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City of Ipswich

Nerima City Delegation Report

January / February 2025



iFuture

Your Vision, Our Journey, Council's Plan





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1: INTRODUCTION

Ipswich City Council’s sister-city arrangement with Nerima City was established more than 30 years ago when Ipswich Mayor David Underwood and Nerima Mayor Sabura Iwanami signed the strategic agreement on 15 October 1994.

Since then, it has blossomed into Ipswich’s longest and most active sister city relationships, as well as one of the most enduring and prosperous sister-city arrangements in Japan.

One of the core tenets of this relationship has been the cultural and educational exchanges that occur between both cities. Thousands of local and Japanese students have participated in education study tours over the past 30 years, opening their minds and opportunities on a global scale.

For many of us in Ipswich, Nerima Gardens in the historic Queens Park is the constant reminder of the importance of this

relationship and the value of sharing and understanding different cultures.

Since Council’s return to elected representatives in 2020, mayors and councillors, senior officers, teachers, and students of Nerima City have visited the City of Ipswich on multiple occasions.

Therefore, on 12 December 2024, Council unanimously resolved that Ipswich City Council would embark on its own delegation to Nerima City to mark the 30th anniversary of the sister-city relationship.

From 29 January to 4 February 2025, Mayor Teresa Harding and Cr Marnie Doyle led this delegation which shared knowledge and experiences between our councils, explored economic opportunities and connections, and strengthened the civic and cultural partnership between Ipswich and Nerima cities.

1.2: STRATEGIC RATIONALE

Vibrant and Growing

With the Greater Tokyo Area being the most populous metropolitan area on earth, this delegation provided an opportunity to learn how Nerima City works with its communities to address the challenges and opportunities of population growth.

One of the primary benefits of growth is economic activity, so this delegation also explored future opportunities to expand the existing sister-city relationship into one that leverages economic connections between the two cities.

Safe, Inclusive and Creative

The enduring relationship between Ipswich and Nerima City is a demonstration of the value the City of Ipswich puts on being an inclusive and welcoming community, one that embraces and seeks to learn about other cultures.

One of the primary focuses of this delegation was to reinforce Ipswich City Council’s commitment to fostering the longstanding relationship between the two cities, ensuring it remains prosperous for another 30 years and beyond.

Natural and Sustainable

Managing the density of the population of Nerima City comes with similar challenges experienced in Ipswich, particularly in our shared objectives of being cities that are clean, green and embrace the circular economy.

Nerima City were proud to demonstrate as part of this delegation their commitment to creating a liveable community, and sharing their learnings about resource recovery, circular economy and how they’ve captured and enhanced their green spaces for future generations.

A Trusted and Leading Organisation

Municipalities across the globe have similar roles and responsibilities which creates opportunities to share, learn and collaborate with each other. The relationship between Ipswich and Nerima cities is certainly no different.

As part of this delegation, Nerima City were generous in their willingness to share information and experiences regarding their processes and learnings as a council, all in the spirit of local government collaboration.

1.3: KEY FOCUS AREAS

The focus of the mission was to celebrate 30 years of a successful sister-city agreement between Ipswich and Nerima City and renew our commitment to fostering a productive and positive relationship for decades to come.

More specifically the itinerary for the delegation covered the following themes:

- Civic and cultural exploration – strengthening the sister-city relationship and exploring opportunities to expand on the value of the arrangement.
- Sustainability and Liveability – learning from each other around innovative ways to create green, clean and liveable cities.
- Economic Opportunities – investigating new ways to leverage our sister-city relationship to form connections and opportunities for local business.
- 2032 Olympic and Paralympic Games – understanding the opportunities of the Olympic and Paralympic Games from the experience of the Tokyo 2020 Games.

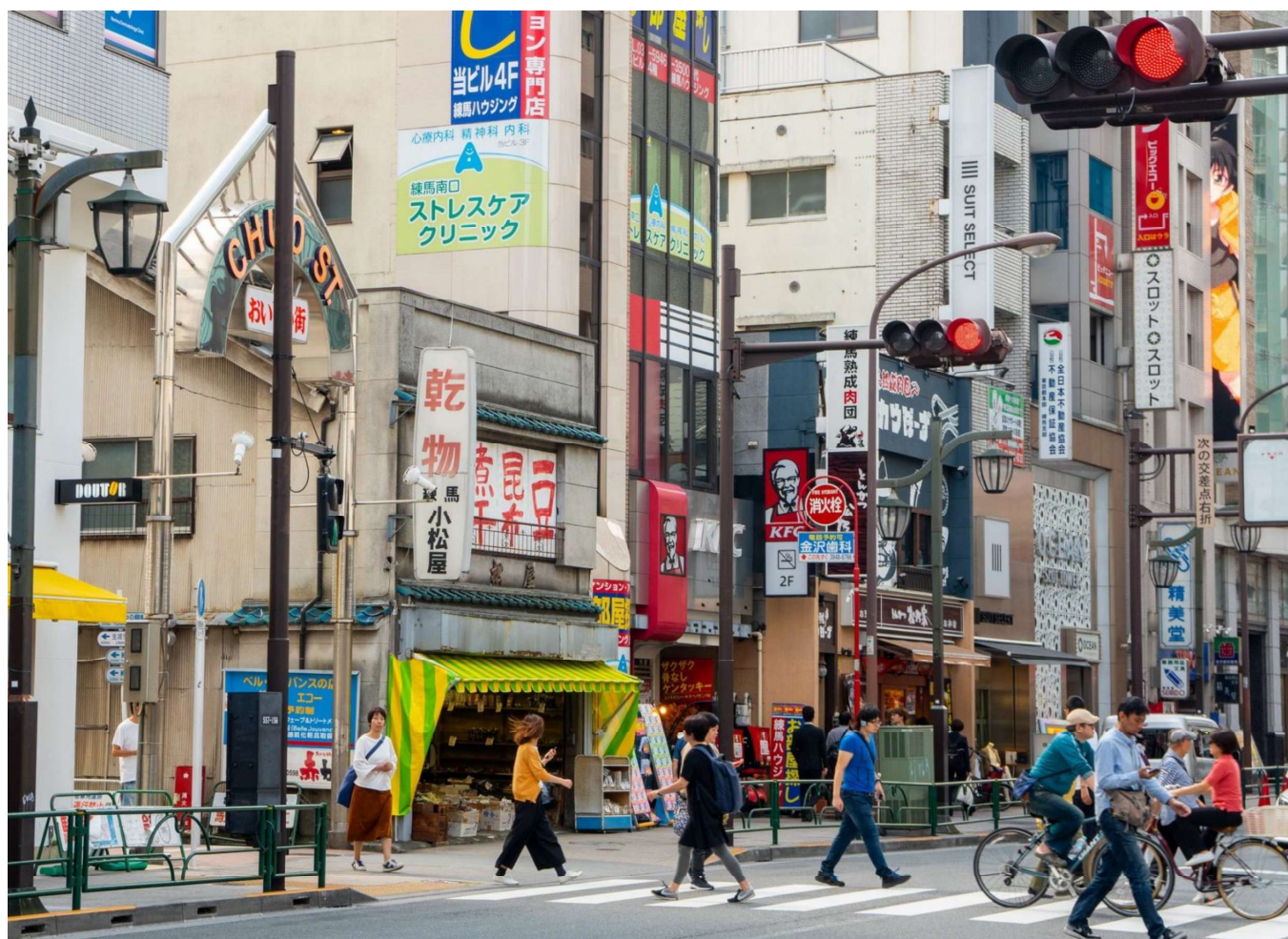


Image: Chuo Street Shopping Precinct, Nerima City

2: NERIMA CITY BY NUMBERS

Nerima City is one of the 23 special wards of Tokyo, primarily residential, which was established in 1947 when it separated from the neighbouring Itabashi Ward. It is one of the most populous wards in Tokyo.

Similar to other wards in Tokyo, Nerima City oversees education, welfare services, waste, urban planning and local services for its residents while the Tokyo Metropolitan Government handles broader regional issues like water supply, healthcare and the delivery of major infrastructure. The relationship between the two organisations is not dissimilar to that of Ipswich City Council and the Queensland Government.

While the City of Ipswich’s population is forecast to double in the coming decades, Nerima City is experiencing a decline in growth. Nerima is part of a national challenge in Japan where the population is shrinking due to low birth rates and an aging population, which is impacting Tokyo more broadly.

	NERIMA CITY	CITY OF IPSWICH
Population	749,451	265,854
Households	399,800	87,352
Population Density	15,591 persons per square kilometre	237.2 persons per square kilometre
Median Age	45.5	33
Area	48.08 km ²	1,090 km ²
City Officials	4,184	1,540
General Budget	¥323,088,360,000 (\$3,468,999,721)	\$678,000,000



Image: City of Ipswich delegation attends a Committee Meeting of the Nerima City Assembly.

3: MISSION PROGRAM AND OBSERVATIONS

Wednesday 29 January 2025 – Travel from Ipswich to Nerima City, Tokyo

Primarily a travel day, with the City of Ipswich delegation departing Brisbane International Airport at 9.20am (Australian Eastern Standard Time) and arriving at Nerima International Airport at 5.30pm (Japanese Standard Time). The travel time from Narita International Airport to Nerima City is approximately 90 minutes by car. The delegation arrived at the Hotel Cadenza Tokyo, which is located in Nerima City, around 7.00pm.

Although the Hotel Cadenza is a modest hotel by Tokyo's standards, the first thing that strikes visitors as they enter the hotel is a framed poster from the Denmark Olympic and Paralympic team as a thank you for their stay as part of Japan's Home Town Initiative in the lead up to the Tokyo 2020 Games.

The Home Town Initiative saw more than 500 Japanese cities and towns and around 185 countries participate in grassroots exchanges with competing countries in the lead up to, during and beyond the Tokyo 2020 Games. As part of the exchange, host towns welcomed athlete visits through various events, cheered on their teams at the Tokyo 2020 Games, and hosted pre-Games training camps.

While discussions in South East Queensland to-date have been largely focused on the delivery of competition venues, there will also be a range of pre-Games training opportunities open to cities and towns across Queensland and Australia more broadly in the lead up to 2032.

Typically, international teams can arrive up to two years ahead of an Olympic and Paralympic Games to begin their preparations and acclimatisation. As an example, Queensland was Australia's largest pre-Games training base in the lead-up to the Sydney 2000 Games.

Queensland cities and towns hosted more than 2,500 athletes during their 2000 Games preparation, including 179 international teams from 48 countries. The direct benefit to the Queensland economy at the time was estimated to be between \$45 million to \$50 million. This presents an economic and cultural opportunity for the City of Ipswich.

Ipswich offers a range of suitable pre-Games training venues from the North Ipswich Sport and Entertainment Precinct to the Redbank Plains Recreation Reserve Skate Park which has regularly hosted the BMD Eastern Rumble, Australia's only pro skateboarding tour. While accommodation remains a challenge for the region, it is certainly an opportunity worthy of further investigation.

Thursday 30 January 2025 – Tour of Nerima City Hall and surrounding areas

This morning commenced with a tour of Nerima City Hall where the City of Ipswich delegation was warmly welcomed by Deputy Mayor Yasuko Morita as well as dozens of Nerima City officials.

The cultural value placed on Nerima City's longstanding relationship with Ipswich and its educational exchanges is immediately evident on the delegation's arrival at Nerima City Hall, through various flags, signage and information boards that are on display in several locations throughout the administration building.

This is where the City of Ipswich delegation is first introduced to Nerimaru, the official mascot character of Nerima. Nerimaru is a character that represents a hybrid of a horse and a radish, with an antenna on top used to broadcast information about Nerima.

It is not unusual to see Japanese cities and towns promoting their own mascots, known as "Yuru-chara", which are used to represent their region and promote tourism. These mascots are typically cute characters designed to embody the features and characteristics of the local area, many also have their own social media presence. They generally appear on everything, from road signs to merchandise, fostering a sense of civic pride and attracting visitors.

The delegation considered whether the introduction of Nerimaru to the Ipswich Children's Library could be a unique and engaging way to introduce our city's youngest residents to our enduring sister-city relationship with Nerima City. This could be established as a temporary or permanent exhibit featuring Nerimaru merchandise to potentially stand alongside a children's book exchange between Ipswich and Nerima City.

The tour then proceeded to lunch and the presentation of official gifts, where the City of Ipswich delegation presented artworks from renowned First Nation artist Jacob Sarra to both Nerima City Mayor Akio Maekawa and representatives from Nerima City Assembly. In return, the City of Ipswich delegation was presented with traditional Japanese and anime artworks.

During the lunch, the discussion turned to future opportunities to expand on the positive and productive relationship that exists between the two cities. In particular, the possibility of a future art exchange between Nerima Art Museum and Ipswich Art Gallery, recognising the importance of art and culture to both cities.

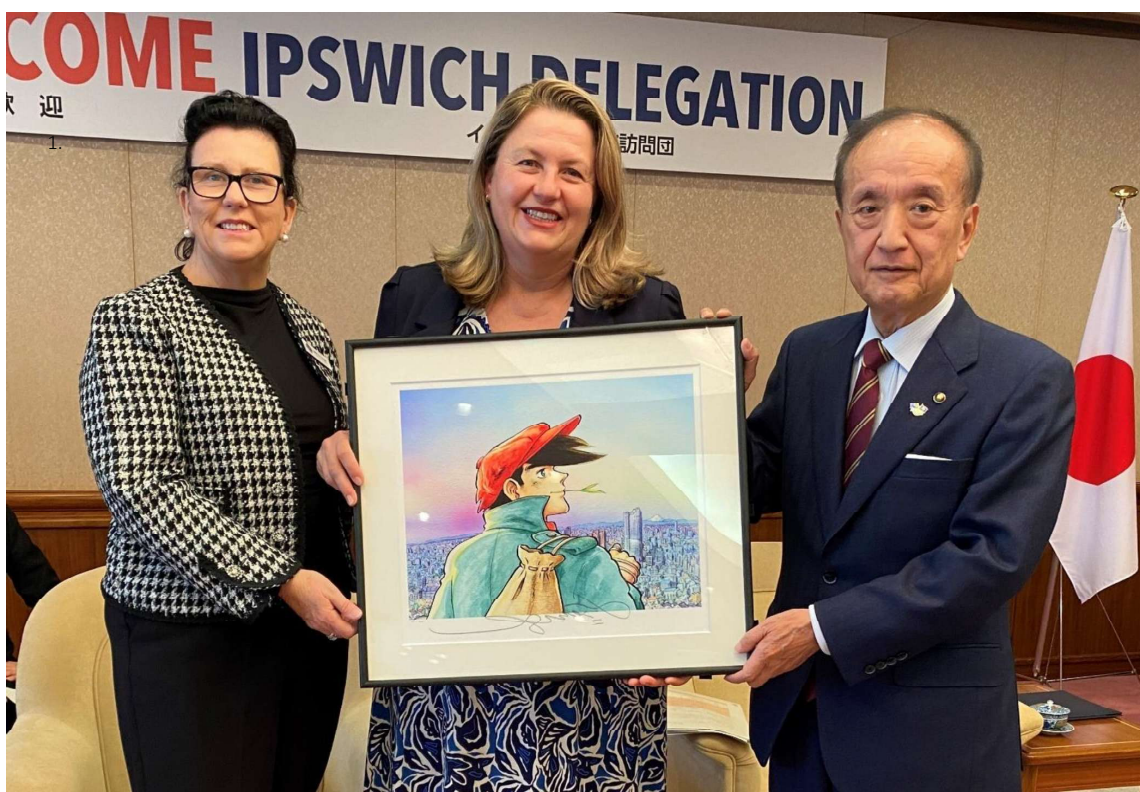


Image: Councillor Marnie Doyle, Ipswich Mayor Teresa Harding and Nerima City Mayor Akio Maekawa

Following lunch, the afternoon provided the opportunity to observe a Committee Meeting of the Nerima City Assembly on Assembly operations. The City Assembly is the decision-making body of Council while Mayor Maekawa heads the executive body of Council. These two sides drive Council's administration, independently of each other, to service the needs of the residents of Nerima City.

Representatives of the Nerima City Assembly are required to be 25 years of age or older, have the right to vote, and live in Nerima City. The current assembly members were elected in the April 2023, with a term of office being four years. The number of assembly members is determined by each local government. In Nerima City, the City Assembly is made up of 50 representatives across a range of political parties.

The City of Ipswich delegation also had the opportunity to meet with the Nerima City Assembly to discuss how it manages important responsibilities of local government such as setting the city's budget. While there were some similarities, the Budget process in Nerima City had some notable differences.

In particular, at the beginning of the process, the City Assembly and the City Administration meet to discuss and agree on the city's Budget priorities. The City Administration then prepares a proposed Budget which is made available to the community, it is not unusual that this Budget is adopted with little to no changes.

At the adoption of the Budget, the City Administration also offers a report to the City Assembly on the expenditure of the previous year's budget to demonstrate how it has delivered value for money for Nerima City residents.

The experience proposed several opportunities for Ipswich City Council to learn from and improve its engagement with the community on how their rates are expended each year.

As an interesting addition, one of the current members of the Nerima City Assembly had visited Ipswich as a high school student as part of the longstanding student exchange program that exists between the two cities.

The afternoon also offered a guided tour of Hikarigaoka Park, one of the city's premier parks and a fantastic example of urban renewal, as well as Shiraishi Farm, an urban farm in the heart of Nerima City.

Hikarigaoka Park was once a US military airfield and housing complex that spanned 51.5 hectares. Opened to the public in 1981, it is now a recreational and sporting hub for the residents of Nerima City.

The park contains almost 17,000 trees, including around 1,000, cherry blossoms, as well as sporting fields, athletics track, tennis courts, a "day camp" area, a BBQ zone, an archery range, gymnasium and play areas for small children. The Hikarigaoka Library is also situated within the park.

An afternoon tour of the park, even on a chilly day, demonstrated how valuable this expansive green space is to a densely populated city such as Nerima. Something that is no doubt as equally important to Ipswich residents.

Item 16.1 / Attachment 1.

Interestingly, Hikarigaoka Park is located next to Nerima Hikarigaoka Hospital and Hikarigaoka Incineration Plant, a waste plant with an incineration capacity of 300 tonnes per day. It generates electricity using a 9,000 kW steam turbine generator and supplies district heating in the form of steam and hot water.

The chimney stack stands an imposing 150 metres high, and is the tallest structure in the Nerima Ward. It was originally opened in 1981, but has since been upgraded and reopened in 2021. It is one of two waste incineration plants in Nerima City.

With Tokyo offering little space for landfill, Japan commonly uses waste-to-energy to manage municipal solid waste that cannot otherwise be recycled. Japan has more than 1,100 waste incineration facilities ranging from small to large scale.

On the topic of managing population growth, Mayor Maekawa also spoke of the city's advocacy to add additional stops to the city's existing rail line, extending the Toei Oedo Line from Hikarigaoka Park, to accommodate the current growth of the city. Hikarigaoka Station is currently the final station of the Toei Oedo Line.

The City of Ipswich delegation finished the day with a visit to Shiraishi Farm, an urban farm located within a suburban neighbourhood. The origin of the farm dates back to Shiraishi's ancestors who started farming on the land in the early Edo Period (1603-1867).

The Shiraishi's still farm the land today, bringing urban agriculture to the city. Not only do they grow vegetables that are sold locally, including their own onsite vegetable vending machine, but the farm also gives volunteers and students the opportunity to learn about and experience organic farming firsthand.

In another interesting connection, Mr Shiraishi was also a beneficiary of the Ipswich and Nerima student exchange program, placed at Redbank Plains State High School in 2003.

While urban agriculture is an important part of Japanese culture, the experience provided ideas of how Ipswich could use vacant blocks (such as those purchased as part of the Resilient Homes Fund Voluntary Home Buy-Back Program) for a community garden program or similar, better connecting our rural communities with more urban suburbs.

In the evening, the City of Ipswich delegation was officially welcomed to Nerima City with a Welcome Reception at the Hotel Cadenza. The reception, which was attended by Mayor Maekawa and Deputy Mayor Morita and representatives of the City Assembly, also celebrated 30 years since the signing of the sister-city relationship between Ipswich and Nerima City.

The evening offered a wonderful display of local produce from across the Nerima Ward, traditional Japanese customs and the positive and welcoming relationship that drives the success of this enduring sister-city arrangement.

Images: Shiraishi Farm, various.



Friday 31 January 2025 – Traditional Tea Ceremony, tour of Koyama Garden and Warner Bros Studio, Tokyo

The focus of today’s activities was exploring some of Nerima City’s key attractions which draw both national and international visitors to their ward.

The day commenced with a visit to Koyama Garden, a traditional Japanese garden and tea room. Koyama Garden is approximately 2,579m² in size and consists of the gardens, tea room and a number of Japanese style rooms which are available to members of the public to book. Visiting the gardens is free, and offers residents the opportunity for quiet reflection, tranquility and peace in an otherwise bustling city.

Nerima City officials joined the City of Ipswich delegation in experiencing a traditional Japanese tea ceremony, a practice deeply ingrained in Japanese culture.

Typically, a traditional Japanese tea ceremony is surrounded by gardens as it is in Ipswich’s own tea house in Nerima Gardens. The ceremony consists of the preparation of the tea, accompanying sweets, and the room itself. The ceremony is

designed to promote well-being, mindfulness and harmony, and for visitors, offers a glimpse into Japan’s rich cultural heritage.

The afternoon provided a tour of one of Nerima City’s most popular tourist attractions, Warner Bros Studio, Tokyo. This Harry Potter-themed studio experience was opened in 2023 and was built on the site of the former Toshimaen amusement park.

This is the first behind-the-scenes tour experience of the Harry Potter films to be offered outside the United Kingdom, and is currently the largest Harry Potter attraction in the world. The attraction welcomed more than 1 million visitors in its first year, boosting tourism revenue and job creation for Nerima City.

Nerima City officials estimated that approximately 30 percent of visitors to Warner Bros Studio, Tokyo were from overseas and the attraction has led to the creation of around 1,300 local jobs.

In Nerima City, where space is limited, the studio’s large sound stages also act as an emergency evacuation centre for neighbouring residents in the event of an earthquake. The facility can accommodate hundreds of residents for a number of days following a natural disaster.



Image: The Great Hall in Hogwarts Castle, Warners Bros Studio, Tokyo.

Saturday 1 February 2025 – Tour of key sites in Nerima City and Japan's National Stadium

Known amongst anime fans as the birthplace of the industry, arts and pop culture form a significant part of Nerima City's cultural identity. The city is home to numerous anime studios as well as the Nerima Art Museum, Toei Animation Museum and the Oizumi Anime Gate.

The City of Ipswich delegation spent this morning exploring some of the sites that attract anime fans to the city, starting with the Nerima Art Museum.

The Nerima Art Museum was opened in 1985, and since then has been the artistic hub of the city. It has a specific focus on Japanese modern art, and hosts exhibiting art works, educational programs, gallery talks, lectures and musical concerts in its main hall. It also hosts spaces for Nerima City residents to create and exhibit their own artworks, not dissimilar to Ipswich Art Workshop and Community Gallery.

The Nerima City Library is integrated into the Nerima Art Museum building with visitors entering through the Nerima Art Forest, a sculpture park filled with 32 colourful and uniquely designed sculptures of animals that families can touch, explore and play on.

This creates an amazing environment where art, learning and play come together in one precinct, making art accessible and fun for residents of all ages. It certainly provided some interesting ideas as Ipswich City Council embarks on its own revitalisation of its cultural spine from the Ipswich Civic Centre, through d'Arcy Doyle Place and the Ipswich Art Gallery, to the Nicholas Street Precinct.

The City of Ipswich delegation also visited the Oizumi Anime Gate, a collection of lifesized bronze statues of popular anime characters that have originated from Nerima City. The city prides itself on being "Anime City Ichiban" (the number one city for anime) so the Oizumi Anime Gate marks the gateway to the epicentre of the anime industry.

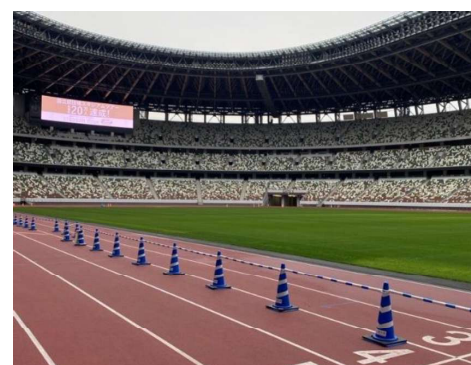
The Oizumi Anime Gate is situated in a high traffic area, outside the north exit of Oizumi Gakuen Station, and is a visible reminder of Nerima City's rich history and city pride. With the Ipswich equivalent arguably being its contribution to the Australian sporting industry, across numerous sports and codes, it certainly gave rise to whether a similar monument would be a welcomed addition to our city.

In the afternoon, the City of Ipswich delegation headed to Central Tokyo for a tour of the Japan National Stadium – the centrepiece of the Tokyo 2020 Olympic and Paralympic Games.

Located in Shinjuku, the stadium is located on the same site as the former national stadium which hosted the 1964 Summer Olympic Games. The former stadium was demolished to make way for a new and modern stadium, increasing its seating capacity from 48,000 to 68,000 ahead of the 2020 Games.

In an interesting note for the delegation, the stadium featured uniquely Japanese designs which were able to showcase the nation's rich culture and history to the world. This included wooden eaves which surround the perimeter of the stadium featuring timber from each of Japan's 47 prefectures.

When walking through the stadium, there is no mistaking this is Japan's national stadium and representative of the country's pride and enthusiasm for the 2020 Tokyo Olympic and Paralympic Games. It stands as a tourism destination in its own right for those that love the Games as well as functioning as a multi-use stadium which hosts football, athletics, large concerts and events all year round.



Images from top to bottom: Nerima Art Forest, Nerima Art Museum, Oizumi Anime Gate and Japan National Stadium.

Item 16.1 / Attachment 1.

Monday 3 February 2025 – Meetings with Trade and Investment Queensland, Suntory and Japan Olympic Museum

The City of Ipswich delegation commenced its final day of the visit with a meeting with the Queensland Senior Trade and Investment Commissioner – North Asia, Mr Tak Adachi.

Mr Adachi leads Trade and Investment Queensland's (TIQ) Japan team, as well as overseeing Trade and Investment Commissioners in Taiwan and Korea. He has been Queensland Senior Trade and Investment Commissioner for Japan, one of the state's largest export markets, since 2004.

In this meeting, Mr Adachi highlighted that Ipswich's sister-city relationship with Nerima City was one of the longest and most active arrangements of its kind in Japan. He also highlighted the advantage that Ipswich has through its formation of a sister-city located within Tokyo, which has one of the largest metropolitan economies in the world.

Mr Adachi encouraged Ipswich to explore how it can expand its economic connections with Nerima City, and use its sister-city relationship to foster greater economic outcomes for our city. Existing connections that could be leveraged include Suntory and its investment in Swanbank as well as with JBS' Dinmore facility, noting that 70 percent of the Australian beef exported to Japan comes from Queensland.

The successful educational exchanges between Ipswich and Nerima City were also discussed, with Mr Adachi raising the opportunity to use student ambassadors as a way to further profile the positive relationship between Ipswich and Nerima cities in both Australia and Japan.

There was also ample discussion regarding the Brisbane 2032 Olympic and Paralympic Games and the opportunity for the South East Queensland region to raise its profile on the global stage, including Ipswich. He expressed TIQ's willingness to assist Ipswich City Council particularly in advance of any future visits to Nerima City and encouraged the delegation to explore how its sister-city relationship could also assist.

The next meeting on the itinerary was with Ms Makkiko Ono, President and Chief Executive Officer of Suntory Beverage and Food, discussing Suntory's investment in Ipswich through their new \$400 million state-of-the-art facility in Swanbank. This meeting provided the delegation with a better understanding of Suntory's business, priorities and objectives in Australia.

Suntory is a family owned business with more than 41,000 employees across 271 companies in the food, beverage, skincare and health industries. Suntory's Swanbank facility is

part of a significant expansion for the company in Australia, following the purchase of Frucor Beverages in 2009.

Ipswich's proximity to major arterials and rail networks, housing and population growth, and skilled workforce were drivers in Suntory's decision to invest in Swanbank, with Ms Ono expressing her excitement for the future of the facility as a key component of the company's expansion plans in the Oceania region.

The final item on the itinerary was a tour and discussion with the team of the Japan Olympic Museum, the epicentre of the Japanese Olympic movement based in Shinjuku, Tokyo.

Situated opposite the Japan National Stadium and next to Japan Sport Olympic Square, the museum is a monument to the impact the global event has had on Japan and the pride and excitement the nation has for its role in hosting the 1964 and 2020 Tokyo Games as well as two Winter Olympics.

During this visit, the City of Ipswich delegation heard about what our city can look forward to as we approach Brisbane 2032 and the role that Japanese cities played as part of the global event such as hosting international teams, fan zones and live sites, and the torch relay.

The delegation was encouraged to see what additional learnings could be taken from Nerima City's involvement in the Tokyo 2020 Games and what assistance our sister-city could offer in attracting Japanese teams to Ipswich ahead of the Brisbane 2032 Games.

Image: Mayor Teresa Harding and Cr Marnie Doyle with Ms Makkiko Ono at Suntory Beverage and Food.



4: CONCLUSION

This delegation served as a fitting acknowledgement of 30 years of the sister-city relationship between Ipswich and Nerima cities. The City of Ipswich delegation welcomed the opportunity to forge closer ties with our sister city, while investigating new ways to strengthen and expand on this successful and lasting relationship.

Throughout this visit, there were ample opportunities to listen, reflect and capture learnings that can be applied to our own objectives, plans and priorities here at Ipswich City Council. In particular, this report has highlighted recommendations that offer new perspectives and opportunities to potentially be explored.

In summary, these included:

- The opportunity to introduce Nerimaru to the Ipswich Children's Library as a unique and engaging way to introduce our city's youngest residents to our enduring sister-city relationship with Nerima City
- A potential future art exchange between Nerima Art Museum and Ipswich Art Gallery, recognising the importance of art and culture for both cities.
- The potential for a community garden program or similar to better connect our rural communities with our more urban suburbs.
- Consider learnings from Nerima City's cultural precinct in Council's own revitalisation of its cultural spine from the Ipswich Civic Centre, through d'Arcy Doyle Place

and the Ipswich Art Gallery, to the Nicholas Street Precinct.

- The addition of a report to Council, as part of the adoption of the Annual Budget, that outlines the expenditure of the previous year's budget to demonstrate how it has delivered value for money for residents.
- The opportunity to consider Ipswich's version of the Oizumi Anima Gate through a sporting Hall of Fame, Legends Walk or similar, potentially as part of the ongoing redevelopment of the North Ipswich Sport and Entertainment Precinct.
- Exploring how Ipswich can expand its economic connections with Nerima City, and use its sister-city relationship to foster greater economic outcomes for our city.
- The use of student ambassadors as a way to further profile the positive relationship between Ipswich and Nerima cities in both Australia and Japan.
- Understand what learnings can be taken from Nerima City's involvement in the Tokyo 2020 Games and what assistance our sister-city could offer in attracting Japanese teams to Ipswich ahead of the Brisbane 2032 Games.

While the delegation presented many valuable opportunities to inform Ipswich City Council's decision making, its true worth was in acknowledging the importance of our sister-city relationship with Nerima City and demonstrating our city's commitment to continuing this valuable partnership.



Image: Mayor Teresa Harding and Cr Marnie Doyle experience traditional Japanese drumming as part of the Welcome Reception.






City of
Ipswich

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February Mission 2025

‘Thinking globally, acting regionally, and delivering locally’

4 -14 February 2025 | BNE-SIN-MAN-CDG



POST-MISSION REPORT



Disclaimer:

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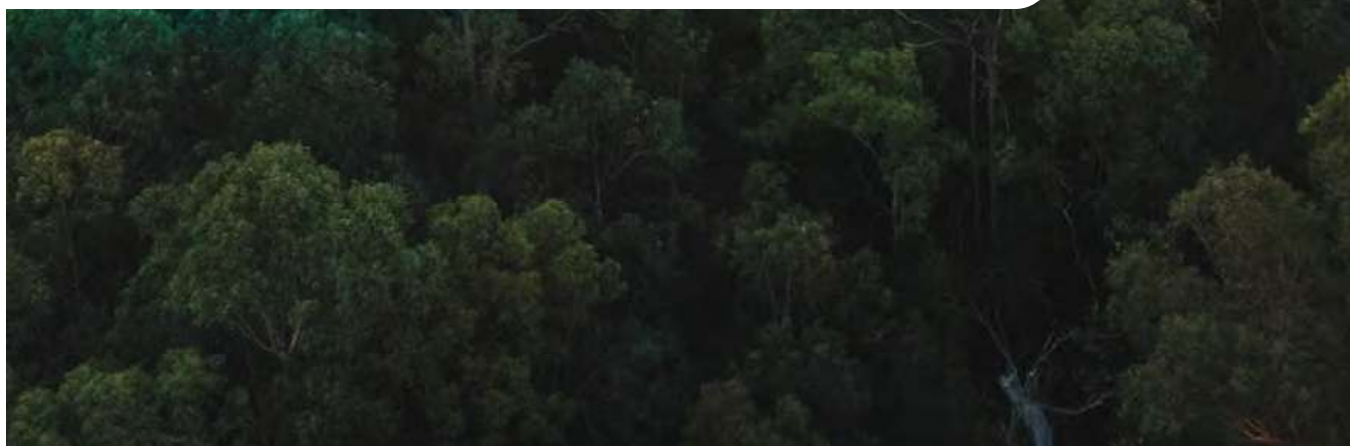
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Introduction



1 Introduction

1.1 Overview of Mission

The Mayors of South East Queensland embarked on a 10-day mission to meet with global leaders and examine legacy opportunities that will help keep South East Queensland moving now, during the 2032 Olympic and Paralympic Games, and beyond.

Past missions undertaken by the Council of Mayors (SEQ) have helped support critical partnerships with other levels of government and the private sector, including the Mayors' pursuit of the \$1.8B SEQ City Deal, the Brisbane 2032 Olympic and Paralympic Games, advanced air mobility, as well as the SEQ Public Transport and Mobility Strategy which is now a key Elevate 2042 Games legacy commitment and deliverable of the new Brisbane 2032 independent delivery authority – GIICA.

The delegation examined transport, urban renewal, housing and waste management opportunities, as well as emerging examples of legacies delivered through major infrastructure and events such as the Paris 24 Games. This included how these city-regions have successfully leveraged public-private partnerships to support infrastructure delivery programs. For example, how Singapore has accelerated the rollout of world-class digital connectivity and water security, Manchester's proposed redevelopment of Old Trafford Stadium District, as well as catalytic public transport investments now connecting more venues and cities and communities across the Paris region. It also sought to strengthen partnerships with Asia Pacific economic powerhouse, Singapore, which is one of Australia's largest two-way trading partners and was responsible for A\$141 billion of foreign direct investment with Australia in 2023. The mission covered Singapore, Manchester and Paris and included meetings with mayors and global leaders.

SINGAPORE:

- The delegation sought to strengthen partnerships and opportunities for future investment and trade between the South-East and Singapore.
- It explored Singapore's world-class public transport network, and how they are using intelligent transport systems and AI to boost the efficiency of their city networks and services.
- Singapore is well advanced on its journey towards a circular economy, and provides a blueprint on what we can expect as we work to implement the South East Queensland Waste Management Plan and transition towards zero waste. This includes understanding their experience with solutions like energy from waste and we explored their newest facility which is now diverting up to 800-tonnes of waste from landfill daily.
- The mission marked the 60th anniversary of Singapore's independence and bilateral relations between Singapore and Australia. The Mayors joined the Australian High Commissioner to Singapore and up to 600 key Singaporean business and government officials, to commemorate the historic milestone.

GREATER MANCHESTER:

- Manchester is home to the first City Deal, and recently secured its seventh generation deal focussed on supporting Greater Manchester's strategic growth and driving net zero initiatives, housing, and employment outcomes. After being inspired by Manchester in 2014, South East Queensland secured the inaugural SEQ City Deal in March 2021, providing a 20-year commitment to support the region's growth. The foundation SEQ City Deal included an initial investment of \$1.8 billion over five-years and included a range of priority planning and business case projects. Almost three years into the SEQ City Deal and with just 7 years before the Brisbane 2032 Games, South East Queensland Mayors are keen to progress discussions with State and Federal governments on the next generation of funding and partnership opportunities for South East Queensland.
- The Mayors sought to better understand Manchester's journey and their work evolving their Deal to meet the changing needs of their region and successive governments. This includes how Manchester's Deal is responding to transport needs, housing pressures and supporting urban regeneration including a new

Housing Investment Fund that has unlocked almost hundreds of millions of dollars to enable Greater Manchester's councils to deliver thousands of new homes.

- The delegation explored the urban renewal of UK Media City – an innovation hub built on the site of one of the world's biggest industrial ports – Manchester Docks. As one of the UK's largest urban regeneration projects, Salford Quays is now home to over 250 companies, including BBC, ITV Granada, Dock 10, and the University of Salford. In just 10 years, this has become one of the world's leading media and tech hubs and one of the UK's leading innovation zones and boasts the highest concentration of creative, media, and technology businesses outside London. It was also home to the first buildings in the UK to achieve net zero carbon status. MediaCityUK, Europe's largest purpose-built digital hub, has also become a leader in immersive technologies such as virtual reality and gaming, and employs over 7,000 people.
- The delegation also received an update on Manchester's regeneration of the Old Trafford Stadium District, and the work being explored to leverage investment in world-class sporting infrastructure to deliver social and economic benefits including mixed-use developments.
- There are significant efforts by Greater Manchester to improve its local public transport to London standards. This includes the rollout of new technologies that have helped to ease congestion and improve traffic flow by up to 23 per cent. Mayors received a briefing on the pragmatic solutions being rolled out that could be applied across South East Queensland.

PARIS REGION:

- By 2030, the Paris region's public transport network is expected to double in size with an ambitious expansion program that will include hundreds of kilometres of new lines and 139 new stations, enhancing the region's capacity to support future large-scale events and providing long-term benefits to residents and visitors.
- The delegation explored a number of significant mass public transit initiatives, including upgrades prioritised ahead of the Paris 24 Games which included a new metro line and improvements to suburban rail and bus networks. This included the public transport investment that is being prioritised in other global regions, and considering the 7-year runway to 2032, a stronger understanding of what could be delivered in time for our own Games.
- The delegation also received an update on the rollout of advanced air mobility infrastructure, and plans to rollout vertiports across the Paris region in the coming years.
- It explored how regions around Paris have delivered long-term legacy benefits for their communities, including how councils and businesses successfully worked in partnership with Games organisers and other levels of government.
- Meetings with Mayors and senior officials across the Paris region and Saint-Denis to better understand city operations and opportunities associated with hosting the Games for local economic development, urban renewal and community outcomes.
- The delegation explored a number of comparable venues which are planned for Brisbane 2032 to better understand their immediate and surrounding legacy impacts, including Adidas Indoor Arena and The Vaires-sur-Marne Nautical Stadium (whitewater venue). This included gaining understanding of the experiences and learnings of Councils and communities during Paris 24, including the scale and extent of impacts on city services as well as initiatives to reduce traffic congestion, extend bike lanes and unlock more space for pedestrians including urban parklands.
- We met with the Mayor of Saint-Denis, the second-largest city in Île-de-France, receiving around 80% of public investment, and was a key hub for the Paris 24 Games, including Stade de France, the Aquatics Centre and Athletes Village.

1.2 Strategic rationale

South East Queensland's international engagement centres on creating opportunities that encourage regional leadership to observe, learn and translate from global experience. This ensures actions have a meaningful impact both locally and regionally. The approach embodies the principle of thinking globally, acting regionally, and delivering locally:

- **global thinking:** observe, learn and experience international best practice, innovation and partnerships to inform regional policy. This global perspective helps identify emerging opportunities and potential challenges that could impact SEQ
- **regional collaborative action:** while thinking globally, the actions are tailored to the circumstances specific to the needs of the SEQ region. This involves developing policies, programs, and initiatives that leverage international insights to benefit the regional context.
- **local place-based delivery:** ensuring that global engagement translates into local improvements, that ultimately deliver tangible community benefits, implementing initiatives that improve local infrastructure, economy, and overall quality of life.

Experience from previous Mayoral led missions has proven the benefits of international engagement, including positioning the SEQ region as a prime global destination for investment and a highly desirable place to live, work, and play, ahead of the Brisbane 2032 Olympic and Paralympic Games.

Additionally, this promotes regional unity by fostering a coordinated approach to international engagement, providing unique opportunities to facilitate knowledge transfer through strategic introductions with government and industry leaders. Participation strengthens bilateral relations and enhances shared connections, contributing to sustained regional collaboration, and fostering a forward-thinking and inclusive approach to regional prosperity.

1.3 Benefits of participation

- Promotes regional unity and coordinated approach to international engagement - positioning South East Queensland as a global destination for trade and investment, and place to live, work and visit.
- Unique experiences to facilitate international best practise and knowledge transfer through key introductions with government and industry leaders.
- Build on shared connections and strengthen bilateral relations.

1.4 Focus areas of mission

The focus of the mission was to investigate how city regions leverage major events to advance their global identity and explore inter-governmental initiatives that promote greater investments while balancing the competing interests from other levels of government. This is critical to respond to the region's growth, secure the benefits of hosting Brisbane 2032 Olympic and Paralympic Games, and to explore opportunities that support tangible funding and policy outcomes for local government, including:



Managing population growth - addressing housing affordability, land-use planning and regional growth management



Funding a growing region - strengthening local government capacity and fiscal sustainability



Regional connectivity - enhancing mobility and smart infrastructure, connecting our activity and growth centres



Sustainability and resilience - focusing on waste management, circular economy, and water security

1.5 Alignment to corporate strategy

Our mission and values

To consistently deliver better regional funding, policy and collaborative outcomes for the communities of South East Queensland.

Strategic pillars



We are the voice of SEQ

Representing the one in seven Australians who call South East Queensland home.



We are thought leaders

Exploring new ways to solve South East Queensland's challenges and maximise its opportunities.



We are partners in SEQ's Future

Forming strategic alliances and delivering tangible outcomes for South East Queensland.



We are innovative, agile and motivated

Adding value for South East Queensland councils and communities.

An aerial photograph of a lush, dense tropical forest. A winding river or stream flows through the center of the forest, reflecting the surrounding greenery. The trees are tall and have a vibrant green canopy. The water is a deep blue-grey color, contrasting with the bright green of the forest.

Delegation

2 Travelling Delegation

2.1 Board of Directors:

Lord Mayor Adrian Schrinner, Brisbane City Council and Chair, Council of Mayors (CoMSEQ)

Mayor Peter Flannery, City of Moreton Bay and Deputy Chair, CoMSEQ

Mayor Teresa Harding, Ipswich City Council

Mayor Jon Raven, Logan City Council

Mayor Frank Wilkie, Noosa Council

Mayor Jos Mitchell, Redland City Council

Mayor Tom Sharp, Scenic Rim Regional Council

Mayor Jason Wendt, Somerset Regional Council

Mayor Rosanna Natoli, Sunshine Coast Council

Mayor Geoff McDonald, Toowoomba Regional Council

Deputy Mayor Chris Wilson, Lockyer Valley Regional Council

2.2 Accompanying Officials:

Steve Wardill, Chief of Staff, Office of the Lord Mayor, Brisbane City Council

Melissa Fitzgerald, Chief of Staff, Officer of the Mayor, Ipswich City Council

Joshua O'Keefe, Chief External Relations Officer, City of Moreton Bay

Wade Oestreich, Executive Officer, Office of the Mayor, Redland City Council

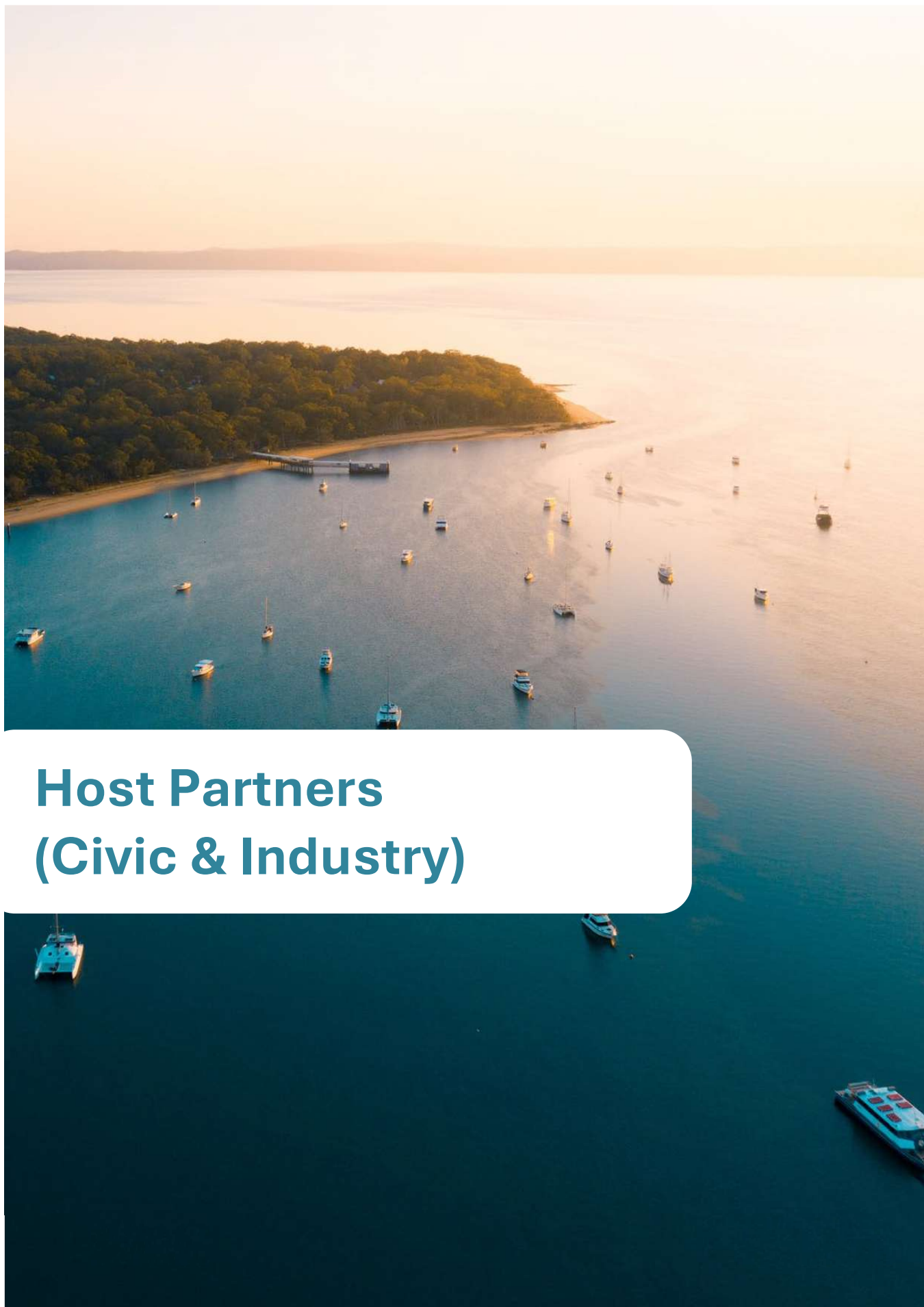
Debra Robinson, Group Executive, Customer & Planning Services, Sunshine Coast Council

2.3 Council of Mayors (SEQ):

Scott Smith, Chief Executive Officer

Matt Hendry, Deputy Chief Executive Officer

Glenn MacRae, Manager - Regional & Economic Partnerships



Host Partners (Civic & Industry)

3.1 Civic and industry host partners

The Council of Mayors (SEQ) acknowledges the following organisations for their support of the mission:





City Regions



Item 16.1 / Attachment 2.

City Regions
at-a-glance



**SOUTH EAST
QUEENSLAND**



SINGAPORE



**GREATER
MANCHESTER**



**PARIS REGION
(Ile-de-France)**





Local authorities	12	17	10	8 departments/ 20 arrondissements
Temperature	21°C / 29°C (February average)	25°C / 32°C (February average)	3°C / 7°C (February average)	3°C / 8°C (February average)
Hours of sunshine (annual)	3,000	2,020	1,415	1,660
Elevation	32m (105ft) (Brisbane CBD)	15m (50ft)	40m (133ft) (Manchester CBD)	35m (115ft)
Area	35,248 km ²	719 km ²	1,276 km ²	12,012 km ²
Local population	4,016,559 (2023)	6,036,900 (2024)	2,948,633 (2023)	12,419,961 (2023)
Local density	108 / km ²	8,207 / km ²	2,311 / km ²	1,034 / km ²
Residential dwellings	1,552,093 (2021)	1,563,641 (2023) (1,108,100 HBD dwellings)	1,268,533 (2023)	1,393,801 (2020)
GLOBAL CONNECTIVITY & COMPETITIVENESS				
Submarine digital connectivity/cables	1 (+ 1 planned)	26	1	0
International airports	4	1	1	3
Air passengers (annual)	21,497,154 (BNE Jan – Nov 24) 6,270,675 (OOO Jan – Dec 24)	61,230,000 (Jan – Nov 24)	30,859,196 (Jan – Dec 24)	95,105,759 (Jan – Nov 24)
Universities	12	7	7	17
World university ranking	77th (UQ - 2025)	17th (NUS - 2025)	53rd (UM - 2025)	42nd (PSL - 2025)
QS best student city ranking	40th (UQ - 2025)	8th (NUS - 2025)	34th (UM - 2025)	24th (PSL - 2025)
International students	79,169 (March 23)	79,300 (Jan 23)	29,827 (2023)	135,475 (2022)
DEMOGRAPHICS				
Ancestry (Top 5)	English (38.2%) Australian (32.2%) Irish (11.2%) Scottish (10.4%) German (5.9%)	Chinese (74%) Malay (13.5%) Indian (9%) Other (3.4%)	British (71.3%) Pakistani (7.3%) African (3.4%) Indian (2.4%) Bangladeshi (1.6%)	French (75.1%) Algerian (2.7%) Moroccan (2.07%) Portuguese (1.9%) Russian (1.04%)
Foreign born population	26% (2021)	40% (Approximate. 2024 data)	28.7% (2021)	14.8% (2021)
Language spoken at home other than English	15.3% (2021)	51.7% (2021)	18.7% (2021)	6.72% (2021)
Languages	English, Mandarin, Vietnamese, Punjabi	English, Mandarin, Chinese Dialects, Malay, Tamil	English, Urdu, Arabic, Polish, Chinese, Panjabi	French, Arabic, English, Portuguese, German, Spanish
% Population over 65 years	16.3% (2021)	19.9% (June 2024)	14.9% (2021)	20.2% (Over 60) (2020)

**City Regions
at-a-glance**







JOBS, SKILLS & ECONOMY				
Jobs	2.087 million (2023)	4.034 million	1.454 million (2023)	6.7 million (2023)
Unemployment	4.2% (Q3 24)	1.9% (Q3 24)	5.4% (Q3 24)	6.9% (Q4 23)
Tertiary qualified (Diploma or above)	44.6% (2021)	62.8% (2024)	46.2% (2023)	57% (2021)
Unicorns	2	30	5	42
Key regional clusters	Agribusiness, Advanced Manufacturing, Life Sciences, International Education, Transport and Communications, Creative Industries, Tourism	Biomedical sciences, Pharmaceuticals, Energy, Chemicals, Electronics, Tourism and Medical Tourism, Manufacturing	Advanced Manufacturing, Creative Industries, Digital Technologies, Financial, Professional and Business Services, CleanTech/Net Zero, Lifescience and Healthcare	Aerospace and Defence, Commerce/Retail, FoodTech, Logistics and Transport, Cosmetics and Perfumery, Creative Industries, Healthcare and Lifesciences, Luxury Goods, Digital Economy, CleanTech, Financial Services, Tourism, Gastronomy, Science, Technology
Capital city CPI (Change from corresponding period last year)	1.8% (Q3 2024)	2.2% (Q3 2024)	1.7% (UK - Q3 2024)	1.68% (Q4 2024)
Gross regional product	AUD\$ 307 billion (2023)	S\$ 673 billion (2023)	£ 90 billion (2022)	€ 765 billion (2023)
Real estate Investment performance	46th (JLL 2023)	11th (JLL 2023)	86th (JLL 2023)	3rd (JLL 2023)
Commercial attraction	88th (JLL 2023)	10th (JLL 2023)	112th (JLL 2023)	4th (JLL 2023)

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Nation in numbers				
	COMMONWEALTH OF AUSTRALIA	REPUBLIC OF SINGAPORE	UNITED KINGDOM OF GREAT BRITAIN & NORTHERN IRELAND	FRENCH REPUBLIC
Population	27,204,809 (2024)	6,036,900 (2024)	68,265,200 (2023)	68,401,997 (2024)
Land area	7,682,300 km ²	699 km ² , including 63 small islands	243,610 km ²	638,475 km ²
Governance	Federal parliamentary democracy under a constitutional monarchy; Federal and state authorities and responsibilities regulated in the constitution	Unitary parliamentary democratic republic with a non-executive president	Unitary parliamentary democracy under a constitutional monarchy	Republican State with a parliamentary democracy
Government type	3 tiers of government with proportional representation: Federal government 6 states and 2 territories 500 local councils	5 Community Development Councils (CDCs) 17 town councils	2 tiers of government using a two-round electoral system: 317 local authorities (England) 32 local authorities (Scotland) 22 principal councils (Wales) 11 local councils (Northern Ireland)	4 tiers of government using a two-round electoral system: Federal government 18 régions 101 départements 34,970 communes (municipalities)
Branches of government	Executive King Charles III represented by Governor General Prime Minister and Ministers appointed from the parliament	Executive Directly elected Head of State (President) Prime Minister appointed by the President	Executive Chief of State: King Charles III Head of State: Prime Minister - Prime Minister and Ministers appointed from the parliament	Executive Directly elected Head of State (President) Prime Minister appointed by the President
	Legislature Bicameral Parliament House of Representatives and the Senate	Legislature Unicameral Parliament Parliament is made up of elected, non-constituency and nominated MPs	Legislature Bicameral Parliament House of Commons directly elected by the public House of Lords may be appointed by the monarch, inherit their seat, or assume their seat as part of a religious appointment. Most members are appointed for their lifetime	Legislature Bicameral Parliament National Assembly and the Senate
	Judiciary High Court of Australia (7 Justices, including Chief Justice)	Judiciary Supreme Court (comprising the High Court, its Chief Justice, 34 Judges, and 3 Justices of the Court of Appeal)	Judiciary United Kingdom Supreme Court (12 Justices, including the President and Deputy President)	Judicial Cour de cassation (First President, and 6 presiding judges of chambers)

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Nation in numbers				
	COMMONWEALTH OF AUSTRALIA	REPUBLIC OF SINGAPORE	UNITED KINGDOM OF GREAT BRITAIN & NORTHERN IRELAND	FRENCH REPUBLIC
Term of government	House of Representatives: 3 years Senate: 6 years	President: 6 years Parliament: 5 years	5 years (House of Commons)	President and MPs: 5 years Senate: 6 years
Legal system	Common law system based on the English model	Common law system based on the English model	Common law system	Civil law system

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Functions
of
Local
Government



COMMONWEALTH
OF AUSTRALIA



REPUBLIC OF
SINGAPORE







UNITED KINGDOM OF
GREAT BRITAIN &
NORTHERN IRELAND



FRENCH
REPUBLIC

POWERS OF MAYORS				
Jurisdiction	<p>Local governments in Australia are created by state/territory legislation.</p> <p>State/territory legislation prescribes election process (including composition of councils and method of election) and the powers of local governments to make and enforce local laws.</p> <p>As councils derive their powers from state parliaments, council by-laws may be overruled by state laws.</p>	<p>There are no direct elections for local government.</p> <p>CDCs were established under the <i>People's Association Act 1997</i>. The CDCs consist of equal population sizes, covering 4-9 Group Representation Constituencies (GRC) and Single-Member Constituencies (SMCs).</p> <p>Each CDC is managed by a Council, which is headed by an appointed Mayor (typically a MP).</p> <p>Town Councils are formed under the <i>Town Councils Act</i>. A Town Council is led by elected MPs from which the Chairman is appointed.</p>	<p>(Specific to England)</p> <p>Many parts of England have 2 tiers of local government: county councils and district, borough or city councils.</p> <p>In other parts of the country, there's one tier of local government known as a 'unitary authority'. This can be a city, borough or county council – or it may just be called 'council'.</p> <p>As well as these, many areas also have parish or town councils.</p>	<p>Paris Region is divided into 20 arrondissements, each with its own Mayor, except the first 4 four arrondissements which have been combined into the Paris-Centre.</p> <p>3 - 18 elected representatives are sent to the Paris Council from each arrondissement, based on the seats allocated by population.</p> <p>The Paris Council then elects the Mayor of Paris.</p>
	<p>State governments prescribe the powers local councils may exercise.</p> <p>Usually, councils have responsibility for:</p> <ul style="list-style-type: none"> local roads, footpaths, cycleways, street signage and lighting waste management including rubbish collection and recycling parking recreational facilities such as parks, sports fields and swimming pools and cultural facilities, including libraries, art galleries and museums sewerage town planning building approvals and inspections land and coast care programs 	<p>CDCs are governed by the <i>People's Association (Community Development Council) Rules 1997</i>. CDC's can:</p> <ul style="list-style-type: none"> plan and develop new community and infrastructure projects administer Government-assistance schemes for residents manage the funds and facilities of the Council other acts as may be necessary and approved by the Board for the performance of the functions of the Council <p>Town Councils are responsible for the day-to-day operations in managing the common property of Housing and Development Board's (HDB) residential flats and commercial property within the town,</p>	<p>County councils are responsible for services across the whole of a county, like:</p> <ul style="list-style-type: none"> education transport planning fire and public safety social care libraries waste management trading standards <p>District, borough and city councils cover a smaller area than county councils. They're usually responsible for:</p> <ul style="list-style-type: none"> rubbish collection recycling council tax collections housing planning applications 	<p>French local government is divided into the Commune, the Department and the Region.</p> <p>Communes are responsible for:</p> <ul style="list-style-type: none"> urban development and building permits management of primary schools, libraries security (municipal police) managing local roads green space and public parks litter deciding local tax rates <p>Departments:</p> <ul style="list-style-type: none"> overseeing social work (childcare, persons with a disability, aged care)

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Functions of Local Government				
	COMMONWEALTH OF AUSTRALIA	REPUBLIC OF SINGAPORE	UNITED KINGDOM OF GREAT BRITAIN & NORTHERN IRELAND	FRENCH REPUBLIC
	<ul style="list-style-type: none">regulation of the keeping of domestic animals	<p>including horticulture maintenance, cleaning works to maintain estate hygiene, refuse collection and pest control services.</p> <p>They are strictly limited to estate management and have no separation of powers from the national government.</p>		<ul style="list-style-type: none">social welfare paymentsmiddle school system (college)maintenance of local roads <p>Regions:</p> <ul style="list-style-type: none">housingpublic transportmanaging key infrastructure: ports, airports, waterwayshigh schoolsprofessional training and TAFEair pollution and waste managementeconomic development

4 City regions at glance



N.B - Not to scale



Key observations, learnings and actions



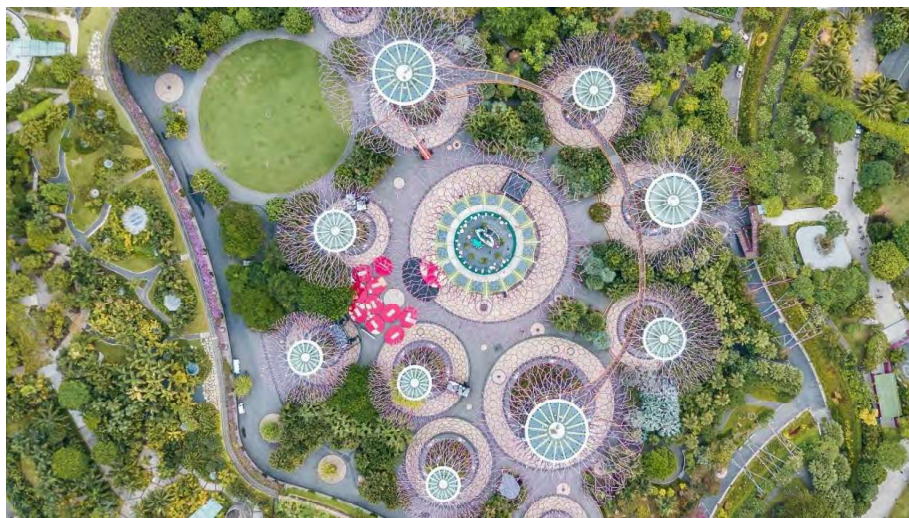
5 Key observations overview

From over 40 bilateral engagements, briefings, and technical site visits across three international city regions in eight days, key observations and outcomes have emerged that may be applied to South East Queensland (SEQ) in preparation for the Brisbane 2032 Olympic and Paralympic Games and beyond. These findings highlight opportunities for collaboration, infrastructure development, public engagement, industry development and long-term regional planning.

The commonality of shared local government challenges observed across the three cities visited was stark, including housing, cost shifting, and the financial sustainability of Local Governments. The most significant lessons from the international engagement are the necessity of sustained regional collaboration, hosting the Olympic and Paralympic Games is not just about four weeks of competition, it's about decades of transformation for the host(s).

5.1 Key outcomes:

- Examined regional and coordinated approaches to managing growth, housing affordability, sustainability, waste management and resource recovery (including the management of residual waste).
- Investigated how local governments are becoming more financially sustainable and responding to growth through innovative funding approaches such as city deals and public-private partnerships.
- Reviewed how local governments are improving regional mass transport outcomes through the adoption of new smart mobility solutions and mass movement of people and goods.
- Explored strategic funding and policy outcomes to enhance regional connectivity and digital infrastructure.
- Investigated how city-regions leverage major events to create a compelling global identity, promote trade and investment attraction and deliver economic and urban renewal.
- Examined innovative solutions to enhance region's sustainability and resilience, focusing on waste management, circular economy and water security.
- Explored plans for the introduction of advanced air mobility (AAM) infrastructure in other global regions, following work being undertaken in SEQ.
- Engaged with global leaders to develop strategic relationships that will generate strong social and economic outcomes for each city while raising global profile of Brisbane, South East Queensland's city region.



5.2 Key insights and observations:

Strong regional collaboration is essential for city regions to thrive globally, aligning efforts around shared international ambitions and driving transformation. Improving regional performance requires policymakers, businesses, and communities to enhance liveability, strengthen global positioning, and unlock economic potential. Successful examples in Manchester, Paris, and Metro Vancouver (2023) highlighted how coordinated regional action secures investment, driving policy reform and enabling urban renewal. However, local governments face increasing financial pressures and complex policy challenges, including housing, transport, and climate resilience. Fostering cross-boundary cooperation can enhance service efficiency, reduce costs, and strengthen influence across all levels of government.

- The enduring power of regional collaboration and continuous coordination is undeniable. City regions flourish on the world stage when strong local partnerships secure policy outcomes that serve the long-term community interests, align efforts around shared international ambitions and drive regional transformation.
- Internationally, local governments face increasing financial pressures, while managing challenges beyond their core responsibilities, often without adequate funding support. Key policy issues include addressing the housing crisis, improving public transport, and enhancing climate resilience. Greater central coordination presents an opportunity to drive efficiency and reduce red tape in government funding for local councils.
- Local governments continue to explore new opportunities to leverage the power of working together across multiple boundaries to drive service efficiency and manage growing risks and cost escalation. This was particularly evident in public service delivery for waste management, community development and public safety.
- Avoiding fragmentation is crucial, as disunity among councils weakens influence, slows progress, and erodes trust across government levels. Strong, productive decision-making processes are essential to prevent internal conflicts that delay initiatives and derail long-term collaboration. Strategic coordination and regional collaboration between local authorities were identified as a key tool for creating prosperous and sustainable regions.
- Improving regional performance requires collaborative action among policymakers, business leaders, and the community to improve the liveability of our residents and businesses with our global image and ensure the region fulfils its potential as a truly world-class region.
- Local government leadership committed to policy development, rooted in evidence, expanding fiscal autonomy, simplifying funding, and enhancing collaboration between central and local governments.
- Coordinated regional efforts and cross-boundary collaboration have proven successful in cities like Manchester, Paris, and Metro Vancouver (2023), demonstrating the significant impact of regional coordination in achieving meaningful policy outcomes and reforms that drive local transformation. This includes integrated policies and coordinated planning initiatives that strengthen the efforts of individual communities and local authorities, such as securing substantial private and public investment in transformative infrastructure projects that foster urban renewal and stimulate economic development.

Key insights and observations:

Waste to energy is a safe and commercially proven technology, with widespread adoption. Resource recovery continues to be a significant policy challenge for Councils, and regional coordination across local authorities is a common success factor. Similarly, improving resource recovery rates while managing risks and cost impacts for communities heavily relies on strong leadership, partnership and investment from other levels of government.

- Waste-to-energy (WTE) solutions have been widely implemented across studied city regions, demonstrating their proven commercial and technological feasibility, community acceptance, and effective public-private funding partnerships underpinned by other levels of government.
- Various public-private partnership (PPP) models have been observed in the development of waste-to-energy facilities, alongside significant investment and support from higher levels of government. This involvement has been crucial in enabling resource recovery within the local government sector.
- Similar to investigations undertaken in Metro Vancouver (2023), resource recovery is predominately run at the province or regional level (State), with a mix of operating and governance models, in partnership with local council. For example policy and regulation is set by the state, which provide funding to local governments to handle WTE operations.
- As a rapidly growing region, SEQ is approaching a critical point where this technology and business model must be carefully considered to meet the State Government's landfill diversion targets. As a regional consideration, this is especially crucial in high-density areas with limited landfill options.
- While local governments own waste feedstocks, their ability to implement effective resource recovery methods is dependent on investment from the other levels of government.
- Product stewardship plays a crucial role in increasing recycling rates. However, it also carries significant risks and potential impacts on material volumes and the revenue models that support resource recovery infrastructure.
- Both Singapore and the Paris region are advanced in their journey toward a circular economy, offering valuable insights for SEQ as it progresses with the South East Queensland Waste Management Plan and aims for zero waste.
- Singapore has been a pioneer in adopting a holistic approach to solid waste management, incorporating technologies like mechanical sorting, material recovery, composting, and waste-to-energy, enhancing circularity in its waste management practices.
- Greater Manchester's near 100% landfill diversion success is largely due to a well-designed public engagement and education strategy, which has effectively promoted recycling and energy recovery. Similarly, local governments globally collaborate with industry to drive community education and behaviour change, emphasising the value of waste reduction and the benefits of reusing, repairing, and recycling.
- Local governments in Greater Manchester have a binding MOU to create uniformity in waste behaviour and management with the network of waste treatment matching this cohesion.

Key insights and observations:

Significant ongoing investment in large-scale generational transport infrastructure is business-as-usual for these internationally competitive city-regions. Investment in public transport has a proven long-term impact on a region's social and economic performance, including many of the challenges SEQ is increasingly facing, such as housing supply and affordability.

- Successful Olympic and Paralympic host cities, including Paris, planned not for the four weeks of competition itself, but for the long-term community benefits, ensuring mass transit, venue placement, and community impact remain central to their strategy.
- A key challenge identified for SEQ was advocating for infrastructure funding without direct control over the Games' budgets. Alignment across local, state, and federal governments is essential to prioritise lasting community benefits and infrastructure investments that extend well beyond the Games.
- The central transport objective during the Paris Games was to achieve 100% of spectators travelling by public transport (60% usually). To cope with demand, a transport plan was developed for each competitive site based on a diversity of solutions and a dedicated event strategy. Transport infrastructure must be upgraded with future usability in mind, preventing the underutilisation post-Games, placement of major venues should stimulate economic activity in key areas.
- By 2030, the Paris region's public transport network is expected to double in size with an ambitious expansion program that will include 350km of new lines and 139 new stations, enhancing the region's capacity to support future large-scale events and providing long-term benefits to residents and visitors. This included several mass transit initiatives prioritised ahead of the Paris 24 Games, including a new metro line and improvements to suburban rail and bus networks, including the extension of the rail network included Metro line 14 to Orly Airport (south) and Saint-Denis Pleyel (north) (+ 8 stations).
- City regions with strong post-Games legacies had long-term development plans (30+ years) i.e. transport connectivity in response to the Manchester Commonwealth Games.
- Ongoing transport infrastructure investment, aligned with Greater Manchester's investment pipeline, will accelerate regional growth. The ambitious vision is to create an integrated London-style transport system, leveraging technology to deliver improved infrastructure and services. This will enhance access to employment, education, healthcare and social opportunities.
- Expanding and enhancing the existing transport infrastructure network is a key driver for future growth. The vision includes transformational investment in City Centre stations, a new high-speed line between Manchester and Liverpool and connecting key investment zones and development sites.
- Greater Manchester have recorded a return of more than £4 in wider economic benefits to every £1 investment in the rail network.

Key insights and observations:

Empowering local government through policy, capability and sustained investment can deliver more efficient and effective outcomes at a regional and national level, than traditional models. City Deals continue to be a proven and effective mechanism for delivering long-term strategic reform and enduring partnership, but require a long-term commitment from all government partners.

- Foreign governments are looking to empower local governments to deliver strategic outcomes. This is being embraced in other regions with a long-term commitment to allowing greater financial autonomy delivering significant benefits including public service improvement and economic diversification.
- The devolution of power and funding to local governments has provided greater autonomy for shaping their futures. The UK Government has progressively devolved authority to local authorities through city deal partnerships, with successive generations of deals being introduced and renegotiated.
- Despite the multiple changes in national government, the core principle of city deals - granting local areas greater power and flexibility in housing, employment, and transport investments – has remained intact. This decentralisation enables local civic and private sector leaders to influence key decisions that impact economic competitiveness and foster innovative projects to drive growth in their communities.
- Local government leadership committed to policy development, rooted in evidence, expanding fiscal autonomy, simplifying funding, and enhancing collaboration between central and local governments.
- The UK continues to support policy innovations to transform fiscal arrangements that better enable local government to deliver on national priorities. This recognised local government is well placed and closest to their communities to deliver outcomes in an efficient and effective manner.
- The success of the city deals in the UK is largely attributed to the substantial financial support transferred from central to local government - not merely a shift of responsibilities without adequate resources - ensuring local authorities have the means to effectively drive growth and improve public services.
- The Manchester City Deal, introduced over a decade ago, was a groundbreaking initiative aimed at improving public service delivery, generating new funding sources, and reducing dependence on national government. It empowered local authorities to become more self-sufficient by enabling them to collect and manage their own revenue streams, independent of different levels of government.
- Greater Manchester Combined Authority has used its unique devolved powers to create a 10-year development pipeline. The aim is to turbocharge growth and deliver tens of thousands of new homes and jobs.
- Manchester introduced a revolving Infrastructure Fund, allowing local authorities to "earn back" a portion of additional tax revenue generated by investments in local infrastructure. This approach also led to the establishment of the Greater Manchester Investment Framework, City Apprenticeship and Skills Hub, Low Carbon Hub, and a housing investment fund.
- The city-region's governance model allows for agile decision-making, strategic investment, and targeted infrastructure improvements, ensuring that developments happen at scale and pace.

Key insights and observations:

Local Governments have a significant opportunity to leverage investment in sports infrastructure as a catalyst for urban, social and economic renewal. Sport-based regeneration strategies can be beneficial as a means of enhancing and, in some cases, transforming the image and prosperity of a local community.

- A key decision by Paris and surrounding councils was to direct investment for the Games into communities requiring economic revitalisation. The neighbouring municipality of Saint-Denis attracted 80% of the public investment for the Games, including the construction of the Athletes' Village and Aquatics Centre. This regeneration has boosted the local economy by attracting additional industry investment, creating jobs, and increasing property values.
- The Adidas Arena, an 8,000-seat facility, in the economically challenged northern suburbs of Paris (Saint-Denis), was selected for investment due to its need for long-term development. This was one of only two purpose-built venues for the Paris 24, opening just one month before the commencement of the Games.
- Efforts have been made to ensure the Adidas Arena hosts regular and major events, complemented by a vibrant precinct featuring restaurants, cafes, and businesses, creating an active and dynamic environment. This venue is a high-quality development that has set a new benchmark for surrounding urban design and amenities. The Arena is managed in a PPP model with a management company responsible for securing events and activations in a revenue-share model.
- This approach has brought economic benefits, but also enhances public safety and amenity, making the area more attractive for residential and commercial investment. Since opening, patronage has been significantly higher than anticipated, contributing to the area's ongoing regeneration.
- The vertical use of space incurs additional construction costs but enables areas to maximize space utilization and adaptability. This approach allows venues to accommodate a wide range of activities, from community sports to major league basketball and large-scale events.
- Previously derelict areas in Greater Manchester have been transformed into thriving precincts for sports, entertainment and media, showcasing the lasting social and economic impact of urban renewal and generational investment into sporting infrastructure.
- Sportcity, developed around the 2002 Commonwealth Games, revitalised East Manchester by attracting investment and infrastructure improvements. Now home to major venues like the Etihad Stadium, the National Cycling Centre, and the Manchester Regional Arena, it has positioned Manchester as a global sporting destination, boosting tourism, job creation, and local economic growth while driving new residential and commercial developments.
- MediaCityUK in Salford Quays is a flagship urban renewal project that turned a declining dockland area into a leading digital and creative industry hub. Home to the BBC, ITV, and numerous media and technology companies, MediaCity has driven economic diversification, creating thousands of jobs and attracting talent from across the UK. The development has spurred investment in transport, housing, and public spaces, contributing to Salford's regeneration. By fostering innovation and creative industries, MediaCity has cemented Manchester's reputation as a major centre for media and technology.
- Together, Sportcity and MediaCity demonstrate how targeted regeneration efforts can drive economic transformation, creating local employment, and revitalising urban landscapes. Both precincts are now a key part of Greater Manchester's economic landscape, hosting diverse businesses and become a cultural and entertainment destination, hosting various cultural institutions and events that enhance the area's vibrancy and appeal.
- Old Trafford Regeneration (OTR) is the largest sports-led regeneration project in the UK, transforming the wider area and creating opportunities for residential and commercial development, forecast to inject an additional 7.3 billion GBP into the broader UK economy.

Key insights and observations:

Local Government is the ultimate custodian of legacy impacts and should therefore prioritise efforts and responsibility to ensure the delivery of local benefits before, during and after the games. Legacy planning, management and implementation must be intentional, ensuring sustained community benefits post-event.

- Hosting the Olympic and Paralympic Games is far more than a four-week event, it is a catalyst for decades of transformation across the entire city region.
- While international committees and sporting federations may have differing legacy priorities and lower local exposure, local governments have a vested interest in securing a long-term legacy for their communities.
- South East Queensland stands at a pivotal moment, with rapid growth and rising global recognition creating diverse opportunities. The region must strategically shape its legacy by prioritising, articulating, and pursuing key initiatives with clarity and commitment.
- The Games opportunity presents significant potential for long-term regional transformation. Setting expectations and focusing on achievable outcomes is essential to maintaining public support and avoiding disillusionment.
- As the 2032 horizon approaches, early and consistent community engagement is crucial. The final year before the event is often chaotic, so laying solid groundwork well in advance is necessary. Beyond physical development, cultivating cultural identity and emotional connections is equally important.
- Venues such as Adidas Arena and the aquatic centre had a clear focus on legacy needs and performance, and their high standard of design and construction is a key factor in their long-term viability (including operational costs and ability to attract sponsors and users), as well as their impact on surrounding high-quality urban renewal outcomes.
- There is a significant opportunity to secure engagement and partnership with sporting federations who will be engaged in the region in the lead up to the Games. A number of strategic partnerships were observed between councils and national sporting federations. This centred around relocation of a federation to support venue investment, legacy activation and long-term viability of new or upgraded venues. For example, British Cycling in Manchester, and Rowing and Canoeing federations at the Nautical Stadium Olympic Ile-de France, Paris. Particular focus should be given to exploring these opportunities in the leadup to 2032.

Key insights and observations:

Hosting major global events can act as a catalyst for regional transformation, but cannot address all existing economic or infrastructure challenges. It should not be seen as a substitute for comprehensive public policy solutions. Meaningful community engagement throughout the Games' journey is essential for ensuring local impact and long-term success.

- Sustained community involvement is vital for maintaining public support, especially by engaging youth to secure long-term benefits. Regular initiatives, such as school programs and community festivals, help build excitement and ensure ongoing momentum.
- A well-structured legacy plan is crucial to prevent disengagement and disillusionment after the Games. There was a cautionary note about potential post-Games despondency within the local community, where excitement may rapidly fade after the event concludes.
- A united regional approach is fundamental for setting realistic goals, securing necessary infrastructure improvements, and maintaining robust public engagement throughout all phases of the Games. Maintaining unity, setting realistic goals, and effectively communicating benefits are crucial to ensuring the long-term success of the Games for the host region.
- Given the intense local and international scrutiny the Games will face, proactive leadership is required to showcase the region's strengths, drive meaningful outcomes, and secure lasting legacy benefits. Transparent, strategic communication is key to managing expectations, building trust, and reinforcing public support by clearly articulating long-term benefits.
- Identify, quantify, agree and articulate the guaranteed legacy outcomes the Games will bring to SEQ (number of new homes to be built, i.e. 4000 homes delivered for the Games villages), number of new visitors, increased global identity etc.

Key insights and observations:

A long-term growth vision serves as a powerful tool for aligning government, industry, and community expectations, particularly when its highly visible, tangible, and actively engages the public, offering Queensland a model to enhance public participation. Global city regions demonstrate successful densification through transit-oriented developments, emphasising the role of thoughtful urban planning in boosting liveability and connectivity.

- Singapore and Manchester exemplified the value of having a 30-to 50-year regional planning vision. Singapore's disciplined 50-year approach serves as a model for structured, sustainable growth and technological development. Communicating this vision publicly, with clarity and consistency, is vital to building trust and securing ongoing community support.
- A clear regional planning vision is essential, particularly how residents engage with and shape their communities' future. Singapore's Planning Gallery demonstrated an innovative approach to educating and involving residents in city development. With low engagement in Queensland's planning process, this model presents a valuable opportunity for the State to explore. The interactive gallery serves as a key tool for fostering alignment on local challenges, responding to community sentiment, and ensuring broad-based buy-in for regional growth development.
- Both Singapore and Greater Manchester exemplify well-executed densification, particularly through transit-oriented developments that integrate seamlessly with high-amenity frameworks. These approaches highlight the importance of thoughtful urban planning in enhancing liveability and connectivity.

Key insights and observations:

Local governments in Singapore, Paris, and Greater Manchester widely adopted common data environments to centralise and manage real-time information, enhancing collaboration and efficiency. Singapore leveraged this for disaster response and public safety, while Paris used it for inter-agency coordination during the Games. Greater Manchester addressed digital exclusion with a flexible regional strategy, integrating public services through AI-driven systems to improve urban management, particularly in traffic and public safety.

- Across the three locations visited, local government entities widely adopted common data environments, and shared platforms that centralise and manage data, enabling external parties to store, collaborate, and review technical documentation in a single, trusted source. This approach was demonstrated in Singapore's disaster response, public safety measures, and water management, as well as in Paris during the inter-agency deployment for the Games, including traffic and security coordination.
- A regional data view provides valuable insights into traffic patterns, population growth, and resource allocation. When well-managed with proper controls, this data can lower costs and deliver improved outcomes, while the ability to co-design in a digital model helps overcome many infrastructure challenges.
- Responding to what it sees as an entrenching 'digital divide', Greater Manchester took decisive steps toward becoming a more digitally inclusive city-region. Its efforts focus on coordinating local and city-region government, businesses, and communities to improve access and up-skill residents.
- As its Combined Authority of 10 local governments matured, its evidence base has found the crosscutting ways that digital exclusion across Greater Manchester amplifies social inequalities and undermines economic development. With no single infrastructure item or silver bullet possible, the city region developed a flexible, collaborative digital plan for the city-region.
- Establishing a common data environment is the key consideration and challenge for local government in leveraging the benefits of emerging technology and AI.
- The GM One Network was demonstrated as a unified digital infrastructure connecting public services across Greater Manchester. It improves communication, data sharing, and collaboration between local councils, emergency services, healthcare providers, and other public sector organisations. This has helped deliver more efficient and coordinated services to residents.
- Singapore's digital development success is rooted in a proactive, government-driven approach that capitalises on a view of regional opportunities. Singapore has long involved itself in coordinating the development of the digital sector, with digital infrastructure initiatives spanning the last 30 years. This gathered momentum after the government developed a comprehensive and responsive policy for digital businesses and public service delivery.

Key insights and observations:

Regional coordination has been key to building global brand identities, as observed in Paris, Greater Manchester and Vancouver (2023). Paris leveraged the Games to generate 137,000 jobs, including 10,000 from foreign direct investment, benefiting the host city and surrounding areas like Saint-Denis. The success of Greater Manchester stems from a mixed revenue system, shared leadership and agency, which drive investment and economic growth.

- As seen in Vancouver and Los Angeles (2023), there was strong coordination among local councils in Paris and Manchester to promote their regions' global brand identity. This included complimentary regional services, and strategic dispersal plans for attracting investment across the broader area.
- The economic impact of the Paris Games has already resulted in 137,000 jobs, including 10,000 indirect jobs from foreign direct investments linked to the event—investments that may not have occurred without the Games.
- Paris and Saint-Denis exemplify how the benefits of the Games and international exposure extend beyond the central core city to the surrounding region. Municipalities like Saint-Denis were actively engaged and benefitted from catalytic investments, ensuring a long-term impact throughout the Paris region. Increased tourism and investment must benefit the entire region equitably.
- Manchester's success in building a global identity is driven by a high-performing mixed revenue system and a culture of shared leadership among politicians, business leaders, and academics. Central to this effort is MIDAS, Greater Manchester's inward investment agency, which leverages institutional expertise and collaborative partnerships. The Growth Company, a non-profit economic development agency, also plays a key role in ensuring consistent regional messaging and showcasing diverse opportunities. This reinforced the idea that economic collaboration across the region by many local authorities strengthens the collective impact of the city region.
- Collaboration has been key to Manchester's growth. The unique city-region governance model unites the public and private sectors, enabling development at scale and pace. Greater Manchester is using its devolved powers to pioneer a new way of delivering tens of thousands of new homes and jobs.
- At the heart of this is the creation of a single pipeline for growth, which will target investment across six Growth Locations. In preparation for the next phase of growth, new partners are being sought to help unlock massive potential by investing in the most impactful and transformational projects.

Key insights and observations:

Regions across the world are grappling with the challenges of affordability, housing supply and homelessness despite a range of differing models and approaches. All approaches rely on a strong and coordinated effort between government and the social sector. Prioritising sustainable development, affordability, and ensuring access to infrastructure like social transportation that connects social and economic services can help address the long-term impact of affordability, housing challenges and prevent homelessness.

- Singapore's strict housing policies and public housing system (HDB flats) help keep levels of homelessness relatively low. Its public housing model, in which over 80% of residents live in government-provided homes with a pathway to ownership, was highlighted as a successful approach to eliminating visible homelessness. The government addresses homelessness through temporary shelters, rental housing schemes, and financial aid, with agencies like the Ministry of Social and Family Development (MSF) and non-profit organisations providing support.
- Greater Manchester's ambition was for everyone to live in a home they can afford that is safe, secure, accessible, healthy and environmentally sustainable for all by 2038. This includes a collaborative approach across housing, health, and social services, alongside strong community involvement to shape effective policies.
- During the 2023 Mission to North America, the delegation observed high concentration of homelessness in civic spaces, posing significant public safety, economic, and social challenges for local authorities. In contrast, despite visiting various low socio-economic areas, the issue was not as visibly prevalent on the same scale in Paris, Manchester, or Singapore.

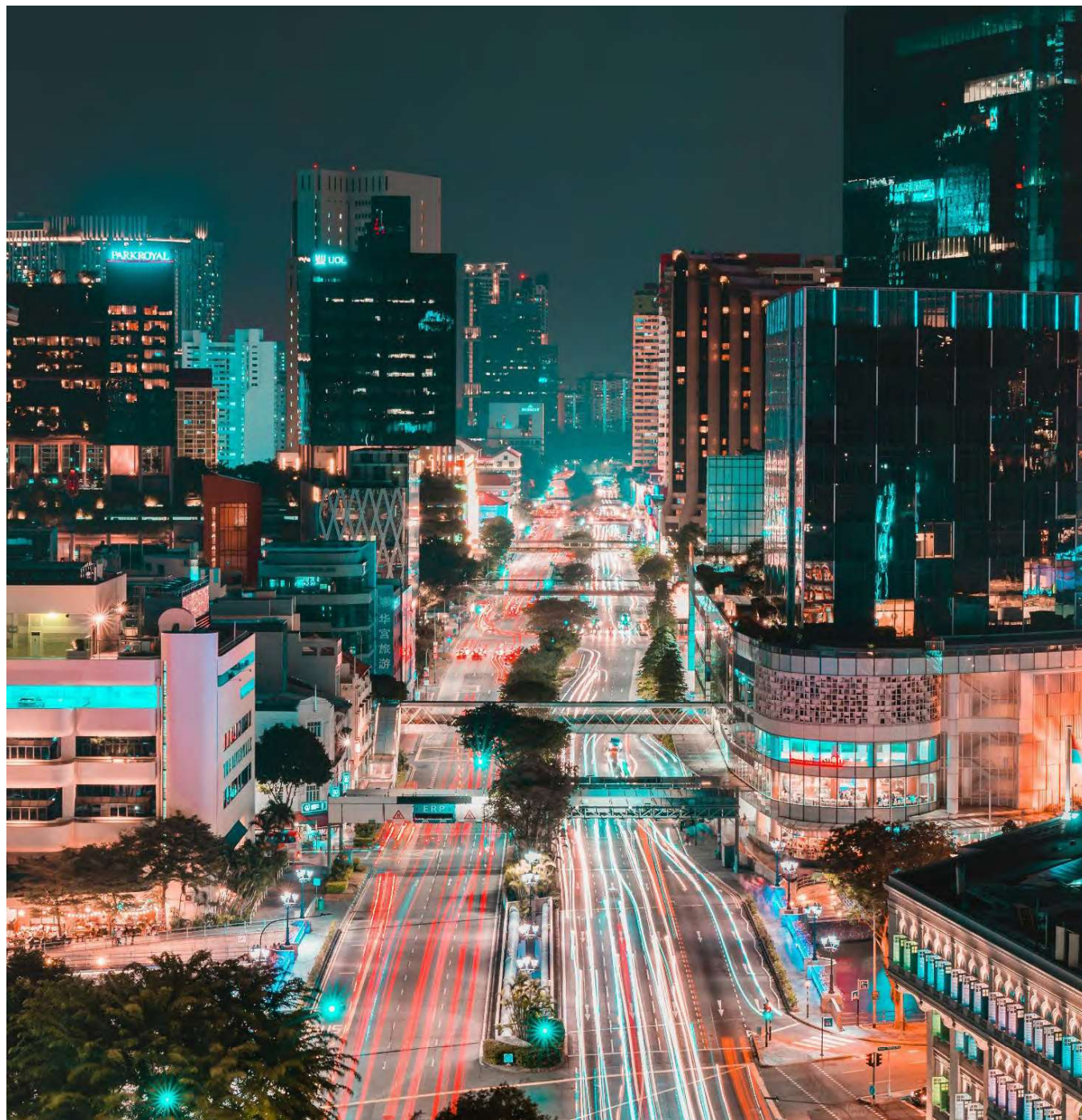
Key insights and observations:

Water security is crucial for growing city regions. Paris, Manchester and Singapore implement a range of innovative infrastructure solutions to manage stormwater and wastewater which have enhanced the resilience of their cities including from flooding, improved the health and amenity of their regions, and responded to the growing need for industrial water for growing economies.

- Singapore transformed its water management system from polluted waterways to a highly efficient model, managed by the Public Utility Board (PUB). It utilises diversified sources such as local catchment, imported water, reclaimed water (NEWater), and desalinated water, addressing rising demand, climate change, and carbon emissions through efficient water capture and reuse.
- The Marina Barrage is a dam in southern Singapore built at the confluence of five rivers, across the Marina Channel between Marina East and Marina South. It was completed in 2008 at an approximate cost of \$165 million (USD) and is a large-scale infrastructure project that serves multiple purposes, including flood mitigation, freshwater supply, and recreation.
- Technological innovation in both Paris and Manchester incorporated smart water management systems, using sensors and real-time data to optimise local water use, detect leaks, and improve efficiency.
- The City of Paris collaborated with a selection of public authorities to regenerate and protect the river's Seine entire ecosystem, with 1.4 billion euros initially budgeted. This involved bacteriological treatment of wastewater leaving treatment plants and eliminating the discharge of wastewater from buildings.
- Over the last 30 years, wastewater discharges have been reduced tenfold through automation and network monitoring. The Austerlitz project aims to further decrease discharge days by another tenfold, meaning Paris will rarely need to open its spillways during storms. This will have a significant positive impact on biodiversity and river quality. Already, the number of fish species in Paris has increased from just three in the 1970s to 32 today, highlighting the success of these environmental initiatives.
- Paris has invested in a suite of green infrastructure projects, including permeable surfaces, green roofs, and urban wetlands, to manage water flow and reduce flooding. Manchester has similarly embraced nature-based solutions for stormwater management, improving water quality and managing urban runoff.

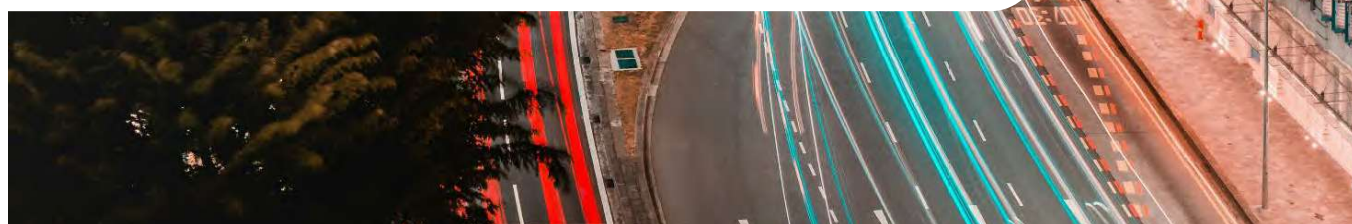


6. Mission Program



Singapore

5 - 6 February



SINGAPORE

Key points of interest

Key areas of discovery for mission delegates during the Singapore visit included:

Waste-to-energy (mass burn solutions)

Singapore's growing population and booming economy have contributed to a seven-fold increase in the amount of solid waste disposed from 1,260 tonnes a day in 1970 to a peak of 8,741 tonnes a day in 2021. Solid waste not segregated at source is collected and sent to waste-to-energy plants for incineration. This reduces the volume of solid waste by about 90% and energy is recovered to generate electricity. The incineration of solid waste reduces its volume by about 90%. This has helped land-scarce Singapore extend the life span of Semakau Landfill. Singapore's solid waste disposal infrastructure consists of four waste-to-energy (WTE) plants. KSTP was developed under a Design, Build, Own and Operate (DBOO) model and commissioned in 2009 to replace Singapore's first WTE plant at Ulu Pandan, which closed in August 2009 after 30 years of operation. The Senoko Incineration Plant was also divested to the private sector in September 2009. TWTE was also developed under a DBOO model and commissioned in 2021 to replace Singapore's second WTE plant (i.e. Tuas Incineration Plant) closed in February 2022, after 36 years of operation.

Digital technology for public service delivery and transformation

In 2014, Singapore set an ambition to become a Smart Nation – to make Singapore one of the leading cities in the world – an outstanding place where the people can live meaningful and fulfilling lives, and where the human spirit flourishes. In October 2024, Singapore released Smart Nation 2.0 Plan, which seeks to shape how technology is used to improve citizens' lives and create a thriving digital future for all. Explore successful models of public-private partnerships (PPPs) and implementation, including innovative public safety and intelligent transport systems, examining the application of AI in municipal services, its impact on citizens and interoperability of common data environment across multiple government boundaries.

Water reclamation

Singapore is taking the "waste" out of its wastewater by turning sewage into safe, clean drinking water using an advanced filtration and treatment system. The island state is one of the most water-stressed places in the world. The plant can treat up to 900 million litres of wastewater daily – roughly equivalent to the water held by 350 Olympic swimming pools. It reaches as far as 25 stories deep in places through an expansive network of tunnels, pipes, tanks, filtration equipment and other infrastructure. Recycled wastewater can now meet 40% of Singapore's water demand – a figure that's expected to rise to 55% by 2060.

Singapore City Gallery (Urban Redevelopment Authority)

Few places in the world have transformed themselves from a humble trading port to a global metropolis, in five decades. Singapore's rapid evolution has been accompanied by remarkable physical transformation, with skyscrapers and other iconic structures emerging to create a distinctive city skyline. Unravel the fascinating story of Singapore's Urban Transformation at the Singapore City Gallery, which documents the nation's planning challenges and efforts in over ten thematic areas, and interactive exhibits spanning three floors.

Gardens by the Bay

An iconic landmark that spans 105 hectares (260 acres) and is renowned as one of the world's leading horticultural attractions, drawing millions of visitors annually. Established in 2012 and adjacent to the Marina Reservoir, it has become a symbol of Singapore's commitment to creating sustainable green spaces within urban environments. At the heart of Gardens lies the Flower Dome, (the world's largest glass greenhouse) a marvel of modern engineering and botanical innovation. The Flower Dome is a climate-controlled conservatory, covering a vast area of 1.2 hectares and standing at a height of 38 meters. This architectural wonder replicates the cool-dry Mediterranean climate, providing an ideal environment for a diverse array of plants from various regions around the world. To celebrate their international partnership and mark the 75th anniversary of the Carnival of Flowers, Toowoomba Regional Council featured in a dedicated installation in the Flower Dome for three months.

Site tour: Wednesday, 5 February 2025
Waste to Energy (WTE) Incineration Plant

Attendees

Jackson Goh, Managing Director of Environment & Infrastructure Division, Keppel

Jackson is responsible for the Environment business of Keppel's Infrastructure division and oversees the Keppel Seghers group of companies. With more than 25 years of experience across the energy and environment sectors, Jackson drives technology innovation for environmental solutions across Asia Pacific and Europe.

Annie Tan, Assistant Managing Director, Keppel Seghers

Brecht Van Gastel, Site Coordination Engineer, Keppel Seghers

Tey Tai Keat, Senior Manager, Business Development, Keppel

Wing Kin Tse, Deputy Director, Business Development, Energy Transition, Keppel

Shermeen Fones, Senior Executive Engineer, Energy & Industrial, Keppel

Background

The Keppel Seghers Tuas Waste-to-Energy (WTE) plant is a landmark in Singapore's waste management sector, notable for being the first WTE facility developed under the National Environment Agency's (NEA) Public-Private Partnership initiative. Operational since October 2009, it represents a significant milestone in showcasing homegrown WTE technology.

Developed by Keppel Seghers, a global leader in environmental solutions, the plant was completed in 2006 and occupies only 1.6 hectares, making it one of the most compact WTE facilities in the world. The facility features two state-of-the-art incinerator-boiler units and one condensing turbine-generator. These systems are equipped with proprietary technologies, such as an air-cooled grate and a flue gas cleaning system, enabling the plant to treat up to 800 tonnes of solid waste daily and generate approximately 22 MW of green energy.

Keppel Seghers operates the plant 24/7 throughout the year, demonstrating its commitment to sustainable waste management and energy production. As part of its decarbonization strategy, the company is actively working on integrating carbon capture technology into its WTE plants, aiming to create carbon-negative waste management solutions. Globally, Keppel Seghers is recognized for its expertise in designing, engineering, and constructing advanced environmental infrastructure. With dedicated in-house operations and maintenance teams, the company continues to deliver innovative solutions to address environmental challenges worldwide.

Key learnings / outcomes

- Keppel Seghers hosted the delegation and provided a site tour of their Waste-to-Energy (WTE) plant as well as a presentation on the organisation and the WTE plant.
- It is a state-of-the-art waste-to-energy facility, capable of dealing with 800 tonnes of solid municipal waste each day, it operates 24 hours a day.
- It's located at least a kilometre from the nearest residents and uses the latest state-of-the-art technology. Various technologies were discussed that are available for waste-to-energy plants.
- Funding, ownership and operational models were discussed. The WTE plant was funded as part of a public-private partnership which included partial government ownership and partial private investment in the facility.
- This facility provides a good example of how this kind of WTE plant can operate in a high density but constrained city with limited landfill options.
- Keppel Seghers Tuas explained that their Waste-to-Energy plant is a world class technology provider:
 - WTE Global Projects: 17 countries, 100+ projects, 74,000 tonnes/day.
 - They are among the top five Waste-to-Energy (WTE) plants globally.
 - Their capacity of tonnes delivered per day has more than doubled from 2010 to today.
- Keppel Seghers built Australia's first WTE plant in Kwinana, Perth – delivers up to 1,200 tons/day.
- They shared that they are an early adopter and advocate for holistic approach and enhanced circularity in solid waste management and treatment, incorporating key technologies such as mechanical sorting, material recovery, composting and waste-to-energy.
- They also explained the modularisation approach they take to waste management:
 - First in global WTE industry to adopt method.
 - Key advantages of approach: availability of skilled labour, reduced delivery timeline, improves quality,

enhances overall safety, optimises use of space.

- Keppel Seghers shared some of their operation and maintenance expertise with the delegation:
 - More than 300 employees worldwide.
 - Keppel Seghers treats almost half of Singapore's municipal solid waste.
 - Plant optimisation and follow-up service – providing technical support to Runcorn WTE (UK) since 2018 achieving higher electrical efficiency and lower chemical consumption levels.



Meeting: Wednesday, 5 February 2025

Surbana Jurong Group (SJ Group)

Attendees

Sean Chiao, Group CEO, SJ Group

Sean works with a global talent force of 16,000 across 120 offices in 40 countries around the world operating under the group's ten specialist brands comprising of design, engineering, facilities and asset management professionals. Sean is driving SJ Group's transformation and charter to accelerate the transition to a regenerative future, enabled by sustainability thinking and the adoption of digital technology and smart solutions. An advocate for inspiring future generations of talent, Sean has instituted Councils of Excellence to drive innovation and excellence in every field, and increased programmes for nurturing early professionals, promoting career mobility and enhancing skills development.

Yeo Choon Chong, Chief Executive, Integrated Solutions & Regional Head, SJ Group

As a key member of Surbana Jurong Group's management team, Mr Yeo Choon Chong is responsible for driving the Group's growth in ASEAN, a rapidly growing urban region with vast opportunities for decarbonisation and adaptations of renewable energy. Choon Chong leads 3,000 multidisciplinary planners, architects and engineers in Surbana Jurong's ASEAN division which operates in Singapore, Malaysia, Indonesia, Philippines and Vietnam, helping clients transition to a smart and sustainable future in urban and infrastructure sectors. Choon Chong is also currently the Chairman of Mitbana, a joint venture company between Mitsubishi Corporation and Surbana Jurong, and the Group Managing Director of KTP Consultants which was acquired by Surbana Jurong in 2015.

Karen Yew Wen Li, Chief Corporate Affairs, SJ Group

Ms Karen Yew is Chief Corporate Affairs, responsible for enhancing SJ's engagement with significant external stakeholders in its global environment. Reporting to the Group CEO, Karen manages executive communications, supporting the Group CEO in establishing and maintaining relationships with internal stakeholders including the Board of Directors, Global Leadership Team and employees, as well as external stakeholders including industry associations, think tanks, and government agencies. Karen also works with Risk Management to protect the group's reputation and maintain stakeholder trust. This includes establishing protocols for a coordinated response and ensuring alignment with the group's brand strategy.

Lim Hong Kian, Executive Director, SAA

Hong Kian's extensive and diverse portfolio of projects cover mixed use, transport, residential, institutional, hospitality, landscaping, master planning and urban design developments. He is a qualified LEED professional and a strong advocate of leveraging technology for sustainable and innovative design solutions. This thinking was the key driving force behind landmark projects such as the Jurong Lake District Masterplan, Dover Masterplan and JTC Bulim smart industrial building and planning projects.

Jonathan Powell, Director, Global Clients and Partnerships, SJ Group

Jonathan is the Director, Global Clients and Partnerships at SMEC and the Surbana Jurong Group. His expertise lies in strategic planning, client engagement, and delivering innovative solutions to meet client needs. As the Global Manager – Clients and Partnerships, Jonathan plays a crucial role in fostering strong client relationships, developing strategic partnerships, and driving SMEC's growth and success in SMEC's global markets.

Henry Woon, Director, Singapore, Atelier Ten

Henry is the Director leading Atelier Ten (Asia) office in Singapore. He specialises in combining environmental design principles and computational simulation capabilities with the practical engineering design knowledge to ensure that sustainable design strategies are deployed in the context of practical building service solutions.

Background

The new SJ Group headquarters embodies the character of Singapore as the 'City in the Garden', as the campus integrates harmoniously with its rainforest setting and is the largest office building to achieve the highest rating awarded in Singapore for environmentally sustainable design. Envisioned as a new centre of research and innovation, the campus supports wellness in the workplace for Surbana Jurong's 4,000 on-site employees and welcomes the wider community to benefit from on-site resources and amenities. The district also includes Nanyang Technological University and new residential developments, and anchors the emerging Jurong Innovation District, a nexus for companies advancing sustainability in manufacturing, urban solutions, and smart logistics.

Key learnings / outcomes

- SJ Group hosted the delegation in their innovative and sustainable campus in the emerging Jurong Innovation District. This meeting included a site tour of their state-of-the-art facility, as well as a round table discussion regarding technology, sustainability and housing.
- The hosts spoke about their new digital approach to customer feedback and satisfaction with city services and the success of this approach.
- SJ Group also highlighted their work on sustainability in the region. The organisation has a public-private partnership (PPP) with the government that has aided them on delivering on sustainability outcomes such as integrated waste facilities and technologies that build sustainability capability in regard to resource recovery, data and innovation.
- Housing ownership models in Singapore were discussed:
 - Public housing is a large part of the housing supply in Singapore - more than 80% of people live in public housing
 - Singaporean residents have an opportunity to purchase their home over time.
 - No house or apartment can be owned for longer than 99 years, everything is on a 99-year lease.
 - It is a more complex model of ownership – however there was no significant homelessness observed in Singapore.
- SJ Group work with the Singapore government to achieve the goal of having as high an ownership of homes as possible for citizens, and have the aim to deliver more than one million new homes.
- Public housing is a large aspect of addressing the issue of housing affordability and availability in Singapore, with 80% of the population living in government funded homes and public housing being available for those with middle income. The approach taken is that affordable housing needs to be attainable housing, with works being done towards opening the planning schemes to support greater population density and growth.
- There is a strong focus on sequenced infrastructure development to support population growth to manage pressure on infrastructure. There is also a focus on density clusters providing residents with access to local services, transport and jobs.
- Green public spaces and corridors are key to support urban density to maintain quality of life for residents.





Meeting: Wednesday, 5 February 2025

Marina Barrage (Water reclamation):

Attendees

Yeow Chong Soh, Senior Deputy Director, Industry & Technology Collaboration, (PUB)

In this role, he is responsible for overseeing technology collaboration initiatives within Singapore National Water Agency.

Choon Kiat NG, Senior Assistant Director, Singapore's Public Utilities Board, (PUB)

In this capacity, he is associated with the Industry and Technology Collaboration Department, specifically within the Singapore International Water Week (SIWW) and Water Industry Programme Office (WIPO).

Winnie Tan, Senior Assistant Director, Industry & Technology Collaboration, (PUB)

Winnie focuses on international relations and since joining the Marina Barrage team at its inception in 2008, she has been actively involved in various events and initiatives. Additionally, she has participated in projects aimed at bringing innovative ideas to life within PUB.

Jessica Boon, Manager, Industry & Technology Collaboration, (PUB)

Background

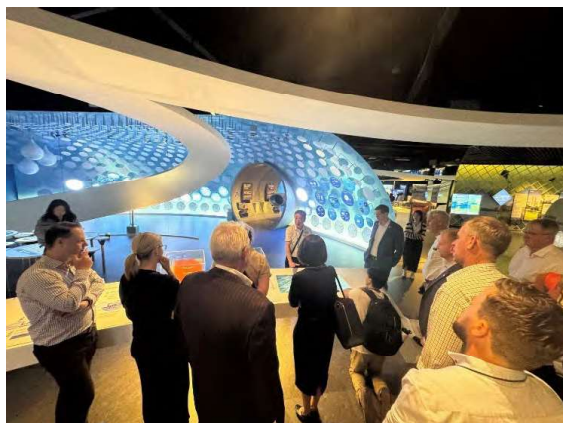
Operated by Public Utilities Board (PUB) – Singapore National Water Agency, The Marina Barrage is Singapore's largest reservoir. Built across the mouth of Marina Channel, Marina Barrage creates Singapore's 15th reservoir and the first in the heart of the city. The Barrage is a dam built across the 350-metre-wide Marina Channel to keep out seawater, creating the 15th reservoir in downtown Singapore. Water from Local Catchment is one of the Four National Taps, with the other three being imported water, NEWater and desalinated water. With a catchment area of 10,000 hectares, Marina catchment is the island's largest and most urbanised catchment. Together with two other reservoirs, Marina Reservoir has increased Singapore's water catchment from half to two-thirds of the country's land area. Officially opened on 31 October 2008, desalting started in April 2009 through natural replacement by rainwater.

Key learnings / outcomes

- Singapore's Public Utilities Board, (PUB) provided an overview of Singapore's integrated water management and NEWater process (water reuse), through an interactive model and a sustainability gallery. This was followed by a roof tour and visual inspection of the barrage.
- PUB is one agency that manages the entire water cycle of the Marina Barrage. This centralisation has led to enhanced efficiency and accelerated decision making.
- PUB emphasised the importance of public messaging, using their example of "make every drop count".
- Their strategic mission is to:
- Supply good water - this is achieved through diversified sources, network reliability, and upgraded water plants.
 - Reclaim used water - PUB uses a deep tunnel sewerage system for this mission.
 - Tame stormwater – reached through an increase in drainage capacity and response to flooding.
 - Resist rising seas – PUB is the lead agency for coastal protection activities.
- The three key strategies of PUB are to:
 - Capture every drop.
 - Reuse water endlessly.
 - Desalinate water.
- There are four "National Taps", or diversified sources of water:
 1. Water from local catchments: 17 reservoirs, two thirds of land mass is a water catchment.
 2. Imported water: agreement with Malaysia to 2061.
 3. NEWater: high-grade reclaimed water.
 4. Desalinated water: five desalination plants.
- PUB also shared that they are exploring additional resource recovery opportunities, specifically the gasification of sludge to reduce waste and extract valuable resources.
- Singapore has a shortage of land, but it also has a shortage of natural resources and it has a shortage of water. We visited the Marina Barrage site, which is right next to the Gardens by the Bay and Marina Bay Sands and that precinct there. What they have created is a dam with a series of walls that can open and close and they effectively want to use every single drop of natural water that lands on the island.
- They have created a series of reservoirs and dams, they treat that water, they recycle that water. It's called NEWater,

which is fully recycled water and that is used by the island as well in various ways.

- This particular dam was an engineering feat, a 350-metre wall across the channel which has opening walls.
- Singapore have previously relied on Malaysia for most of their water supply, so the water supply gets pumped from Malaysia. Singapore has needed to be more self-sustainable when it comes to their own water needs and so they're using water, they're recycling water and it's quite common and accepted there that that's the thing to do.



Reception: Wednesday, 5 February 2025

G'Day by the Bay

Hosted by

His Excellency **Allaster Cox**, Australian High Commissioner

Before posting to Singapore, Allaster was the First Assistant Secretary Strategy & Development in the Office of Southeast Asia (2022-23), following his posting to Jakarta (2017-21) as Deputy Head of Mission. Allaster has had a long career in Foreign Affairs and Trade (DFAT) working mainly on Southeast Asia, including in Canberra as Division Head for Southeast Asia (2013-17), and overseas as Ambassador to Vietnam (2008-12) and Brunei Darussalam (2001-03).

Background

The G'Day by the Bay reception celebrated the 60th anniversary of Singapore and Australia's diplomatic relations. The delegation was invited to join 500 VIP guests which included Singapore government officials, business and industry leaders, plus key members of the diplomatic community (including heads of missions).

Key learnings / outcomes

- The Australian High Commissioner for Singapore, Allaster Cox, hosted a reception to celebrate the 60th anniversary of Singapore and Australia's diplomatic relations, to which the delegates were invited to attend.
- Singapore and Australia share a longstanding and robust diplomatic relationship characterised by strong economic, defence, and cultural ties. The partnership is built on mutual trust, shared values, and common interests in regional stability and prosperity.
- Key aspects of the Australia / Singapore strategic relationship incorporate economic cooperation, defence and security, education and people-to-people ties, regional and multilateral collaboration, and innovation and technology.
- The reception hosted by the Australian High Commissioner served to strengthen that diplomatic relationship between Australian and Singapore as the CoMSEQ directors were able to engage with key figures in Singapore.
- It included key industry, business and government stakeholders in the bilateral economic relations between Australia and Singapore.



Meeting: Thursday, 6 February 2025

Centre for Liveable Cities

Attendees

Michael Koh, Executive Fellow, Centre for Liveable Cities

Michael Koh is a fellow with the Centre for Liveable Cities (CLC), a division of Singapore's Ministry of National Development. He was previously the head of projects and design at property developer SC Global and has 25 years of experience in public service in Singapore. During his time at the Urban Redevelopment Authority, Koh spearheaded the city planning and urban design of Singapore's Central Area.

Hugh Lim, Executive Director, CLC

David Ho, Director, CLC

Elaine Tan, Director, CLC

Stephanie Yong, Deputy Director, CLC

Sherry Ng, Sr Assistant Director, CLC

Adib Jalal, Sr Assistant Director, CLC

Cheryl Lee, Assistant Director, CLC

Ruth Chong, Manager, CLC

Background

Through the City Gallery, the Urban Redevelopment Authority discovers how Singapore transformed from a fledgling nation in the 1960s to one of the most liveable cities in Asia at this highly immersive and interactive gallery that features urban planning challenges and the innovative solutions that tackle them.

Key learnings / outcomes

- The delegation received a tour of the City Gallery which showcased Singapore's physical transformation in the last 50 years, and illustrated with a 3D model how "forward-looking, long-term and integrated land use planning and partnership between private and public sectors is achieved".
- The Gallery also presented "creative solutions to balancing different competing needs, the many live, work, play opportunities planned for, extensive conservation efforts and urban design strategies to create a more distinctive Singapore."
- The Centre for Liveable Cities (CLC) then provided a presentation on how they work towards the liveability of Singapore for its citizens and residents and demonstrated how a polycentric region can be extremely successful.
- Highlighted initiatives to maximise valuable land through investigating if infrastructure such as public transport could move underground.
- CLC shared how Singapore uses social housing as a way to promote and support multiculturalism, with 80% of residents living in social housing, with a 94% home ownership. This is achieved as residents own the title of the apartment but not the land. The land and building, and the management of these, are looked after by local councils through a central fund.
- Housing is made available as there are large social housing developments, of up to 50 storeys high, built on cemetery land. Immigration is also regulated to ensure that the city can keep pace with housing requirements to reduce homelessness. However, the need for immigration to address workforce shortages with an aging population were also highlighted.
- Housing is made affordable as citizens are able to use their super fund to buy a home. Housing can be inherited and resold, but in order to transfer ownership there is a means-tested criteria that must be fulfilled by the one receiving ownership.
- The urbanisation trend was discussed, with an expectation that close to 2/3 of the world's population will be living in urban areas by 2050. The relevance of urban resilience and regeneration, focusing on how cities can adapt to changes and disruptions, was also emphasised in light of growing urbanisation.
- CLC stressed the importance of orienting gained knowledge towards future purposes, specifically by capturing lessons already learned to anticipated future challenges and unexpected challenges, such as a global pandemic. From this, an importance of integrated master planning and development systems to ensure cities are prepared for future challenges was stressed.
- The challenges of climate change and its impact on liveability, especially for coastal cities, were discussed.





Lunch Meeting: Thursday, 6 February 2025**National Computer Systems Group (NCS) and Singtel-OPTUS****Attendees**

Chew Sing Bin, Chief Information Officer, NCS Group

Mr Chew Sing Bin serves as the Chief Information Officer (CIO) at NCS Group, a leading information, communications, and technology service provider headquartered in Singapore. In his role, he oversees the company's information technology strategies and operations, ensuring alignment with business objectives.

Daniel Ryan, Client Director - Major Accounts QLD Strategic, Singtel-Optus

Mr Daniel Ryan holds the position of Client Director for Major Accounts in Queensland at Singtel-Optus, one of Australia's leading telecommunications providers. In this role, he manages strategic relationships with key clients, ensuring the delivery of tailored communication solutions to support their business objectives.

Michael Tan, Senior Partner and Strategy Lead, Gov+, NCS Group

Mr Michael Tan is the Senior Partner and Strategy Lead for Gov+ at NCS Group. He leads and nurtures key client accounts within the Government Strategic Business Group and spearheads regional expansion efforts. Prior to joining NCS, Michael was a Managing Director and Partner at Boston Consulting Group (BCG) in Singapore, where he led the Public Sector Practice across Southeast Asia. He co-founded BCG's Climate & Sustainability Hub for Innovation in Asia, focusing on decarbonizing various sectors.

Cameron Boog, Tech Innovation Lead, Global Innovation Team, NCS Next

Mr Cameron Boog serves as the Tech Innovation Lead within the Global Innovation Team at NCS Next, a division of NCS Group focused on digital services and innovation. In this capacity, he is responsible for driving technological innovation and developing cutting-edge solutions to meet client needs.

Stephen Hill, Director, Pre-Sales Architecture, Singtel-Optus

Mr Stephen Hill is the Director of Pre-Sales Architecture at Singtel-Optus. His role includes identifying and developing unified communication, collaboration and modern workplace opportunities.

NCS EXECUTIVES**Singapore**

Howie Sim, Senior Partner, Transport, NCS

Mr Howie Sim leads the Client Service Unit for Transport in NCS. He focuses on helping transport organisations digitally transform their services in moving people and goods, to become more people and customer-centric to support future demands in smart cities. Howie serves as an industry practice lead for transport contributing to the growth of business and capability-building in APAC, ASEAN & Singapore regions.

Ying Shao Wei, Chief Scientist, NCS

Mr Ying Shaowei coordinates the efforts of NCS' centres of innovation and centres of excellence, including leading one or more of these centres. He builds up a global network of technology experts and research institutions which NCS could call upon to accelerate the company's client development and delivery work.

Wynthia Goh, Senior Partner, Global NEXT

Ms Wynthia Goh leads the NCS NEXT business globally, driving the growth of NCS's capabilities, offerings, and services in digital, AI, and cloud-based technologies to help clients transform their businesses. She leads the digital, AI, and cloud specialist teams, working with clients across all industries and geographical markets to solve business challenges through experience-led, intelligence-driven, and cloud-forward solutions. This includes taking a co-innovation and co-development approach, partnering closely with clients and the NCS partner ecosystem to explore, implement, and manage emerging technologies and innovations.

Andy Sim, Senior Advisor, Gov+ Growth & Innovation

Mr Andy Sim is the Senior Advisor for the Government Strategic Business Group which aims to transform and grow businesses. Andy has experience in Management, Sales, Business Development, Consulting and Software Development and has worked in large multinational enterprises, small regional companies and government linked organisation.

James Chong, Innovation Lead, Tesseract

Mr James Chong is the Tesseract Lead for NCS in Singapore, where they help clients understand, identify and prototype opportunities in innovative technologies. James helps organisations understand, identify and implement Digital transformations that solve business challenges, exploit opportunities and improve business by understanding their operations and their business imperatives and applying Digital innovation.

Australia

Tony Bailey, Chief Client Officer, NCS Australia

Mr Tony Bailey is the Chief Client Officer at NCS Australia. In this role, Tony spearheads strategies to enhance client satisfaction, drive business growth, and foster long-term partnerships. He focuses on delivering exceptional client experiences by aligning organisational efforts to meet and exceed expectations. With a keen eye for identifying opportunities, Tony plays a pivotal role in building strong relationships and ensuring seamless collaboration across teams to deliver innovative solutions that create value for clients.

Mike Swaby, Executive Director, Strategic Engagement, NCS

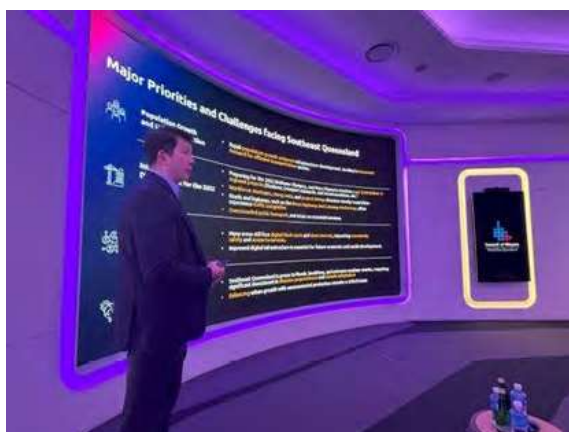
Mr Mike Swaby is the Executive Director of Strategic Engagement at NCS. His role focuses on leading impactful B2B growth strategy by helping some of Australia's leading organisations, private equity and family offices answer questions of growth and execute on growth agendas. Mike leads and coaches' diverse teams of 20+ on multi-million-dollar projects to grow and strategically transform businesses by focusing on outcomes.

Background

Singapore's efforts in harnessing digital technologies to transform its economy, society, government, and security have established the country as a leader in areas such as digital infrastructure and inclusion.

Key learnings / outcomes

- The delegation received a site tour of the NCS Hub and was given a presentation from the National Computer Systems Group (NCS) and Singtel-Optus.
- The primary purpose of this engagement was to gain insights and learn from Singapore's experiences in key areas of urban development and governance that align with SEQ's priorities for building a digital and sustainable future.
- The engagement was split into two sections, including:
 - Building a successful digital future with Public-Private Partnerships: there was an executive discussion on Singapore's approach to PPP, including NCS involvement with Singapore's Smart Nation program, and delivery of Digital Government services.
 - Immersive discussion: Safe Spaces and Intelligent Transport Innovation – there was also an interactive deep dive session on key projects supporting public safety and transportation.
- Key outcomes from the engagement included:
 - Enhanced Knowledge and Best Practices: the delegation gained insights into Singapore's digital transformation initiatives, public-private partnerships, and innovative technologies for urban governance.
 - Tangible Technology Demonstrations: the delegation had the opportunity to observe real-world examples of digital services, intelligent transport systems, and AI applications for potential implementation in Queensland.
 - Networking Opportunities: the delegates were able to build relationships with Singaporean private sector partners to foster future collaborations and investments.



Site tour: Thursday, 6 February 2025**Gardens by the Bay****Attendees**

Henry Woon, Director, Singapore, Atelier Ten

Mr Henry Woon leads Atelier Ten's Asia office in Singapore. As a chartered building services engineer, he has extensive experience in both building services engineering and environmental design. Henry has led environmental design and consultancy projects such as Jewel Changi Airport, Marina Bay Sands Energy Improvement projects, and the Mandai Nature Attraction Masterplan.

Mihkaail Anis Ng, Senior Director of Conservatory Operations, Gardens by the Bay

Grace Yang, Conservatory Operations, Gardens by the Bay

Background

Gardens by the Bay is a world-renowned horticultural and architectural marvel in Singapore, blending cutting-edge technology with nature to create a sustainable urban oasis, featuring more than 500,000 plants across more than 2,200 species. Spanning 101 hectares in Marina Bay, it comprises three waterfront gardens: Bay South, Bay East, and Bay Central. The centrepiece is Bay South Garden, featuring iconic attractions like the Supertree Grove - vertical gardens standing 25 to 50 meters tall, integrating sustainable technologies such as photovoltaic cells to harness solar energy and a system for rainwater collection.

Key learnings / outcomes

- The Gardens by the Bay tour from the design and maintenance team at the site was a first-hand example of how a public space can combine aesthetic beauty with ecological awareness. The location serves as a model for urban green spaces and how a local attraction can advance a city's reputation. It also generates significant tourism and economic benefits to the city, and showcases impact of opportunities on reclaimed lands.
- It was highlighted that the Flower Dome hosted the 'Carnival of Flowers' display from Toowoomba Regional Council between 23 September to 17 November in 2024 which coincided with the 75th anniversary of the Toowoomba Carnival of Flowers. The attraction received 399,919 visitors while on display. The Toowoomba Region was the first location in Australia to feature in the rotating pop-up displays at the Gardens by the Bay, and has increased Toowoomba's exposure in South East Asia via significant increases in website visits.
- Supertrees are connected by the OCBC Skyway, offering panoramic views of the gardens and cityscape. Two climate-controlled conservatories, the Flower Dome and Cloud Forest, exemplify sustainable engineering. The Flower Dome, the world's largest glass greenhouse, houses diverse Mediterranean and semi-arid plants, while the Cloud Forest features a 35-meter indoor waterfall and a mist-laden ecosystem. Both utilize energy-efficient cooling systems powered by biomass and an innovative air circulation design. Gardens by the Bay also includes a network of lakes, pathways, and sustainable water management systems that recycle rainwater for irrigation.
- The Gardens by the Bay is on a pathway to net zero implementing a range of initiatives.
- There is also a long-term plan to enable new housing and short-term accommodation around the gardens. This once low-value land is now of significant value due to the amenity of the Gardens, and will generate significant economic returns for government.



Greater Manchester

7 - 8 February



GREATER MANCHESTER CITY REGION

Greater Manchester is a vibrant metropolitan area in northwest England, comprising 10 districts with a population of nearly 3 million. Known for its industrial roots, its position as the global hub for textile manufacturing during the Industrial Revolution led to rapid urbanisation and numerous technological innovations, including the world's first steam-powered passenger railway system. The city has also been at the forefront of influential social and political movements, serving as the birthplace of the modern cooperative movement and the suffragettes. The region has since transitioned into a diverse economy, generating a Gross Value Added (GVA) of £78.7 billion, surpassing that of Wales. The area hosts over 126,000 businesses, and its higher education institutions enrol 116,000 students annually.

Like South East Queensland, local governments in Greater Manchester have a long and proud history of regional collaboration. This record has enabled it to become a leader in city-region devolution. Governed by the Greater Manchester Combined Authority (GMCA), led by Mayor Andy Burnham, the region operates under a unique devolution arrangement with the UK government. This structure grants local control over areas like transport, housing, skills, and health, enhancing its ability to address regional needs. The latest "Trailblazer" devolution deal, agreed in 2023, further supports Greater Manchester's strategic growth, offering greater fiscal flexibility and power over sectors such as net zero initiatives, housing, and employment. The region's refreshed strategy, *Good Lives for All*, aims to create a fairer, greener, and more prosperous Greater Manchester, where distinct towns and neighbourhoods contribute to a thriving city region known for innovation, sustainability, and inclusivity.

Civic Host

Greater Manchester Combined Authority (GMCA)

Established in 2011, the Greater Manchester Combined Authority (GMCA) consists of 11 members: 10 indirectly elected councillors, each representing one of Greater Manchester's 10 metropolitan boroughs, and the directly elected Mayor of Greater Manchester. It derives its powers primarily from the *Local Government Act 2000* and was created to provide formal administrative authority for the region, replacing various joint boards and quangos. This marked the first such authority since the abolition of Greater Manchester County Council in 1986. The GMCA operates as a strategic authority with powers over public transport, carbon neutrality, and planning. Functional executive bodies, such as Transport for Greater Manchester, oversee service delivery. The GMCA appoints a Chair and Vice-Chairs from its 10 executive members. UK legislation allows for a 'revolving infrastructure fund,' enabling the GMCA to 'earn back' tax revenue through infrastructure investment. In alignment with these incentives, the 10 local authorities unanimously agreed to a 10-year economically focused investment program. However, the governance structure is intended to be ongoing.

The GMCA emerged from the Association of Greater Manchester Authorities (AGMA), a voluntary organisation formed after the county council's abolition under the Local Government Act 1985. The AGMA developed key planning policies, including the Greater Manchester Strategy in the 2000s.

Encouraged by the Blair/Brown UK Governments, AGMA pursued the creation of a formal authority, culminating in the GMCA, which superseded AGMA and rapidly expanded its responsibilities. These include transport, economic development, housing, regeneration, strategic spatial planning, skills, training, public health, waste management, and emergency services like police, fire, and crime.

Key points of interest

The areas of discovery for mission delegates during the Greater Manchester visit included:

The Manchester City Deal

The UK City Deal model was initially developed to determine whether city regions could achieve a better infrastructure and economic outcome by acting collaboratively, rather than individually, and by engaging with central government and each other to do so.

In Greater Manchester there was a fundamental shift in the mindset of decision-makers to allow for consideration of changes to infrastructure funding, prioritisation and delivery. This collaborative approach to implementation allowed the City Deal concept to develop and, in turn, realise the current growth in investment and economic outcomes. The original deal (2012) brought more localised control and financial autonomy to local government, focusing on a devolved and consolidated transport budget. It provided a multi-year settlement on the same basis as capital and resource allocations given to central government departments and Transport for London.

Manchester has now secured seven generations of city deals (now Devolution Agreements) that have given local government new powers and expanded fiscal devolution. This has included increased responsibility over strategic planning and control of a new £300 million Housing Investment Fund (AUD \$591m), to build 15,000 new homes over ten years, plus new planning power to encourage regeneration and development.

Local Government taking back control of Public Transport

By 2030, Greater Manchester wants local public transport connectivity to be significantly closer to the standards of London, with improved services, simpler fares, and integrated ticketing. To achieve this vision, the Mayor of Greater Manchester and leaders needed more levers, so they pushed for and successfully secured more responsibilities over transport in the new devolution deal. Building on existing plans for transport integration between trams and buses through franchising, the devolution deal commits to activity to enable the delivery of full integration of local rail services into the Bee Network by 2030.

Greater Manchester Digital Blueprint

GMCA is doing digital differently, remaining committed to being a digital city-region. The blueprint underpins the commitments in the Greater Manchester Strategy 2021-31 through the vision of 'digitally enabling a greener, fairer, more prosperous city-region for everyone', identifying five digital priorities. Greater Manchester goals include building responsible, data-driven public services, empowering people and communities, and enabling a resilient and prosperous economy. Equally, they are committed to creating connected, inclusive, sustainable places while strengthening our position as a global digital influencer.

A Green City Region

Waste management in the UK faces several challenges in the future from major policy reform. GMCA is the largest waste disposal authority in the UK responsible for the reuse, recycling and managing 4% of the nation's municipal waste. Each of the nine GMCA councils operates a standard 4-bin system collecting recycling and waste bins including paper and cardboard, mixed recycling, food and garden waste and general waste. The partnership with SUEZ has also seen a significant improvement in performance with only 0.2% of waste going into landfill and HWRC recycling close to 60%.

Economic Plan for the City Region

Funded by the city deal (3rd generation), the Greater Manchester Local Industrial Strategy outlines long-term priorities to increase productivity and deliver a future-ready economy. This strategy aims to provide a joint plan for good jobs and growth, capitalising on the area's strengths in advanced materials and health innovation. Co-developed with local and national stakeholders, including businesses, social enterprises, trade unions, universities, and community organizations, the strategy promotes coordination between local economic policy and national funding streams, establishing new working relationships between levels of government and the private sector. This has been particularly impactful for the region attracting catalytic Foreign Direct investment.

Places for Everyone (GM Spatial Plan to 2039)

A long-term regional plan for jobs, new homes, and sustainable growth, maximising the use of brownfield land and urban spaces while protecting Green Belt land from the risk of unplanned development. It also ensures all new developments are sustainably integrated into Greater Manchester's transport network or supported by new infrastructure, aiming for world-class connectivity and economic growth. The city deal funded the first transport fund, a 10-year, £3 billion investment in local transport. Projects include new Metrolink lines, the redevelopment of Oxford Road, and new guided busways.



Meeting: Friday, 7 February 2025

A Path Towards Greater Autonomy – ‘A decade of city deals; the evolution, challenges and remaining opportunities’

Hosted by

Adam Mason, Managing Director, Local Economic Growth & Infrastructure Strategy, KPMG

Adam leads KPMG’s advice to Mayoral Combined Authorities and on devolution. He is an expert in the economics and funding of infrastructure with over 20 years’ experience working in the local government sector. He is a specialist in funding & financing, economics, and Green Book business case development. He has helped to secure a number of devolution and city deals for over a decade and has worked extensively for existing Strategic Authorities in the UK including GMCA, WYCA, WMCA, WECA, NECA and is currently advising GMCA on trailblazer proposals and their Single Settlement.

Lewis Atter, Associate Partner, Head of Infrastructure Strategy, KPMG

Lewis has been active in the infrastructure sector for 35 years, both within government (His Majesty’s Treasury and Department of Transport) and as a lead advisor. He leads KPMG’s Infrastructure Strategy Business, which combines economic, financial, and strategic advice to assist clients in delivering sustainable and inclusive growth focused programs. He has led on all Greater Manchester’s large deals with governments over the last 19 years.

Background

The inaugural Manchester City Deal invests in long-term government budgets to plan a modern, better-connected regional transport network. Significant investments have been made in an employment fund to help 50,000 people return to work, including skills development and incentives for training providers to offer work-related training. The Manchester City Deal demonstrated that with political consensus and innovative thinking, limited public funds are not barriers to transformative urban development.

Key learnings / outcomes

- KPMG hosted an official event at their offices with information sessions and discussions with key leaders in Greater Manchester.
- The briefing began with a snapshot of Manchester as a city currently:
 - There have been big changes in urban renewal for the region. An example of this is that Manchester had only one tower in 2018, and the city centre now boasts 15-20 towers.
 - The region is attracting lots of talent, with over 100,000 students currently studying in Manchester.
 - The city is also attracting lots of investment: Manchester has attracted more foreign direct investment benefits than any other city in the UK in recent years which has been key for their international reputation; Manchester has the second largest private equity in Europe; and there are more new companies registered in Manchester than any other place in the region making it the most popular place for startups.
- The devolution of powers from other levels of government to local authorities, specifically the Greater Manchester Combined Authority (GMCA) was then discussed:
 - The GMCA is made up of the ten Greater Manchester councils and the Mayor, who work with other local services, businesses, communities and other partners to improve the city-region.
 - Through the GMCA, the local council CEOs and Mayors have a role to elevate the region.
 - Local decision making has shown to be working through outperforming economics, improved growth and other decision-making outcomes.
- Responsibilities that have been passed down to local government with funding includes transport, skills and public housing. With the change in responsibility, there has been a raise in local revenue, which is required as the local government receives 15% of the tax share compared to the national powers.
- One of the key challenges that the GMCA has faced from this decentralisation is regarding the tax-base which limits fiscal debt so there is a need to align tax to where the most growth occurs. There also then needs to be a focus on taxing windfall areas that benefit from infrastructure development.
- Manchester is home to the first City Deal and recently secured its seventh generation deal focussed on supporting Greater Manchester’s strategic growth and driving net zero initiatives, housing, and employment outcomes, a new Housing Investment Fund that has unlocked almost AUD \$600M to enable Greater Manchester’s councils to deliver over 15,000 new homes.

➤ **Key learning:**

Manchester doesn't compete nor cannibalise their neighbouring municipalities (i.e. land value share and business profit share, visitor economic benefit share) Working together enables amplification of efforts and benefits.



Meeting: Friday, 7 February 2025

Funding the Future City Region – ‘Expanding fiscal autonomy, simplifying funding, and enhancing collaboration between central and local governments’

Hosted by

Laura Blakey, Director, Strategic Finance & Investment, Greater Manchester Combined Authority

Laura oversees the £500m+ of GMCA investment funds operating across housing, commercial property, and business. Laura also heads up the GMCA’s strategic finance function, bridging the gap between finance and strategy. Laura is a Chartered Accountant and prior to joining the GMCA spent 13 years at KPMG.

Background

“Earn Back” mechanism – the City Deal includes an “earn back” mechanism, allowing the region to retain and reinvest increases in Gross Value Added (GVA), providing extra money for local infrastructure. This model builds on the Greater Manchester Transport Fund, created in 2009, which combines central and local funding to create a £2 billion plus program (AUD \$3.94b). If successful in driving economic growth, Greater Manchester receives a larger share of the resultant tax take, creating a revolving fund for further investment.

Working with a new Central Government - one of the most difficult challenges facing the new Central Government is local government finance and fiscal sustainability. Councils in England began declaring ‘effective bankruptcy’ at the end of the previous Government. These short-term funding challenges cannot be separated from the long-term problems that have weakened local government over many years. Ultimately the Government must choose one of three possible options: large increases to council tax for everyone; large increases in central government grants when the public finances are squeezed; or reform of English local government and fiscal devolution. The new Labour UK Government has committed to delivering local fiscal autonomy and enabling long-term planning and development projects.

Key learnings / outcomes

- The second session hosted by KPMG was regarding funding methods and mechanisms for local government and how to enhance collaboration between central and local governments.
- The discussion began with how investment and funding has been utilised for housing in Greater Manchester. GMCA has spent \$1 billion to deliver 11,000 new homes in the region, with this delivery generating money in the local economy due to the uplift and interest from loans. There has been a flexibility in funding for housing as blending different types of funding helps to deliver difficult regeneration themes.
- There has been a regeneration of the town centre using the Brown Field Housing Fund that has started with 4-story apartments and will include a wider regeneration zone that will feature a school and commercial held tenancy to improve the community.
- The following principles are used by GMCA to achieve enhanced funding:
 - Do just enough in terms of public funding.
 - Recycle as much as possible.
 - Capture the value of what you invest.
- The hosts spoke about the “earn back” principle which is that if GMCA backs themselves to invest and it generates growth, then they will earn that money back through a larger share of the resultant tax take. This model has been agreed upon with the treasury as they were able to capture the value of this method that will attribute economic benefits to the region.
- Another source of potential funding that has been explored is tourist tax, especially with the high tourist rate that Greater Manchester receives.
- Another option is integrated funding which incorporates unallocated funding in the budget to provide flexibility to deliver strategic outcomes for Greater Manchester rather than a more limited programmatic funding approach.
- Big focus on repurposing and retrofitting stock, including funding trunk infrastructure for individual cities in the UK

Meeting: Friday, 7 February 2025

Shifting Public Behaviour for a Greener City Region – ‘How in four short years, Greater Manchester have increased the rate of recycling from 35% to 58%’

Hosted by

David Taylor, Executive Director of Waste and Resources, Greater Manchester Combined Authority

David is the Executive Director – Waste and Resources for Greater Manchester Combined Authority (GMCA). GMCA is the largest joint waste disposal authority in the UK handling 1.03 million tonnes of waste per annum. David leads the GMCA contract management team that oversee the management of the largest municipal waste management contracts in Europe. This role encompasses managing the interface between the contractors and the constituent collection authorities to ensure the contracts are operated in accordance with the specification and budget. Strategic development of the contracts to meet future legislative requirements is a key element of this role.

Background

GMCA sets strategic targets to reduce waste arisings, increase reuse and recycling and develop plans to reduce the carbon impact of the waste management operation to meet the target of becoming a carbon-neutral city region by 2038. Greater Manchester’s impressive recycling rate is compelling, but was this driven by technological advancements or by behaviour change through public education efforts?

Key learnings / outcomes

The third discussion session was surrounding behaviour change for waste, specifically how Greater Manchester was able to increase the recycling rate from 35% to 58% in four years. GMCA’s Executive Director of Waste and Resources, David Taylor, shared how GMCA manages their waste resources as the Councils own the waste collection process and bin assets. The Waste and Resources Team (formerly the Greater Manchester Waste Disposal Authority GMWDA) plays a key role in managing Greater Manchester’s household waste and recycling. Working in partnership with the nine local councils in Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside and Trafford, we set strategic targets to reduce waste arisings, increase reuse and recycling and develop plans to reduce the carbon impact of the waste management operation. Each of the nine councils operates a standard 4 bin system collecting recycling and waste in wheeled bins as follows: paper and cardboard, mixed recycling, food and garden waste, and general waste. 99.5% of GM’s waste goes to landfill diversion.

The region’s councils have a binding MOU to create uniformity in waste behaviour and management with the network of waste treatment matching this cohesion. There are 37 household waste facilities that have an EfW capacity of 1 million tonnes and MSW capacity of 400 tonnes. There are 20 household waste recycling centres where residents are also able to drop off their bigger items, garden waste and such. GMCA has found that there is significant social value in the regional approach to recycling that yields greater results and social sentiment. There are also closed landfill sites that have an ongoing operational cost.

GMCA taxes the producers of waste based on the tonnage of packing they produce to foster product stewardship, with these funds invested into councils to support the waste collection and managing costs of facilities. Around £1 billion is received from this producer’s tax annually. GMCA manages green organics, or "mixed biowaste" (food and garden waste), through a combined authority (GMCA) collection system, with the material delivered to GMCA facilities for bulking up before being treated at contracted merchant facilities.

- **Collection:** Food and garden waste is collected together across Greater Manchester, with some areas, like Bolton, using green bins.
- **GMCA Facilities:** The collected material is delivered to GMCA facilities for bulking up, meaning it’s combined and prepared for treatment.
- **Contracted Treatment:** The treated biowaste is then sent to contracted merchant facilities for further processing. Suez manages around 80,000 tonnes of the biowaste, with the remainder handled by a framework of other contractors.



Meeting: Friday, 7 February 2025

Opportunity Through Connectivity

Hosted by

Vernon Everitt, Transport Commissioner, Greater Manchester

With over 40 years' experience across the finance, transport and technology sectors, Vernon is the Transport Commissioner for Greater Manchester. He advises Mayor Andy Burnham on the development of the Bee Network, a fully integrated, London-style transport system for this growing three million strong city-region. He led the successful pan-Government and transport industry marketing and communications strategy for the **London 2012 Olympic and Paralympic Games**, the largest ever integrated campaign of its kind.

Stephen Rhodes, Director of Bus, TfGM

Stephen is TfGM's Director of Bus. He is responsible for the operation and further development of the recently franchised bus network across the 10 local authority areas of Greater Manchester. Buses are at the heart of Greater Manchester's Bee Network. This is an exciting time and unique opportunity, supporting the Mayor's wider agenda for a truly joined up transport system – improving performance, growing patronage and increasing customer satisfaction.

Peter Boulton, Network Director for Highways, TfGM

Peter is Network Director Highways for Transport for Greater Manchester (TfGM), a position he has held since 2018. He is accountable for the strategic oversight of the GM highway network, urban traffic control, road safety, the multi-modal Operational Control Centre, TravelSafe Partnership and operational data and analytics. Peter has worked at TfGM since 1995 working primarily across Projects and Programmes but also spending a number of years as the operational interface on Metrolink following the opening of the Eccles line. During his time at TfGM he has developed an extensive knowledge of leading and managing all aspects of project and programme lifecycles from inception to development, design, delivery, commissioning and handover to operations. Peter has also led several business transformation projects on behalf of the organisation and the introduction of improved processes during operational and cultural change. Peter is a Chartered Quantity Surveyor by background and worked for consultancies and contractors before moving into the transportation sector.

Background

Manchester's transport plan for the 2002 Commonwealth Games was widely praised for its efficiency and sustainability, setting a benchmark for future large-scale events in the city. The transportation system played a crucial role in seamlessly accommodating the needs of athletes, officials, and spectators throughout the games. A cornerstone of the plan was the expansion of the tram network, which saw additional services and strategic extensions implemented to meet the heightened demand. The network provided fast, reliable connections to key venues, including the City of Manchester Stadium (now Etihad Stadium), ensuring smooth transit for all attendees.

Transport for Greater Manchester (TfGM) - the local government body responsible for developing the Bee Network (bus, tram, cycling and walking routes) an integrated transport network for Greater Manchester. Established in 2011, it is an executive arm of the GMCA, the city region's administrative authority, and the owners of Metrolink (UK's largest light rail network with 99 stops along 103km and annually transporting 22 million passengers) with further plans to continue expanding, own Greater Manchester's bus infrastructure, manage the Key Route Network (nearly 400 miles) and keep the traffic flowing on some of the busiest local roads

Transforming the rail network for a future city region - understand how Greater Manchester plans to 'Transform the North' by investing in intercity fast rail connectivity to drive economic growth, decarbonise the transport system and improve opportunities for all. Over the past decade, Greater Manchester has made huge investments in developing the city-region's transport infrastructure, operating the largest capital transport programme in the UK outside London. While this led to significant improvements in journey times and reliability, 38% of recent community consultations found "the public transport system is unreliable, too expensive and lacked investment". Northern Powerhouse Rail (NPR) is a major strategic rail programme, specifically designed to support the transformation of the North's economy by providing effective and efficient rail connectivity between the North's major economic centres, offering a faster and more reliable service across the entire region. Connecting the people, communities and businesses of the North. Options currently

being explored for Greater Manchester include a new line between Manchester and Leeds via Bradford, new and upgraded rapid rail lines to connect the city to Liverpool and major upgrades to the existing route to Sheffield.

Artificial intelligence-controlled smart junctions - TfGM is rolling out first-of-its-kind 'smart' traffic junctions to accommodate the increase of active travel modes, such as cycling and walking. Using sensors with inbuilt artificial intelligence, VivaCity enables TfGM to anonymously identify different types of road users at selected junctions and control traffic signals to allow different modes of transportation to be prioritised as and when required. With more cyclists on the road as people look to avoid public transport, these 'smart junctions' will be able to give priority to people on foot or bike where and when appropriate. This initiative has the potential to reduce emissions and improve air quality in the Greater Manchester area. Congestion and queuing can be reduced by traffic signals that respond better and more quickly to changes in traffic conditions than existing systems.

Key learnings / outcomes

- The delegation met with the Transport Commissioner for Greater Manchester and two representatives from Transport for Greater Manchester (TfGM) to discuss connectivity in the region.
- The hosts shared that the integration of suburban rail is the key to unlocking productivity and opportunity for residents across the region, with the goal being to deliver eight new rail lines by 2028.
- They shared that you increase public participation in public transport with rail and cost reliability, because the transport is multimodal, and with their mode shift aiming for 50-50 by 2040.
- TfGM has recently deployed Green Light (Google) to improve and optimise their services. This will include a review of traffic signals, congestion and air pollution; network or AI cameras across the city and 20 in each corridor; a 30% improvement on journey time for commuters; and policy led UTC.
- There is Public-Private Partnership (PPP) between the government and private sector that provides an investment levy, with the greater funding showing a return of £4 in wider economic benefits to every £1 investment in the rail network. The government is prioritising new approaches rather than traditional with a performance-based investment, meaning that council is taking the risk but will receive the reward if there is continued success.
- The proposed funding to TfGM for 2024/25 is £330.6m, an increase of £11.9m compared to 2023/24 revised budget at quarter 3. The major variances are as follows:
- Transport Revenue Grant to TfGM of £152.0m funded from the Levy and Statutory Charge, which is an increase of £11.0m compared to 2023/24 revised budget funded by:
- Local Authority (District) Transport Levy increase of £6m. This funding is ringfenced for the net costs of Metrolink and Bus Franchising, with the amount of Levy allocated for TfGM 'core' budgets to be maintained at a 'cash flat' level again.
- Capital financing cost of £5.0m to be met from the GMCA Capital Programme Reserve.
- Previously announced Government bus recovery funding (BSOG+) of £6.5m for 2024/25, which is a reduction of £23.7m compared to 2023/24.
- Bus Franchising funding of £42m for 2024/25 funded from a combination of Mayoral precept, Earnback reserve and Local Transport reserve. This an increase of £18.6m compared to the 2023/24 revised budget.
- City Region Sustainable Transport Scheme funding / 'capital to revenue switch' of £25m applied to the revenue budget, funded from the Business Rates Top-Up reserve.
- Scheme development funding of £17.1m, also funded from the Business Rates Top-Up reserve. This is a reduction of £3.1m compared to the 2023/24 revised budget.
- 16-18 'Our Pass' and Care Leavers concessionary pass funding of £17.7m (an increase of £0.3m from 2023/24) funded from the Mayoral budget from a combination of Mayoral precept, grant funding, reserves and income.
- Other grants of £17.7m including Bus Service Operators grant and Active Travel revenue grants which reflects a £17.1m decrease compared to 2023/24 revised budget.



Meeting: Friday, 7 February 2025

The Greater Manchester Digital Blueprint – ‘Towards a world-leading digital city region, the why and the how’

Hosted by

John Duncan, Connected Places Lead, Greater Manchester Combined Authority

John is a highly experienced, engaging, and well-respected leader with vast experience in the Digital Sector, having benefited from a career that has spanned the public and private sectors. He has vast experience of working in Digital Strategy, Connectivity, and Inclusion through roles at Leeds City Council, Virgin Media O2 Business and GMCA.

Helen Wilding, Head of Digital Policy, Greater Manchester Combined Authority

Helen works collaboratively across the digital ecosystem with a focus on supporting the development of Greater Manchester’s cyber and AI ecosystems, and the role of digital technology in enabling growth, innovation and opportunity in Greater Manchester’s economy and public services.

Sam Li, Senior Innovation Officer, TfGM

Sam Li is a Senior Innovation Officer at Transport for Greater Manchester, UK (TfGM). With over decade of experience working in the mobility sector in both private and public organisations. Currently leads the development within sector of AI & Data, Smart Cities, Future of Connectivity and Energy. Driving the strategic focus of the TfGM Innovation team function as the “pathfinder” for the organisation, to identify opportunities and risks within future mobility solutions through real-world implementation. Working in partnership with SMEs, Innovators, and academic partners to transform the region into an innovation living lab to deliver impactful solution to the people of Greater Manchester. To develop and create solution blueprints within the fabric of the region, that are scalable and replicable to city regions in the UK and around the world, creating a shop window for future mobility innovations.

Background

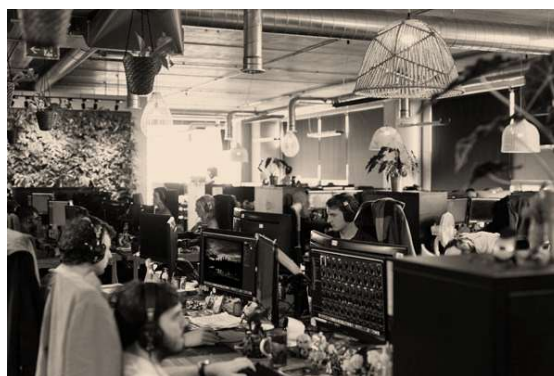
The briefing covered the following topics of discussion:

- Building responsible, data-driven public services
- Empowering people and communities
- Enabling a resilient and prosperous economy
- Creating connected, inclusive, sustainable places
- Strengthening Manchester’s position as a global digital influence

Key learnings / outcomes

- The delegation received a briefing from representatives from GMCA and Transport for Greater Manchester (TfGM) regarding Greater Manchester’s Digital Blueprint.
- The hosts shared about the importance of understanding the challenges and opportunities of AI in the age of modern digital government.
- Reinforced a common data environment was the most critical action for leveraging the benefits of emerging technology and AI, and this continues to be a big focus.
- Collaboratively foster innovation by engaging with digital, data and technology best practice to deliver transformed, sustainable and resilient public services that meet local needs.
- Use data responsibly and effectively to improve decision making, support those people most in need, and reduce our carbon footprint.
- Ensure digital services are co-designed with residents, are inclusive, and meet community and environmental needs.
- Work together to develop the digital and data skills of Greater Manchester’s public sector workforce.
- Agree and adopt standards and information governance practices that enable responsible data sharing across Greater Manchester
- Take measures to reduce the carbon footprint of technology infrastructure in line with our net zero ambition.
- Further showcase Greater Manchester across the world as a leader in digital innovation and practice
- Enhance Greater Manchester’s reputation as a UK and European centre for ethical AI and data driven technology, digital trust and security, and immersive technologies.

- This has allowed the region to champion Greater Manchester as a place with an incredible, collaborative digital ecosystem for investment and talent attraction. It has ensured Greater Manchester is known as an extremely attractive place to develop, grow and stay, for individuals and businesses contributing to digital innovation.
- This has enabled promotion of Greater Manchester's digital economy on a national and international stage, as a destination for digital organisations that align (or have the aspiration to align) with the values and ambitions of the city region.
- One of the opportunities is ensuring that policy enables expansion of AI in growth zones.



Meeting: Friday, 7 February 2025

Building a Housing First City Region – GMCA

Hosted by

Steve Fyfe, Head of Housing Strategy, Greater Manchester Combined Authority

Steve's work is focused on accelerating the delivery of new housing, in partnership with the ten GM authorities and Homes England in particular, and increasingly with the GM Housing Providers group. He led work on developing and implementing the Greater Manchester Housing Strategy. He is now immersed in the work to turn Greater Manchester into a 'Housing First' city region by 2038, tackling new supply, improving standards of existing homes, and providing support for people to live healthy, independent lives.

Background

Greater Manchester will become the UK's inaugural Housing First city-region with a clear mission to end the housing crisis by 2038, including the following initiatives the Housing First strategy and The Good Landlord Charter / A Bed Every Night.

Key learnings / outcomes

- The Head of Housing Strategy at GMCA led the delegation in a briefing concerning the GMCA's approach toward housing, specifically their plan to turn Greater Manchester into a 'Housing First' city region and end the housing crisis by 2038.
- To reach this goal, GMCA needs to deliver 75,000 homes. The organisation is currently delivering 10,000 homes a year, however they need to deliver 15,000 per year to reach the overarching goal.
- The greatest challenges the GMCA face with the Housing First goal is ensuring there is adequate investment, land and capacity to deliver the number of homes required.
- The Greater Manchester Housing Strategy identifies safe, decent and affordable housing as a priority so that homes fit the needs and aspirations of current and future citizens.
- It sets strategic actions at a city region level, designed to maximise the impact of our collective efforts and to complement the huge amount of work and investment going on every day at district and neighbourhood level.
- The strategy is built on understanding the connections between housing, people and place, the need to invest in the homes we already have, and the importance of building the new homes they need.
- The Good Landlord Charter is a new scheme to make renting in the city region better, and address challenges with landlords.
- It will be a voluntary scheme for landlords who want to commit to higher standards than they are currently required to by law. It will be the first such scheme in the country open to all landlords, no matter whether they are private or social landlords, big or small.
- Greater Manchester's biggest social landlords, represented by Greater Manchester Housing Providers, partnered GMCA in developing the charter, and some big landlords have already committed their involvement. This will bring potentially tens of thousands of tenants under the additional protection of the charter.
- Now that the Good Landlord Charter has been agreed, GMCA will be going through a process to select a partner to run the independent Implementation Unit that will implement and operate the charter. Members of the Good Landlord charter need to show they meet 21 member criteria, which are specific commitments to going beyond the minimum required by law.
- The member criteria are designed to help deliver on the key characteristics of good renting, and include the following examples:
 - Affordable – e.g. properties meet EPC C as a minimum
 - Inclusive – e.g. make or facilitate reasonable adaptations to properties, where needed
 - Private and secure – e.g. tenants able to make reasonable changes to their home
 - Responsive – e.g. published, timely target response times
 - Safe and decent – e.g. any work/repairs done by a qualified or competent tradesperson
 - Supportive – e.g. a commitment to refer tenants at risk of homelessness to council
 - Well managed – e.g. landlord must be able to demonstrate accreditation or training
- The Greater Manchester Housing First (GMHF) Programme is a partnership of 11 organisations, co-ordinated by a Central Team at Great Places Housing Association, with the support of zonal delivery teams across Greater Manchester. Each zone has a Housing First team comprising of a Zone Lead, Team Leads, and Housing First Workers.

The Zone Lead has overall responsibility for the services delivered in that zone. Team Leads and Housing First Workers deliver bespoke support to people on the programme, which are aligned with the 7 Housing First Principles. The teams also have a Dual Diagnosis practitioner who provides mental health, physical health and substance misuse support to staff and people on the programme.



Meeting: Friday, 7 February 2025

The International Ambition of Greater Manchester

Hosted by

María Gonzalez, Principal for International Relations, GMCA

María González is Principal for International Relations at the Greater Manchester Combined Authority (GMCA). She is responsible for international policy, city-region diplomacy and engagement with the FCDO and foreign diplomatic missions in the UK. María has got over 20 years of experience in working in European and international policy and is the lead officer driving the bilateral partnership with regional and local governments in Bangladesh, Germany, Spain, France, Japan and the US. The GMCA International team led the refreshing of the GM International Strategy launched in spring 2022 and is responsible for the coordination of its delivery.

Audrey Peers, Head of Business Delegation, MIDAS (GM's inward investment agency)

Background

Old Trafford Regeneration Taskforce

The Greater Manchester Combined Authority (GMCA) and Trafford Council have entered a strategic partnership with Manchester United to unlock the full potential of the Trafford Wharfside area. This regeneration effort represents a bold vision for the future, combining sport, commerce, and community to transform the Old Trafford area into a thriving hub of opportunity and innovation. This aligns with the ongoing development of MediaCity in Salford and complements Greater Manchester's Western Gateway and Central Growth Cluster strategies, creating a regeneration project of national importance. Foster + Partners, a globally renowned architecture studio, has been appointed to develop the masterplan for the district.

Investment attraction in Greater Manchester

MIDAS is Greater Manchester's inward investment promotion agency, dedicated to securing significant new investments for the city region and creating and safeguarding jobs. Through global business marketing of the city region's key sectors and an extensive package of free advice and assistance, MIDAS has supported hundreds of businesses in successfully relocating to or expanding within Greater Manchester.

Key learnings / outcomes

- The delegation received a briefing from the Principal for International Relations from the Greater Manchester Combined Authority (GMCA) and the Head of Business Delegation of MIDAS. This briefing was regarding Greater Manchester's international relations, specifically Greater Manchester's International Strategy.
- The Greater Manchester International Strategy is a regional strategy that is based on robust evidence from the 2019 Independent Prosperity Review and the 2016 Science and Innovation Audit and focuses on supporting the city region's globally competitive strengths, and enhancing infrastructure, innovation ecosystems, and local business environments.
- Greater Manchester's International Strategy leverages its global reputation for culture, sport, and innovation to strengthen international engagement.
 - The Strategy is focused on trade, investment, research, tourism, international students, connectivity, diplomacy, and reputation. It sets ambitious targets to harness opportunities and foster partnerships.
 - Aligned with the Greater Manchester Strategy, it aims to drive a greener, fairer, and more prosperous future for the city region while addressing global challenges and capitalising on its strengths.
- The Greater Manchester Combined Authority (GMCA) and Trafford Council have entered a strategic partnership with Manchester United to unlock the full potential of the Trafford Wharfside area, known as the Old Trafford Regeneration (OTR) Taskforce.
 - Led by Lord Sebastian Coe, the Taskforce aims to build on Manchester's rich industrial heritage, transforming the area into a vibrant mixed-use community. At the heart of the project lies a redeveloped stadium, serving as a catalyst for local growth and long-term benefits.
 - A public-sector led delivery vehicle will be established to drive forward and implement the project.

- Thought to be the biggest regeneration project in the UK since London 2012, it will be a globally recognised exemplar of sports-led regeneration with a world-class stadium at its heart, and includes sustainable housing, employment opportunities, and world-class amenities.
- The project boundary will also include Trafford Wharfside, a significant residential development with the potential to deliver 5,000 new homes.
- OTR has been projected to inject an additional £7.3bn of GVA into the UK economy. Planned to create up to 70,000 new jobs in the regional economy and c.90,000 new jobs nationally.



Meeting: Saturday, 8 February 2025

[Bilateral Courtesy Call with Lord Mayor of Manchester](#)

Hosted by

Councillor Paul Andrews

First elected to Manchester City Council in 1996, representing Woodhouse Park ward, and since 2002 he has represented Baguley ward. He served on several committees, including Planning, Licensing Standards and most of the scrutiny committees during that time. Paul completed two terms on the Executive Committee between 2008 and 2017, first as Executive Member for Neighbourhood Services, and then for Adults Health and Wellbeing. Paul has also represented the Council on outside bodies, including Parkway Green Housing Trust/Wythenshawe Community Housing Group, the Flood Risk Defence Committee, Greater Manchester Pension Fund, and the Airport Consultative Committee, as well as serving on several governing bodies. More recently, he served on the Manchester Airport Trust Fund and the Port Health Authority.

Key learnings / outcomes

The delegation met with the Lord Mayor of Manchester, Councillor Paul Andrews, to discuss his experience leading a heavily populated city from a local level, including the post-industrial status of the city into today's city region renowned as an international centre for sport and major events.



Site tour: Saturday, 8 February 2025

[MediaCityUK](#)

Background

The Transformation of Salford Quays - Inspired by global waterfronts such as Oslo and Sydney's Darling Harbour, MediaCityUK is a product of strategic investment, local government collaboration, and a commitment to long-term growth. Over the past 30 years, Salford Quays has undergone an extraordinary transformation. Once a derelict wasteland following the closure of the Manchester dockyards in 1982, it has been revitalized into a thriving 200-acre (81-hectare) mixed-use development on the banks of the Manchester Ship Canal. A pivotal factor in its success was the BBC's vision to decentralize and relocate substantial operations to the north of England in 2006.

Key learnings / outcomes

- The delegation experienced the rich history and cultural evolution of Salford Quays on a guided walking tour of MediaCityUK, charting its transformation from the historic Manchester Docks to one of the UK's fastest-growing tourist destinations. The tour began and ended at the iconic MediaCity Piazza, situated opposite BBC Quay House and adjacent to the Metrolink tram station. From this impressive starting point, they explored the scenic Salford Quays on a 4.5-kilometre walking route, passing renowned landmarks such as The Lowry Arts Centre, the Imperial War Museum North, and other significant locations.
- MediaCityUK, a modern and dynamic hub, has emerged as the epicentre of the UK's digital and creative industries.
- As one of the UK's first and largest urban regeneration projects, Salford Quays is now home to 250 companies, including BBC, ITV Granada, Dock 10, and the University of Salford. This vibrant digital hub employs over 7,000 people and boasts the highest concentration of creative, media, and technology businesses outside London. MediaCityUK, Europe's largest purpose-built digital hub, has also become a leader in immersive technologies such as virtual reality and gaming.
- The story of Salford Quays began with the Manchester Ship Canal, born from the simple yet ambitious question: "Why not bring the sea to the city?" This groundbreaking idea opened new trade routes and established Salford's reputation for innovation, vision, and international commerce. Key milestones in its evolution include:
 - 2000:** Opening of The Lowry Arts Centre.
 - 2002:** Opening of the Imperial War Museum North.
 - 2007:** Start of MediaCityUK Phase 1 construction.
 - 2010:** ITV relocates its Manchester base to MediaCityUK.
 - 2012:** Official opening of MediaCityUK.
 - 2013:** Coronation Street's new production centre begins filming.
 - 2018:** Kelloggs moves its Northern HQ to MediaCityUK.
 - 2019:** Start of MediaCityUK Phase 2 construction.
 - 2020:** MediaCityUK becomes the first Wired Certified Neighbourhood in Europe.
- Today, MediaCityUK is a symbol of Salford's transformation and a testament to the power of strategic regeneration and innovation.





Site tour: Saturday, 8 February 2025

SportsCity

Hosted by

Eamonn O'Rourke, CEO and Head of Sport & Events, Manchester City Council

Eamonn is the CEO of MCRactive, where he has been a driving force behind initiatives that promote physical activity and community well-being across Manchester. He brings a wealth of experience in fostering partnerships between local government, Sport England, and health commissioning bodies, which has been critical in shaping Manchester's innovative approach to community health and fitness.

Paul Hulme, Sport Strategy Manager, MCRactive / Manchester City Council

Manchester Active (MCRactive) are at the forefront of promoting physical activity, sport, leisure, and health to its people. MCRactive recognise that physical activity is not a one-size-fits-all solution, and the key to promoting physical activity is to understand the different needs and interests of all. As a result, they continue to lead the way nationally in how sport, leisure, health, and physical activity can be a powerful agent of change for all people. Manchester Active are a not-for-profit organisation established and overseen by Manchester City Council, here to inspire and encourage people to lead a more active lifestyle. Their mission across the city is to "enable and encourage Manchester communities to prioritise health, lead active lifestyles and thrive."

Background

Operated by Manchester City Council, SportsCity is the regions premier sports and entertainment destination, a vibrant district featuring world-class stadia, iconic sporting venues, and a hub of athletic excellence.

The origins of SportsCity trace back to Manchester's 1996 bid for the **2000 Summer Olympics**, which laid the groundwork for an international sports precinct. This precinct later hosted the Commonwealth Games and has since evolved into a world-renowned complex, home to top-tier facilities such as The English Institute of Sport, National BMX Arena, Manchester Velodrome, Etihad Campus (48,000-seat stadium), National Cycling Centre, Rugby Football League headquarters, Manchester Regional Athletics Arena (6,500 seats), Tennis Centre, Manchester Aquatics Centre and the National Squash Centre. SportsCity stands as a testament to Manchester's commitment to excellence, innovation, and community-driven development.

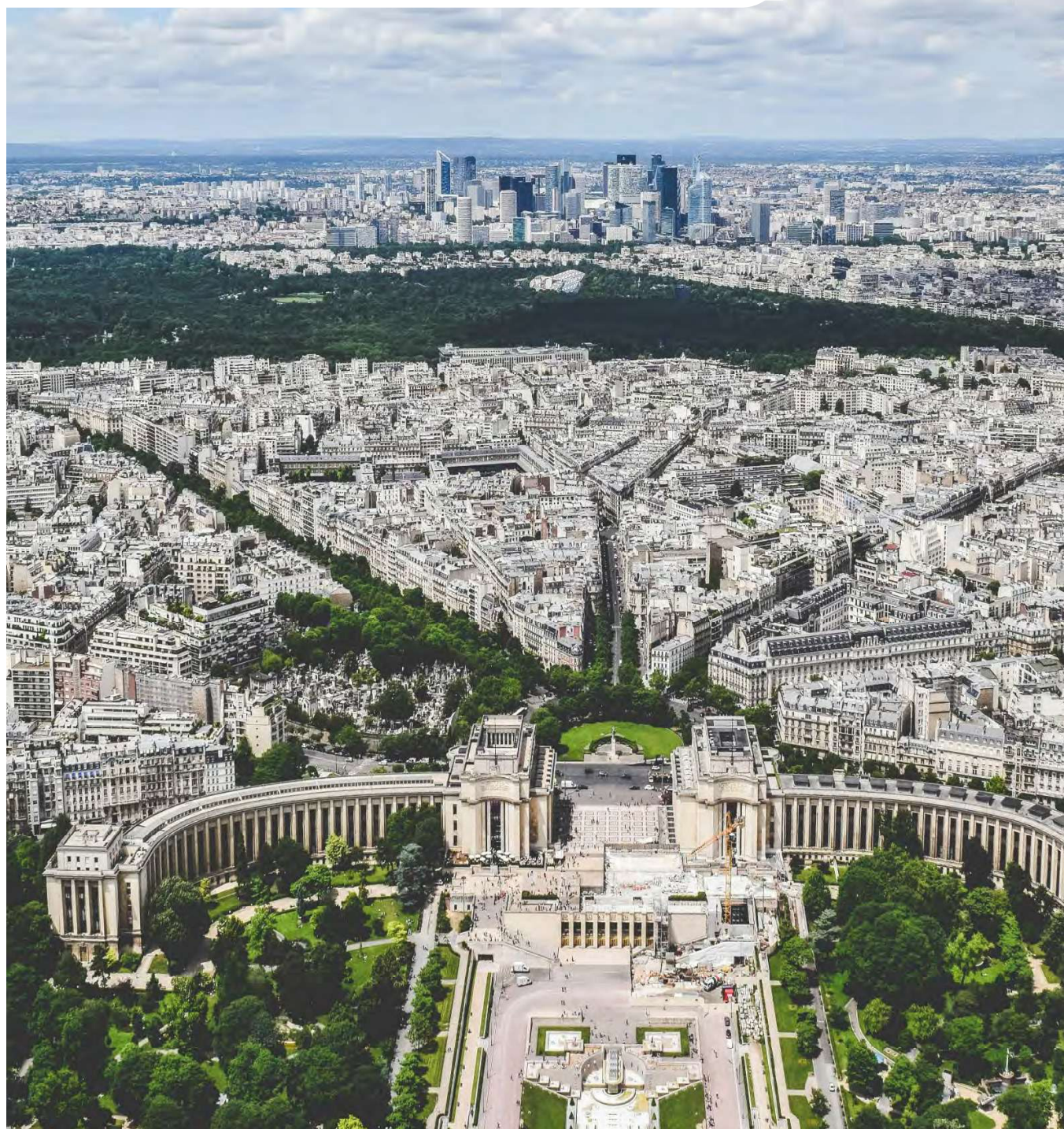
Key learnings / outcomes

- The delegation received a site tour of the UK's SportsCity from Manchester City Council's CEO and Head of Sports and Events, and their Sports Strategy Manager.
- Located less than two miles from Manchester CBD, SportsCity boasts the largest concentration of sporting infrastructure in Europe. This precinct was built following Manchester's successful bid for the 2000 Summer Olympics. The development hosts over 400 events annually, attracting more than 4.5 million visitors and transforming what was once derelict land into a thriving hub of activity.
- It has brought significant environmental improvements, employment opportunities, and urban regeneration, exemplifying the vision of city leaders who prioritised long-term benefits for the community at local, regional, and national levels.
- The most recent development of the site is Co-op Live, the UK's largest live entertainment area. Opened in May 2024, it offers Europe's largest indoor seating capacity, accommodating up to 23,500 people. There are plans to host 120 events annually, including 100 music performances.



Paris Region

9 - 13 February



PARIS REGION (Île-de-France)

The "Paris Region" is a term used to describe the diverse areas surrounding and including France's capital city, with a population of over 12 million, consisting of 8 départements and 1,280 municipalities. Standing at the crossroads of European and worldwide trade, the Paris Region is France's leading economic region, representing 31% of the nation's GDP. While the French capital is known for its attractiveness and innovation, it stands out for its commitment to urban ecology, human rights, international solidarity, and international cooperation between cities.

The Paris region stands as a beacon of innovation and attractiveness, leading global efforts in city diplomacy and sustainable urban development. By learning from Paris's recent experiences with the 2024 Olympic & Paralympic Games, South East Queensland can enhance its regional development strategies, promoting sustainability, inclusivity, and international collaboration.

The City of Paris (Ville de-Paris)

Known as Ville de Paris, the City of Paris is comprised of 163 council members who are renewed every six years. The Paris Council regulates town planning, housing, educational establishments, culture, and health. The Hôtel de Ville (Paris City Hall) serves as the administrative seat and office for the elected officials. Established in 1977, the Office of the Mayor of Paris saw former Prime Minister Jacques Chirac elected as the inaugural mayor until 1995. Before this, Paris was governed directly by the highest French polity of the time: the Crown before the French Revolution and a state-appointed préfet governing the Seine département afterwards. In 2015, City Hall endorsed Paris's successful bid to host the 2024 Olympic and Paralympic Games, marking a return to hosting after the Games in 1900 and 1924.

Key points of interest

The areas of discovery for mission delegates during the City of Paris (Ville de-Paris) visit included:

The Adidas Arena, Porte de la Chapelle / The Gare des Mines

- The new Adidas Arena at Porte de la Chapelle, located in the 18th arrondissement, is the only purpose-built venue (within Ville De Paris) developed specifically for the Games. The project objectives include:
- Enable creation of a Parisian sports facility, a vector of new dynamics linked to Paris 2024; while modernizing and expanding the local sports facilities;
- Continue the transformation of the gates into "Grand Paris squares", connect Paris and the neighbouring towns of Seine-Saint-Denis. The establishment of the Arena and the Chapelle Condorcet university centre will contribute to an ambitious requalification of the Porte de la Chapelle, while the redevelopment of the Porte d'Aubervilliers with the passage of the T8 tramway and the cultural project of the Station will contribute to strengthening this emerging intercommunal polarity;
- Open up the Charles Hermite estate and the Valentin Abeille, renovate these residences and diversify the housing offer with the addition of student and family housing;
- Create urban landscape that meets the challenges posed both on the scale of the large landscape and on the scale of the pedestrian;
- Create a district with mixed housing/employment programming integrating a global action on the management of travel, deliveries, parking; and develop sustainable mobility; and
- Adapt the neighbourhood to climate change, increasing vegetation, open ground, and de-impermeability.

Site tour: Monday, 10 February 2025

Adidas Arena, Partis Arena II

Hosted by

Eric Lejoindre, Mayor of 18e Arrondissement

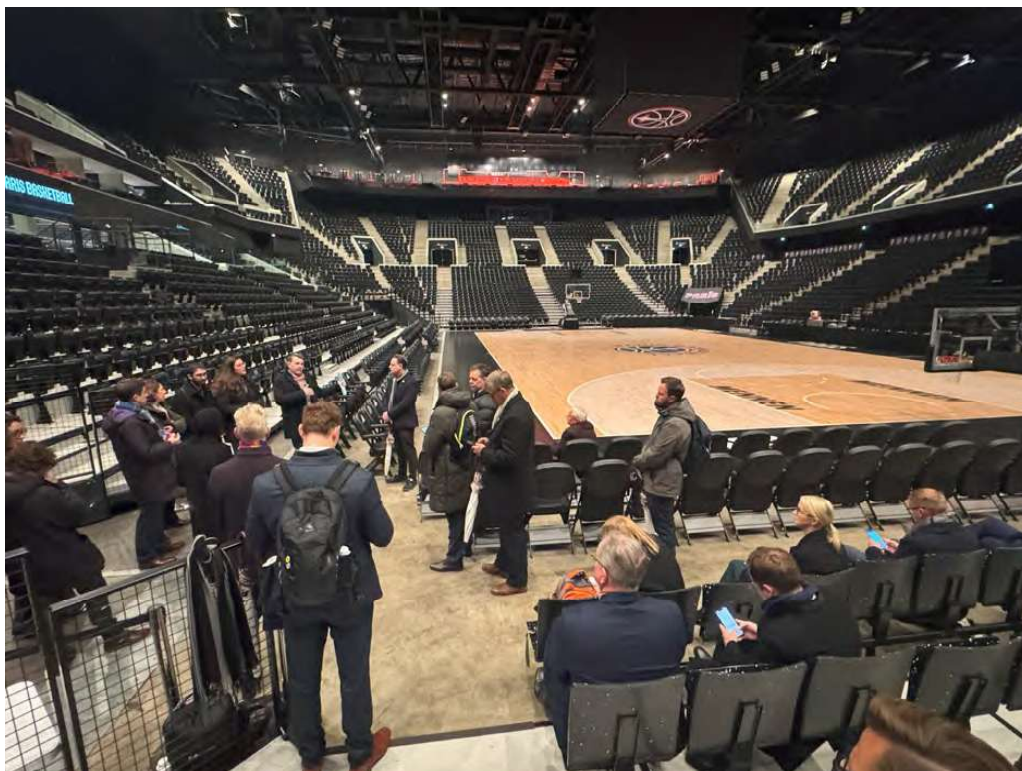
Background

The new Adidas Arena at Porte de la Chapelle is located in the 18th arrondissement. This 8,000-seat facility is designed to host elite sports and large-scale events, providing a lasting legacy for Paris's sporting infrastructure.

Key learnings / outcomes

- The delegation received a site tour from the Mayor of 18e Arrondissement of the Adidas Arena, which was the only purpose-built venue developed specifically for the 2024 Olympic and Paralympic Games.
- The surrounding area includes the 20-hectare Gare des Mines-Fillettes site, undergoing major redevelopment spanning both sides of the ring road between Porte d'Aubervilliers and Porte de la Chapelle, integrating railway land, 1930s social housing, and the Charles Hermite district, plus Jardins d'Eole.
- This area was shown to play a pivotal role in the ambitious urban renewal plan, aided by the extension of the T8 tramway and the cultural project at the Station.
- The Adidas Arena has welcomed more than 715,000 spectators in the year that it has been opened, with 300,000 of those being at the Paris 2024 Games for badminton, rhythmic gymnastics, para-weightlifting and para-badminton events.
- The delegation learnt that the venue has been a major asset to the local community. The opening of two new gymnasiums in the Arena has allowed Parisian Clubs to use the facilities, as well as many students from 12 local schools. The Arena has also become a young and urban cultural space with the hosting of 23 concerts and 14 special events so far. SEQ will need to ensure their venues can create spaces that add to the local community following the conclusion of the Games, similar to the Adidas Arena.
- High standards of construction quality with a focus on legacy needs and performance is a key factor in the ongoing operation and viability of venues and infrastructure.
- Vertical use of space cost more in construction but has allowed maximisation of activation of space, and flexibility to host everything from community sport to major league basketball ad events.





Meeting: Monday, 10 February 2025

Eco-Friendly Games

Hosted by

Antoine Guillou, Deputy Mayor (Cleanliness, Waste Reduction, Reuse, Recycling and Sanitation)

Antoine Guillou has been Deputy Mayor for Public Cleanliness, Waste Reduction, Reuse, Recycling and Sanitation since October 2023. He was first elected in June 2020 and was appointed Deputy Mayor for Human Resources, Social Dialogue and the Quality of Public Service between 2020 and 2023. Antoine is a member of the 8th Commission of Paris City Council (Environment – Climate and Biodiversity – Waste and Cleanliness). He was elected in the 13th district of Paris and is a member of the Socialist Party. Antoine has also been a voluntary member of the Editorial Commission of the Terra Nova think tank since 2015 and has written several publications about the ecological transition.

Background

Paris had the ambition and goal to be an eco-friendly Games for the 2024 Olympic and Paralympic Games. Many efforts were taken by the government and Games planning authorities to achieve this goal, with real results being evident.

Key learnings / outcomes

- The delegation had a discussion with the Deputy Mayor of Cleanliness, Waste Reduction, Reuse, Recycling and Sanitation regarding how Paris 2024 achieved an eco-friendly Games.
- The city government used the influx of public funds and attention associated with the Olympics to advance efforts to reduce car traffic, extend bike lanes and open more space for pedestrians - including turning a highway along the right bank of the Seine into a park. City officials claim the policy has reduced air pollution by 40%.
- Paris 2024 set the goal of avoiding or recovering 80% of waste produced during the Games, by prioritising waste reduction at the source through its circular economy strategy.
- Logistics and operations aligned with Paris's overall strategy, ensuring a legacy that benefits both the city and future large sporting events.
- The Paris Cleanliness Technical Service in Figures -
 - 2900km of sidewalks to clean
 - 30000 street bins to empty
 - 3000 tons of waste collected daily by 480 garbage trucks
 - 1000000 bulky waste removals per year
 - 400000 m2 of graffiti removed annually
 - 1400 cleaning and collection vehicles operated directly by the city
 - 6800 members in the Paris Cleanliness Technical Service, including 5000 sanitation workers, 700 drivers and 500 crew leaders



Meeting: Monday, 10 February 2025

Lunch with the French Ambassador for Sport

Hosted by

Samuel Ducroquet, French Ambassador for Sport

Samuel Ducroquet has been an Ambassador for Sport since February 2023. A career diplomat, he joined the Ministry for Europe and Foreign Affairs in 2007 as an International Civilian Volunteer at the Permanent Representation of France to the European Union in Brussels, then was appointed to the European Union Directorate at the Quai d'Orsay. Samuel Ducroquet then held the position of political counsellor and sports referent at the France Embassy in Qatar (2015- 2018). But it is more particularly his experience as Sports Counsellor / Olympic Attaché at the France Embassy in Tokyo (2018- 2021) that has enabled him to develop real expertise in the field of sports diplomacy, reinforced by his position as Senior Manager in charge of the dignitary programme within the International Relations Department of the Paris 2024 Organising Committee until January 2023.

In close collaboration with other State services, the French sports movement, companies and territories, the Ambassador for Sport assumes a role of development, coordination and representation in sports diplomacy. Based in Paris, he also regularly travels abroad to develop international cooperation on the sidelines of major sporting events, or to promote French positions in international forums.

Key learnings / outcomes

- The delegation met with the French Ambassador for Sport, Mr Samuel Ducroquet, who provided insight and learnings from the Paris 2024 Olympic and Paralympic Games which saw the arrival of over 1.5 million people in the region for the event.
- Mr Ducroquet shared that effective communication is essential for success with such a large-scale event, as well as the importance of coordination with the police to ensure there are smooth security measures in place.
- Additionally, the importance of conveying messages and inclusiveness of supporting people with fewer means was discussed.
- The conversation also touched on the diplomatic efforts involved, with the Ambassador describing the Games as a fantastic opportunity to work with the entire diplomatic network. Mr Ducroquet shared about the cooperation and support from the French Foreign Ministry and local government of Paris, expressing their willingness to work hand in hand with others to share their experience and expertise and deliver a fantastic experience for all involved.





Meeting: Monday, 10 February 2025

Games Mass Transit & Mobility

Hosted by

Valérie Pécresse, President, Île-de-France Mobilités

Elected for the first time to the Île-de-France Regional Council in 2004, she became its president in December 2015, as well as the president of Île-de-France Mobilités.

Laurent Probst, Director General, Île-de-France Mobilités (Public Transport Authority of Paris Region)

Laurent Probst is Chief Engineer of the Ponts, Eaux et Forêts (Bridges, Water and Forests), a graduate of the Ecole Polytechnique and holds a Master's degree from the London School of Economics. After more than ten years working for the government in the transportation sector, he specialised in financing issues as Head of the Infrastructure Financing Mission, then Head of the Public-Private Partnerships Expertise Mission. He also served as Deputy Director of the management of France's toll motorway network between 2012 and early 2016, where he managed the motorway concession contracts, a sector that represents €11 billion in revenues.

Laurent Probst was also advisor to the President and former Minister Valérie Pécresse for more than three years, first as advisor for financial and real estate affairs at the Ministry of Higher Education and Research, then as Deputy Cabinet Director in charge of State reform at the Ministry of the Budget. Since March 2016, he has been Managing Director of Ile-de-France Mobilités, the transport authority in Ile-de-France, which manages, through its contracts with transport operators, the operation of 13 train and RER lines, 16 metro lines, 13 tram lines and 1,500 bus lines (10,500 buses), with a budget of more than €13 billion per year. Ile-de-France Mobilités also oversees the development of the transport network, as well as the project management of certain projects. It defines the digital, ticketing and new mobility strategy.

Background

One of the key challenges during the Games was efficiently moving 200,000 accredited individuals while ensuring smooth access to venues for millions of spectators. Addressing this issue comprehensively, while minimizing the transportation carbon footprint, was a monumental task. Under Mayor Anne Hidalgo, the City of Paris leveraged the event to promote sustainable mobility, reducing car dependency by expanding cycle paths and increasing pedestrian-friendly spaces—especially along the Quays of the Seine. Ile-de-France Mobilités is the organising authority for public transport in the Ile-de-France region, responsible for designing, organising and financing transport for everyone living in the Ile-de-France region. Every day, 9.4 million trips are made by residents using one of the largest public transport networks in the world. It is financed by local authorities (region, departments and the City of Paris), employers via a transport subsidy tax and the obligation to cover 50% of the cost of transport for staff, and by ticket sales.

With a fleet of 10,500 buses, distributed around 200 bus operational centres, passengers can ride on the 1,500 bus routes, 14 metro lines, 9 tram lines and 13 train and RER lines which crisscross the Region. In the next ten years or so, the Île-de-France Mobilités network will have been enhanced with numerous extensions and new metro, tram and RER lines under construction at the moment, including the future lines 15, 16, 17 and 18 and the regional metro (Grand Paris Express project). To operate all of these lines every day, Île-de-France Mobilités has contracts with transport companies such as RATP, SNCF, Transdev, Keolis, RATP Dev, Savac-Lacroix and many others. The cost of running this gigantic system amounts to more than 10.5 billion euros each year. It was the official partner of the 2024 Paris Olympic and Paralympic Games, responsible for organising the transportation of spectators and accredited participants, alongside the International Olympic Committee and the Mobility Committee for the Paris 2024.

A Transportation Revolution: Public Transit at the Core

For the first time, the Games will be fully accessible via public transportation, marking a significant milestone in sustainable mobility. This revolutionary effort ensures that all public transit used during the Games will be 100% carbon-free—a global first. As a result, the carbon footprint of transportation during the Paris Games will be 20% lower than that of the Tokyo Games. Additionally, by 2030, the Paris Region's public transportation network is expected to double in size. This ambitious expansion will include 218 miles of new lines and 139 new stations. These investments will enhance the region's capacity to support future large-scale events while providing long-term benefits to residents and visitors.

Low-Carbon Public Transport for the Games

- 300 biogas, diesel, and hybrid (biofuel) shuttles
- 1,000 carbon-free buses to transport athletes, media, and accredited visitors
- BRT (Bus Rapid Transit) systems to support high-frequency travel
- 75% of venues located within 500 meters of a public transport stop
- Regional transport authority, Île-de-France Mobilités, coordinated efforts to increase service capacity for bus, tram, and train frequencies by 15%

New Metro Line 14 Extensions

Automated line extended with 7 new stations connecting both the Orly and Charles de Gaulle airports (via RER lines), improving accessibility in lower socioeconomic locations (Saint Denis), connecting to key transit hubs to central Paris and catalyst for urban renewal opportunities.

Capacity Upgrades (RER Line and Bus Upgrades)

Enhancements to the suburban rail lines included newer trains and added capacity on lines serving major Games venues. Bus networks were also improved with more frequent services and additional routes to better connect outlying neighbourhoods.

Key learnings / outcomes

- The delegation met with the President and Director General from Île-de-France Mobilités for a presentation on public transport in Paris, especially covering the organisation's actions to prepare for the Paris 2024 Games and their experience during them.
- The presentation began with a brief overview of Île-de-France Mobilités as an organisation and their network.
 - The organisation has an annual budget of €12.69 billion with 9.4 million passengers across France daily.
 - Some of Île-de-France Mobilités' responsibilities include contracting and monitoring transport operators, the development of innovative forms of transportation, creating investment programs, mobility planning and creating recommendations on organising intermodal solutions.
 - There are currently over 500 stations across the France transport network which are used by 10,500 buses, 391 tramways, 750 metro trains, 1,307 train sets and over 20,000 Veligo bikes.
- Île-de-France Mobilités shared the improvements they have made on the network for daily users. The improvements included: an extension of the rail network; improved quality of service in passenger information, shorter service interruptions and digital ticketing; the digitisation of services, especially with the success of the Paris 2024 dedicated app and the Paris 2024 pass; and finally, achieving maximum efficiency to transport passengers through infrastructure availability, driver mobilisation, maximum availability of the rolling stock fleet and reactivity in handling abandoned baggage.
- Île-de-France Mobilités then shared about improvements that have been implemented in terms of safety. These improvements were surrounding security staff reinforcement with 16 new sniffer dog brigades, 2,200 new police officers and a new Regional Transport Brigade.
- Finally, improvements were shared in terms of accessibility for public transport in France. Accessibility improvements were made to 240 stations in the suburbs of Paris, to 100% of Parisian buses, 100% of Ile-de-France tramways and to 100% of RER A and B stations as well as line 14.
- Île-de-France Mobilités then spoke about how they organised the mobility in Île-de-France during the Paris 2024 Olympic and Paralympic Games.
 - Paris had 25 competition venues for the Games with 13 in Paris and 12 in the suburbs. There were 767 sessions (50 per day) and around 7 million spectators with 100% accessibility to public transport.
 - The greatest challenges facing transport for spectators during the Games was the assumptions that had to be made, the capacity of various venues and the network system and how to organise this without impacting the daily journeys of people living in Paris. To address these issues, the public transport services were increased to meet additional spectator demand, and a specific strategy was developed for each event. Shuttle buses were also set up to travel to remote venues which also acted as a dedicated service for spectators using wheelchairs. Park and rides were also established for the spectators wishing to drive to the venues.
 - Tips on how to adapt throughout the Games were also provided which included ensuring the mobilisation of drivers, the reinforcement and pre-positioning of intervention staff for breakdown repairs during the day and

urgent corrective work at night, establishing an organisation that was dedicated to the Olympic Games transport and having RATP and SNCF liaison officers stationed at the main command centres, and conducting extensive communication to encourage working from home for everyday users of the transport network.

- The final advice that Île-de-France Mobilités passed on to the delegation is to have good anticipation and preparation prior to the Games, have an assurance of the availability of resources and the possibility of intervening at any time during the event and to have strong reactivity and resilience during the Games.
 - Spectator information and flow management was communicated as essential for the Games. 5,000 staff, including the usual teams, were on hand at stations to provide information to spectators, as well as 3,000 prevention and security officers and special signage that was installed on public transport to direct passengers. Information campaigns encouraging useful behaviour such as cycling, carpooling and remote working were also deployed prior to the Games. Finally, the Transport Public Paris 2024 app was key to making it easy for spectators to get around the region.



Meeting: Monday, 10 February 2025

Bilateral Courtesy Call with the Deputy Mayor of Paris

Hosted by

Pierre Rabadan, Deputy Mayor of Games & Tourism, City of Paris

Pierre Rabadan is a former professional rugby player and has been the successful captain of *Stade Français*, an iconic Parisian club. In 2015, he retired from his sporting career and joined Anne Hidalgo's office as sports advisor to participate in Paris' bid for the 2024 Olympic and Paralympic Games and to promote the organisation of major international sporting events in Paris. In 2020, he was elected as a Paris Councillor and appointed Deputy Mayor in charge of Sport, Olympic and Paralympic Games by Mayor Hidalgo.

Ivoa Alavoine

Mayor's Advisor for Olympics & Paralympics, City of Paris

Paul-David Regnier

Mayor's Advisor for diplomatic and international affairs, City of Paris

Background – Areas of Discussion

Financial cost of city operations for hosting the Olympic & Paralympic Games:

The net contribution to the budget by the City of Paris was previously set at 370 million euros (520 million euros in expenditure and around 150 million in revenue) which matches the city's original expectations.

Creating long-term legacy benefits – 'Paris 2024 and the future of cities through sport':

This was a unique conversation on how the event sparked public-private partnerships that addressed urban challenges. From public engagement to sustainable infrastructure, this discussion uncovered how the Games acted as a catalyst for creating long-term benefits and legacies, offering inspiration for future host cities.

Civic diplomacy and international relations, including the importance of sub-national collaboration with Los Angeles:

Hosting the Olympic & Paralympic Games provided an excellent opportunity for Paris to shine on the world stage and strengthen diplomatic relations.

Key learnings / outcomes

- The delegation had the opportunity to meet with the Mayor of Paris, Mayor Anne Hidalgo, and the Deputy Mayor of Games & Tourism from the City of Paris.
- The Mayor and Deputy Mayor spoke about the financial cost of city operations for hosting the Olympic and Paralympic Games in 2024. They explained that the expenditure has been spread over 8 years, from 2018 to 2025, and will have a very moderate impact on the city's overall budget, averaging 0.65%/year. Expenditure can be broken down into two parts: €386 million of capital expenditure and €117 million of operating expenditure. These are in line with public policy objectives:
 - Development and modernisation of the city's assets through capital expenditure (€386 million): i.e.: Adidas Arena, a stage the Porte de la Chapelle district's renewal / Stade Pierre de Coubertin, accessibility upgrades, as well as the Davin, Max Rousié, Vallerey and Poissonniers sports venues, the Olympic traffic lanes and the area around the Grand Palais
 - Involvement of Parisians and enhancement of the region with the legacy and celebrations program (€73 million) to enable Parisians to enjoy the Games experience.
 - Quality of reception and regional attractiveness (€40 million).
- The hosts also spoke about the importance of creating long-term legacy benefits. From the outset, Paris aimed to ensure the Games provided long-term community benefits. The Games accelerated public policy and investment with 20 initiatives aligned to its "Olympic Transformation" legacy programme. Paris introduced 38 new sports and cultural facilities, with 22 remaining post-Games. The City funded 500 community groups and their sustainable projects through the Paris 2024 OCOG endowment fund. The three key regional public policy legacies were:
 - Densification and decarbonisation of the daily transportation network. Games venues 100% accessible by public transport, by carbon-free transportation.

- Creation of high-quality, permanent sports facilities and athlete's village, transformed into more than 22,000 housing units by 2025.
- Showcase Paris Region's industrial and technological know-how, including quantum, artificial intelligence, hydrogen and aeronautics and Advanced Air Mobility (AAM).
- The courtesy call also included a discussion on international relations and working with, as well as learning from, other host cities. Hosting the Olympic & Paralympic Games provided an excellent opportunity for Paris to shine on the world stage and strengthen diplomatic relations. It showcased and amplified social initiatives created for the Games and highlighted its role in hosting a major international sporting event. The dialogue provided insight into Paris's approach to sharing hosting experiences with future host cities and sharing legacy projects with international delegations.
- The key themes and takeaways from the discussion for the delegation was the importance of coordination and collaboration for all involved in the games, ensuring clear and effective services and delivery during the Games, being aware of the challenges and costs associated with security for the event, and finally having a focus on customer engagement and competition and balancing the different positions of all stakeholders in the Games.



The City of Saint-Denis (Ville St-Denis)

Saint-Denis, the second-largest city in Île-de-France, is a densely populated commune just north of Paris and served as a key hub for the Olympic Games. This expansive district received 80% of the public investment for the Games, reflecting its strategic importance. Major infrastructure projects, including the Athletes' Village and Aquatics Centre, were developed within its borders. Saint-Denis is also home to the Stade de France, the national stadium for football and rugby. Despite being one of the poorest districts in the Paris region and hosting the highest concentration of immigrant residents, Saint-Denis boasts a rich historical heritage. The Basilica of the Kings and Queens of France stands as a symbol of its medieval past and royal legacy. Once a medieval city and royal necropolis, Saint-Denis became a key industrial hub during the Industrial Revolution and later developed into a working-class area. Today, it is experiencing rapid economic transformation and is set to become the second most populous commune in Île-de-France by 2025, following the planned amalgamation with a neighbouring municipality. The city embodies the material legacy of the Olympic Games, marked by ongoing urban renewal and creative growth. Its vibrant diversity, with over 130 nationalities represented, adds to its cultural wealth. During the Games, three live celebration sites energised the community, while the world's media gathered at the Saint-Denis Media Centre, located at the Plaine Commune headquarters, opposite the Stade de France.

Key points of interest

The areas of discovery for mission delegates during the City of Saint-Denis (Ville de-Paris) visit included:

The Department (Seine Saint Denis Conseil département)

The regional department, made up of 39 cities, covers 236.20 km², compared to the 105.40 km² surface area for the City of Paris. Seine-Saint-Denis accounts for 1,668,970 inhabitants. Since 1990, this department also accounts for the highest nationality rate in France, making it the youngest department in metropolitan France. Seine-Saint-Denis helped finance Olympic facilities via SOLIDEO, (the independent Olympic infrastructure authority) and is the contracting authority for infrastructure projects such as the Annette Kellermann Aquatic Centre in La Courneuve, PRISME in Bobigny, and the new Athletes' Village bridge between Saint-Denis and L'Île-Saint-Denis.

Plaine de Commune

Plaine de Commune brings together nine cities of North Paris known for being part of the urban agglomeration that makes up the larger metropolitan region of Paris. This area includes multiple municipalities (communes) and is part of the administrative territory known as the Plaine Commune Grand Paris. These cities include Saint-Denis, Saint-Ouen, Aubervilliers, Pierrefitte-sur-Seine, Stains, Ile-Saint-Denis, La Courneuve, Epinay-sur-Seine and Villetaneuse; the beating heart of the Olympic Games, with 3 competition venues, closing ceremonies, 13 celebration venues, 12 training venues, the Athletes' Village, etc.

Meeting: Tuesday, 11 February 2025

Official Welcome from Saint Denis Council

Hosted by

Mathieu Hanotin, Mayor of Saint-Denis and member of Paris 2024 Organising Committee

In 2012, he was elected Deputy of Saint-Denis, Pierrefitte and Villetaneuse. He notably acted on the issue of substandard housing. In 2015, he was re-elected Departmental Councillor of Saint-Denis in charge of sports and major events including the Olympic and Paralympic Games in 2024 and the Rugby World Cup in 2023. He was elected Mayor of Saint-Denis on July 4, 2020 to improve the living environment and make Saint-Denis a peaceful, united, ecological and resilient city. In continuity, he was elected President of the Plaine Commune territory to restore proximity with the inhabitants in the daily actions of the community.

Stéphane Troussel, President of Seine Saint Denis, Conseil dept / board member of Solideo

Stéphane Troussel was elected President of the Departmental Council of Seine-Saint-Denis on September 4, 2012. In 2008, he was elected Vice-President in charge of policies relating to Housing, Urban Policy and Social Diversity in the new majority after the election of Claude Bartolone as President of the Departmental Council. Since November 2009, he has also chaired the Public Housing Office of Seine-Saint-Denis.

Other elected representatives:

- **Katy Bontinck**, First Deputy Mayor, Ville de Saint-Denis
- **Shems El-Khalifaoui**, Deputy Mayor of the Olympics, Ville de Saint-Denis
- **Guy Marthély**, Deputy Mayor of Transports, Ville de Saint-Denis
- **Séverine Eloto and Rabia Beraï**, Deputy Mayors of International Cooperation, Ville de Saint-Denis
- **Antoine Mokrane**, Deputy Mayor of Transport, Ville de Saint-Denis
- **Mathieu Defresle**, Vice-President of Transports, Plaine Commune
- **Corentin Duprey**, Vice-President of Sustainable Mobilities & Territorial Development, The Departmental Council



Meeting: Tuesday, 11 February 2025

Grand Paris Express Underground Network

Background

The Grand Paris Express was opened in June 2024 by President Macron, and was expected to receive over 40,000 passengers during peak periods of the Olympics and Paralympics, with the station south-west of the Stade de France and the Aquatics Centre (the only arena specially constructed for the Games). Built over 9 levels, the station has capacity to accommodate 250,000 passengers a day. The station is operated by Keolis and in will serve the future orbital Line 15 and the terminus of automatic metro lines 16 and 17. The station was designed by Japanese architect Kengo Kuma, following an international architectural competition. Over 100 sculptures of "prehistoric Venus " by French artist Prune Nourry will be installed in the station atrium by 2026, plus murals by Spanish illustrator Sergio García Sánchez.

Key learnings / outcomes

- The delegation received a briefing on the Grand Paris Express Underground Network.
- Built by BESIX Construction, (contractors of the new Kangaroo Point Bridge), the Saint-Denis Pleyel station and the Grand Paris Express are Europe's single biggest infrastructure project, providing a direct link with the centre of Paris.
- Work on this long-term project were accelerated by the Olympic Games, which also opened legal facilities to quicken the project.
- The following works began in 2020, just four years prior to the Paris 2024 Games to prepare for the influx of visitors in the city:
 - 200km of new rail line.
 - 36 new train stations.
 - 4 lines connected to the station – 27m down.
- The station has capacity to accommodate approximately 250,000 people per day.
- The station will have four lines, including the already open Line 14 and three others that are not yet open. Once fully operational, it is expected to be used by 2.5 to 3 million passengers per day.
- It was also shared that there is an artistic project planned for the station to enhance the visual amenity of the space.
- The station and surrounding infrastructure has been the catalyst for significant urban renewal and housing around the station, with plenty more planned in future years.





Site tour: Tuesday, 11 February 2025

Pleyel Urban Crossing

Background

With a length of 300m, the Franchissement Urbain Pleyel (FUP) is a major structure crossing on one of the world's busiest railways (48 separate lines), linking the previously separated districts of Landy-France and Pleyel (Saint-Denis). The Crossing is at the heart of the Olympic project, with the Olympic Village to the west, and the Stade de France and Olympic Aquatics Centre to the east.

The bridge provides a smooth, efficient and comfortable connection between the RER D station "Stade de France - Saint-Denis", line 13 and the Grand Paris Express station "Saint-Denis Pleyel". The pedestrian section was opened in July 2024, with full commissioning of the multimodal link with ample room for bicycles, buses and pedestrians scheduled for 2026.



Site tour: Tuesday, 11 February 2025

Athletes Village

Hosted by

Adrien Delacroix, Deputy Mayor, Urbanism

Laurent Monnet, Deputy Mayor, Ecological Transition

Hermann Timba, City Councillor in Charge of Olympics

Christian Pernot, City Councillor in Charge of Sports

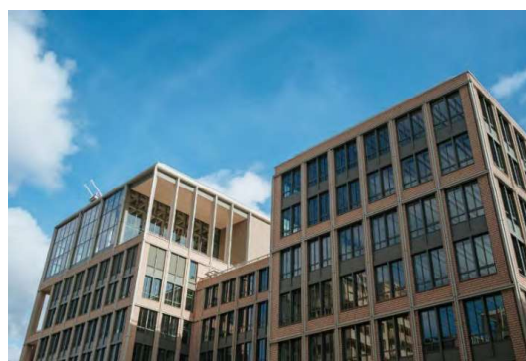
Corentin Duprey, Vice-President, Sustainable Mobilities & Territorial Development, Departmental Council, Seine-Saint-Denis

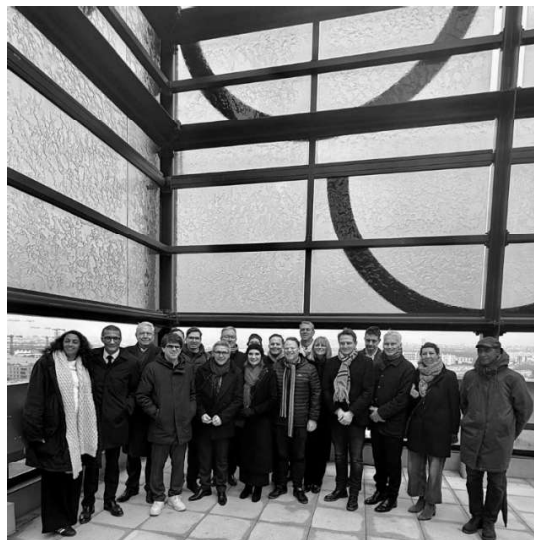
Background

Located in the French Department of Seine-Saint-Denis, the village hosted athletes and members of nearly 180 delegations during the Paralympic Games. Around 300,000 square metres of walkways, green spaces and buildings of different sizes and colours. During 2024, it welcomed nearly 15,000 athletes competing at the Olympic and Paralympic Games. All of this was achieved with key goals in mind; to help create a sustainable city, improve the local economy and increase growth in innovation and technology. Conceived as an eco-neighbourhood, the Olympic Village will be transformed after the Games into a new residential and business district, providing workplaces for 6,000 people and apartments for an additional 6,000. A quarter of these residences will be reserved for public housing, catering to 40% of the current residents in Saint-Denis who rely on it. Another third will be rented out as affordable housing, managed by government-affiliated agencies and offered to students and low-income workers.

Key learnings / outcomes

- The delegation received a site tour of the Paris 2024 Games Athletes Village in Seine-Saint-Denis. This tour was hosted by various relevant Deputy Mayors and City Councillors.
- The hosts shared that local pride has been one of the most powerful outcomes from the 2024 Paris Games, with 81% of the population that was surveyed post-Games sharing that they were proud to live and work in the region.
- The region had a €4.5 billion construction program for the Games. However, the region was able to build as little as possible with a reuse and repair focus and most of the projects being the refurbishment of already-built sites.
- There was a strong focus on sustainability for the Games, with there being high environmental and social goals and 50% less reo than business code. The athlete's village was renovated without aircon as they were able to use thermal, carbon free cooling from underground, and included circular economy showing that it is possible to deliver a project on time whilst delivering sustainability.
- There was a major focus on community infrastructure when developing the athlete's village. This included transforming the site into two new neighbourhoods with connectivity, creating 4,000 homes with 30% of these dedicated to social housing, 10 new schools and surrounding amenities.
- The following key lessons were shared by the hosts in regard to the Games site:
 - Ensure there is unconditional support from councils.
 - Address local needs first to ensure that sustainable development continues post-Games.
 - Design venues for legacy.
 - Ensure there is good contracting – BAU is not enough.
 - International delegations will ask for changes; therefore, the hosting city needs to manage these and include strict processes for when this happens.
 - The less time there is to develop these venues the more communication that is required.
 - Master risk and change management.







Meeting: Tuesday, 11 February 2025

Council Olympic Region Lunch

Hosted by

Valérie Pécresse, President of the Île-de-France Regional Council

Valérie Pécresse began her career as an auditor at “Conseil d’Etat”, government commissioner specializing on legal matters on internet, disabled people rights and hospital liability. In 1995, she supported Jacques Chirac and joined his Cabinet at the Presidency of the Republic as a technical advisor in charge of studies, forecasts and information technologies. Elected to the National Assembly for the first time in 2002 as Member of Parliament for Yvelines (one of the 8 departments of Ile-de-France region), Valerie Pécresse specialized on Family matters, Research and Education. After Nicolas Sarkozy’s victory for the French Presidency in 2007, Valérie Pécresse is nominated Minister of Higher Education and Research, in order to carry out one of the most important reform of Nicolas Sarkozy’s five years term as President: a more autonomous model for Universities and a reform of the research sector. On June 30, 2011, Valérie Pécresse is appointed Minister of the Budget, Public Accounts and State Reform, spokesperson for the Government of François Fillon. As Minister of Budget, she worked on the historic reduction of budget deficit and public expenditures. She also set up a special VAT scheme against delocalisation, which contributes to reduce the cost of work, key for employment competitiveness. She is re-elected as MP for Yvelines in 2007 and 2012. Elected for the first time to the Ile-de-France Regional Council in 2004, she became President of region Ile-de-France in December 2015, as well as President of Ile-de France Mobilités.

Other elected representatives:

- **Mathieu Hanotin**, Mayor of Saint-Denis
- **Stéphane Troussel**, Président, Seine-Saint-Denis Department
- **Karim Bouamrane**, Mayor, Saint-Ouen-sur-Seine
- **Shems El Khalfaoui**, Deputy Mayor, Ville de St-Denis
- **Adrien Delacroix**, Deputy Mayor, Urbanism, Ville de St-Denis
- **Leyla Temel**, Vice President of Plaine Commune, in Charge of Tourism
- **Séverine Eloto and Rabia Berai**, Deputy Mayors, International Cooperation
- **Sonia Bennacer**, Deputy Mayor of Employment
- **Antoine Chinè**, Délégué Général de Territoires d’Evénements Sportifs

Background

Since 2016, to advance the territorial brand and combat negative perceptions associated with the region, Seine-Saint-Denis has focussed on three ambitions; value, revitalise, transform.

Key learnings / outcomes

- The President of the Île-de-France Regional Council hosted the delegation for a Council Olympic Region Lunch.
- The attendees of the lunch were able to discuss the attractiveness, tourism and employment strategy developed during the Paris 2024 Olympic & Paralympic Games to see what could be implemented in SEQ in 2032.
- Lord Mayor Adrian Schrinner provided an address at the Council Olympic Region Lunch and provided his gratitude on behalf of the SEQ delegation for Saint-Denis’ hospitality and opportunity for collaboration and to learn. The Lord Mayor provided background on who the Council of Mayors (SEQ) was and the incredible cooperation between the different councils in South East Queensland. He then highlighted the importance of collaboration between the three levels of government in Australia to achieve the Olympic dream which started with the mayors in 2015. He emphasised the need for better infrastructure and public transport in the Brisbane region, which is characterised by its low density and large geographical spread, especially after observing and experiencing the high-quality transport systems in Saint-Denis.



Site tour: Tuesday, 11 February 2025

State de France

Hosted by

Shems El-Khalifaoui, Deputy Mayor in Charge of Olympics

Benjamin Meura, Deputy Mayor, Buildings & Investment

Séverine Eloto & Rabia Berai, Deputy Mayors in Charge of International Cooperation

Hermann Timba, City Councillor in Charge of Olympics

Christian Pernot, City Councillor in Charge of Sports

Paul Ally, City Councillor for The Stade De France Sector

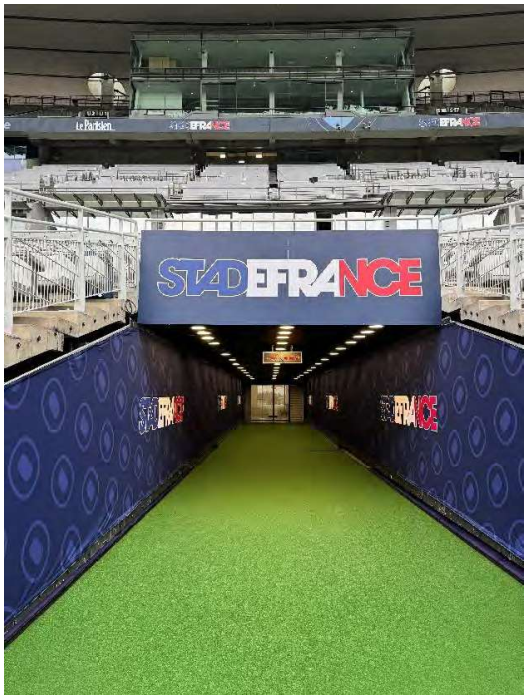
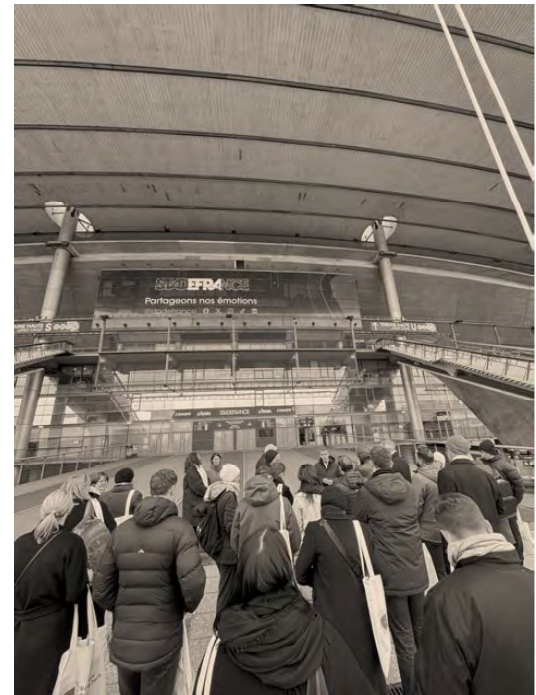
Corentin Duprey, Vice-President of The Departmental Council in Charge of Sustainable Mobilities & Territorial Development

Background

Created for the 1998 FIFA World Cup and the 2008 Olympic bid, it was designed by architects Macary, Zublena, Regembal and Costantini. Since the World Cup, this multi-sports arena has continued to host the biggest sporting events organised in France, from the World Athletics Championships in 2003 to the 2007 and 2023 Rugby World Cups and the Euro 2016 Football Championship. Each year, it stages the matches of the French national football and rugby teams, as well as some of the biggest concerts by French and international artists.

Key learnings / outcomes

- The delegates received a site tour of the State de France from various relevant Deputy Mayors and City Councillors.
- The delegation was provided with the following background regarding the venue:
 - With a seating capacity of 80,698, Stade de France is the country's largest stadium and biggest modular stadium in the world.
 - Transformed into the Olympic Stadium after three decades of hosting France's biggest sports events.
 - After negotiations with the municipality of Saint-Denis, the decision was made in 1993 to locate the Stade de France in the Plaine. The existence of an ambitious Urban Project supported by local authorities was a key factor in that decision. The conditions the City of Saint-Denis negotiated in the so-called 'Stade de France Agreements' were:
 - Capacity to accelerate the implementation of the Urban Project particularly through the improvement of public transport in order to limit car access⁷ and the building of large new pedestrian public spaces, including the covering up of the A1 motorway and the creation of public gardens on top.
 - Physical integration of the stadium in a mixed-use urban district (with housing, offices and leisure).
 - Local priority for jobs for the building of the stadium (a PPP project) and related infrastructure.
- The dynamics created by the success of the FIFA World Cup led ten municipalities located in the immediate sphere of influence the Plaine Saint-Denis area to sign a new Development Charter¹¹ in 1999. The idea behind this was to ensure that the new economic growth of Plaine Saint-Denis helps the development of much wider jurisdictions. At the end 1999, five of these municipalities decided to join forces and form what is now Plaine Commune, the local inter-municipal authority with delegated planning and development powers, and financial solidarity.
- Includes a running track around the field, which is covered by temporary seating for rectangle sports such as Rugby.
- Showcases opportunity to deliver an intimate oval stadium that can be used for hybrid sports and activations.



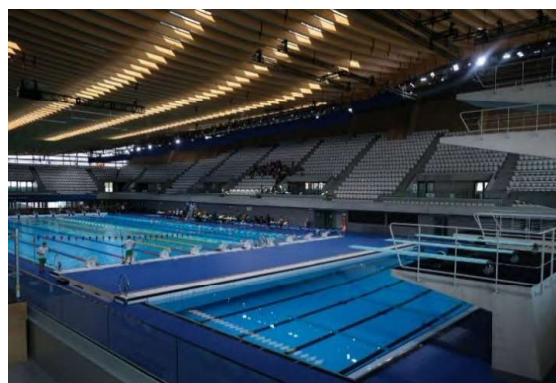
Site tour: Tuesday, 11 February 2025**Olympic Aquatic Centre****Hosted by****Patrick Oliver**, President, Greater Paris Metropolis**Background**

The vision for the Saint-Denis Olympic Swimming Stadium began as early as 2005, initially tied to Paris's bid for the 2012 Olympics. Although that bid was unsuccessful, the dream was revived with Paris's successful bid for the 2024 Summer Olympics. The site chosen for the stadium, located in the Plaine Saulnier district, is steeped in history, having previously housed a gas research centre and, before that, a gas factory dating back to the late 19th century.

Key learnings / outcomes

- The delegation received a site tour of the Olympic Aquatic Centre.
- The transformation of this site from a gas research centre into a world-class aquatic centre involved extensive decontamination and redevelopment efforts, showcasing a commitment to sustainability and urban renewal with an eco-friendly design.
- A key feature of the Saint-Denis Olympic Swimming Stadium is its integration with the surrounding urban landscape. A pedestrian bridge, installed in August 2022, spans the A1 motorway, linking the stadium to the Stade de France. This 100-meter-long, 18-meter-wide steel structure not only provides a vital connection between these two iconic venues but also enhances the accessibility and flow of foot traffic in the area. After the Olympics, the bridge will be narrowed to 12 meters, allowing for the creation of landscaped areas that will further beautify the surroundings.
- The Aquatics Centre is a flagship project in France's drive for all new public buildings to use 50% wood or other bio-materials.
 - The site boasts the biggest hanging roof in the world made entirely from wood. On this sits a giant 5,000m² solar farm, which will provide enough energy for the entire building. The design of the Aquatics centre features an impressive wooden roof, a suspended shape with minimal construction height that strictly follows the required minimum space for tribunes, people and sightlines, thereby minimising the amount of air that needs to be conditioned during the coming 50 years.
 - Inside, all the furniture in the restaurants, bars and entrances is made from wood waste from the construction site and other nearby demolition sites.
 - All the spectator seats are newly designed and made of 100% recycled plastic collected from schools in Saint-Denis.
 - Wood, one of the quintessential bio-based construction materials, is used to create the main structure of this building.
 - By using wood for this monumental structure, the proposal doubles the required minimum percentage of bio-sourced materials.
- The Olympic arena under the roof, with tribunes on three sides, can host 5,000 spectators around an innovative, modular and multifunctional competition pool.





Meeting: Tuesday, 11 February 2025
Plaine Saulnier Urban Renewal

Background

The ZAC de la Plaine Saulnier was created by deliberation of the Council of the Greater Paris Metropolis on October 11, 2019. A development operation with an area of approximately 12 hectares. It includes the Olympic Aquatic Center (CAO) project and the pedestrian-cyclist crossing that will overlook the A1 and connect the Plaine Saulnier to the forecourt of the Stade de France. Located on a former industrial site, the ZAC Plaine Saulnier will undergo two major development phases carried out under the project management of the Métropole. The first phase will allow the hosting of the Paris 2024 Olympic and Paralympic Games on the site and within the CAO, the second will begin the day after the Games and will allow the creation of a district with mixed functions by 2032.

Key learnings / outcomes

- Whilst at the Aquatic Centre, the delegation received a briefing regarding the Plaine Saulnier urban renewal that has taken place in Paris.
- It was explained that unlike other large cities in France, the Paris region (11.6 million inhabitants, 12,000 km², 1,300 municipalities) has no metropolitan authority. The Ile-de-France Regional Council has an overall spatial development responsibility, the City of Paris (2.2 million inhabitants, 100 km²) has strong planning and development powers but only within the narrow limits of its municipal boundaries. The real regional planning powers lied then in the hands of the regional representative of Central Government.
- In this context of potential conflicts, the regeneration process of Plaine Saint-Denis is an example of building a constructive cooperation not only between different levels of government (central government, region, county, local authorities) but also between the public sector (the French Railways (SNCF), the Ile-de-France Transport Agency (STIF), the public transport company (RATP), public land owners such as the City of Paris or the French Electricity Board (EDF), the private sector (local businesses, developers, investors) and the local communities (citizens, associations).



Meeting: Tuesday, 11 February 2025

Civic Reception from Saint Denis Council

Hosted by

Mathieu Hanotin, Mayor of Saint-Denis

Stéphane Troussel, Président, Seine-Saint-Denis Department

Invited guests include:

- Samuel Ducroquet, Ambassadeur pour le Sport
- Marie Barsacq, Ministre des Sports, de la Jeunesse et de la Vie associative
- Damien Combredet-Blassel, Chief of Staff, Ministre des Sports
- Vincent Roger, Délégué ministériel en charge de la grande cause nationale de 2024
- Yasmine Camara, Special Envoy of Ile de France to the Olympic and Paralympic Games
- Patrick Karam, Vice President of the Regional Council of Ile de France
- Nicolas Ferrand, Directeur du Programme Aval du Futur - membre du Comex- ORANO
- Yann Krysinski, Executive Director, Solideo
- Henri Specht, Directeur des opérations d'aménagement, Solideo
- Laurent Probst, CEO, Ile de Mobility
- Olivier Francois, Directeur de cabinet et secrétaire du conseil, Ile de Mobility
- Lionel Grotto, CEO, Choose Paris Region
- Romain Erny, Head of Business Sectors & Aftercare, Choose Paris Region
- Rebecca A. Ross, Attachée for Paris 2024 Olympic & Paralympic Games, U.S. Embassy Paris
- Yannick Callet, Deputy Mayor, St-Denis
- Shems El Khalfaoui, Deputy Mayor, St-Denis
- Jean-Baptiste Borsali, Mayor of Le Bourget / Vice President of Terre d'Envol (Combined Authority)
- Eric Lejoindr, Mayor of 18e Arrondissement (Adidas Arena)
- Karim Bouamrane, Mayor, Saint-Ouen-sur-Seine
- Quentin Gesell, Mayor of Dugny and Vice-Président de la Métropole du Grand Paris
- Karine Franclet, Mayor, Aubervilliers
- Karim Bouamrane, Mayor, Saint-Ouen-sur-Seine
- Amélie Oudea-Castera, Ministre des Sports et des Jeux Olympiques et Paralympiques
- Emmanuel Constant, Departmental Advisor, Seine Saint Denis departmental council
- Patrick Ollier, President of the Greater Paris Metropolitan Area
- Antoine Chinè, Délégué Général de Territoires d'Événements Sportifs

Key learnings / outcomes

- The delegation was hosted by the Mayor of Saint-Denis and the President of the Seine-Saint-Denis Department at a civic reception.
- This event was an opportunity to strengthen diplomatic ties with representatives in attendance from various local councils and representatives from the Paris 24 Games.
- The Mayor of Saint-Denis, Mayor Mathieu Hanotin, provided an address at the reception. He began by acknowledging the collaboration between the public and private sector for the Paris 2024 Games that allowed for achievements such as new stations, an athlete's village and aquatic centre for the benefit of the whole community.
- The Mayor also highlighted the unique opportunity the Games provided to bring people together and share skills, also sharing his appreciation to have had the opportunity to share with the delegation the progress the city has made and their future plans for improvement. Saint-Denis will continue to focus on the legacy of the games and the continuous efforts to improve the city and its infrastructure. Finally, he thanked the delegation for their visit, and everyone involved in organising this chance for collaboration.
- Lord Mayor Adrian Schrinner also provided an address at the reception and began by thanking Mayor Mathieu and the team for their warm welcome and generosity during the delegation's visit. The Lord Mayor shared his appreciation for the insights shared about the Olympic journey and the successful delivery of the Paris 2024 Olympic and Paralympic Games. He also expressed a mix of excitement and the weight of the upcoming Games and the global recognition that SEQ will receive but is confident the region will achieve a successful outcome through collaboration.

- The Lord Mayor and the SEQ delegation have been inspired by the legacy created by the Paris 24 and is determined to learn from it.



Ile de France (Regional Council)

With an annual budget of more than 5 billion euros, the Île-de-France Region is a major political, institutional and economic player in the Île-de-France region. Hence the concern of its administration to support the implementation of its regional policies as effectively as possible. The Region acts in most areas that concern the 12.4 million people of the Paris region: transport, high schools, apprenticeships, economic development, the environment, etc. Beyond that, it develops a territory that is both urban and rural, which represents 2% of France but concentrates 19% of its population and contributes to almost 31% of the national GDP. In addition to a deliberative assembly composed of 209 regional councillors, the Île-de-France Regional Council includes a Standing Committee, with a much smaller membership, to which part of the Assembly's responsibilities are delegated, as well as 22 thematic committees.



Meeting: Wednesday, 12 February 2025
Advanced Air Mobility (AAM) Vertiport Infrastructure

Hosted by

Alexandra Dublanche, Vice President, Choose Paris Region

Joyce Abou Moussa, Deputy Director of International Development & AAM Global Program Lead, Groupe ADP

Damian Kysely, Head of Infrastructure, Europe & Middle East, Skyports International

Lionel Grotto, Managing Director, Choose Paris Region

Romain Erny, Head of Business Sectors & Aftercare, Choose Paris Region

Background

Skyports Infrastructure is a leading enabler of AAM, designing, building, and operating take-off and landing infrastructure for air taxis and partnering with eVTOL (electric vertical take-off and landing) passenger and cargo vehicle manufacturers worldwide to enable safe, sustainable, and efficient flight operations in urban and suburban environments.

Key learnings / outcomes

- The delegation met with various representative from Choose Paris Region, Skyports and Group ADP to discuss the Advanced Air Mobility (AAM) operations in Paris and see how the learnings could apply to current AAM efforts in SEQ.
- Advanced Air Mobility (AAM) Operations in Paris will begin with five vertiports starting with a test bed in London, gradually expanding to cover the entire Paris region over the next decade.
- A temporary river-based vertiport will be located near Austerlitz station and will serve as the base of operations for VoloCity, a two-seat aircraft from the German company Volocopter. The vertiport is part of a joint project between the manufacturer and Groupe ADP, who manage and operate the Paris airports.
- Skyports was able to share about their current projects worldwide:
 - There will be a commercial air taxi service in Dubai which will commence in 2026. Construction of these services will likely be underway in October to begin building an airport and palm. This will create some noise disturbance, but one with less impact than a traditional helicopter with only 65-75db when 15 metres away.
 - Skyports is currently securing sites for South Florida in USA.
 - The Japanese authorities are currently establishing demonstrations of AAM for their world expo in Osaka.
- The discussion highlighted the importance of public acceptability of the project and the challenges faced in convincing both the public and the authorities about the project's benefits. There were concerns voiced from these parties about the noise and image of the project, which was perceived as a luxury service for wealthy individuals.
 - The importance, therefore, of partnerships with hospitals and other stakeholders were therefore highlighted, in order to communicate AAM's social utility, particularly in emergencies.
- The hosts emphasised the need that was felt to showcase the region's innovation and industrial capabilities, especially in the context of the Paris 2024 Games and aiming to leverage the visibility of the Olympics to demonstrate the region's potential to the world.
- There was also a focus in the discussion on the transportation infrastructure and the need to work on the economic legacy of the region, with Ile de France and the Paris region primarily perceived as a cultural destination rather than an innovation hub.



Site tour: Wednesday, 12 February 2025

Vaires-sur-Marne Nautical Stadium

Hosted by

Stéphane Beaudet, Vice President of International Relations, Ile de France

Stéphane has served as Mayor of Évry-Courcouronnes since 2020, and previously served as mayor of Courcouronnes from 2001 until its merger with Évry in 2019. He is a member of the Regional Council of Île-de-France and serves as a vice president of the council. Until 2018, he was a member of The Republicans. In the 2024 legislative election, he was a candidate for Essonne's 1st constituency.

Anne-Louise Mesadieu, Ambassador & Special Delegate for Diplomatic Relations, Ile de France

Audrey Prieto, Director of Nautical Centre, Ile de Loisirs de Vaires-Torcy

Laetitia Quilichini, Project Manager & Strategic Partners (Australia, NZ & India), Ile de France

Background

The Olympic rowing and canoe-kayak event venue is located 30 km east of Paris. Alongside the activities already available around the lake, such as rowing, catamaran sailing, stand-up paddle-boarding, windsurfing and dinghy sailing, the white-water stadium offers rafting, hydrospeeding and, of course, canoeing and kayaking.

The 4,400 sqm sports centre comprises of two courses over 300 and 150 metres; the 2,200m rowing and sprint canoe-kayak course, equipped with a finishing tower; a sports medicine centre; various administrative spaces; a media centre; and a training and accommodation centre.

Key learnings / outcomes

- The delegates visited the Vaires-sur-Marne Nautical Museum and received a site tour of the venue from Ile de France representatives.
- Along with Beijing and Sydney, it is one of three sites in the world with the facilities needed to host Olympic and Paralympic canoe-kayak and rowing events.
- The complex is structured around three core features of the Vaires-Torcy leisure base: the lake, the white-water stadium and the living area, which includes the new buildings with a landscaped roof that can be accessed for walks.
- This 150-hectare site is the only one of its kind in Europe and meets the demand for leisure facilities serving communities in the Paris region while satisfying the standards of excellence required for high-level athletes. Looking beyond elite competition, the white-water stadium enables the Vaires-Torcy leisure complex to offer a wide selection of leisure activities, as well as parklands, to benefit communities from across the Paris region.
- The renovations to the site were sped up ahead of the Paris 2024 Games with the works taking three years to develop the site. 90-95% of the pre-existing facilities were able to be utilised for the Games such as renovating a gym to be used for volleyball.
- This venue was one of the most significant investments for the Games so there was an emphasis on legacy building. The Games provided an opportunity to showcase the local region with the international event successfully boosting the attractiveness of the region and boosting its pride and global standing in the process. Not only this, but 44,000 job seekers were trained and employed to prepare for the Games and to support future employment at the Nautical Stadium.
- A key to the legacy of this venue after the Games is the national federations that use the nautical stadium facilities, especially the French federal rowing national training centre that is being established in the white-water venue. These federations have used the 36,000 spectator-capacity to host 20 competition sessions, 45 events and 1,024 athletes and were able to test the effectiveness of the venue before the Games with the Junior World Championships.
- Some of the challenges that the venue faced during the Games primarily surrounded security and safety due to the size of the venue, as well as the white-water basin not working and causing concern about the viability of the venue.
- Public transport was expanded to accommodate for the influx of visitors and athletes for the Olympic events, with park and ride facilities put in place. There were 13,000 buses in operation that transitioned into electric vehicles and the subway system is set to double in Paris by 2030.



Event: Wednesday, 12 February 2025

[South East Queensland Reception from the Australian Ambassador to France](#)

Hosted by

Her Excellency Lynette Wood, Australian Ambassador to France

The Ambassador to France is also accredited to the People's Democratic Republic of Algeria, the Islamic Republic of Mauritania and the Principality of Monaco. Her diverse diplomatic career includes a short-term assignment as Acting High Commissioner in London and postings in Berlin as Head of Mission, as well as in Ottawa and Bonn. Ms Wood has served three times on secondment to the Department of the Prime Minister and Cabinet, including heading the International Division for three years and three months as International Advisor to the Prime Minister's Office. She also served as Deputy Director of the department's Headquarters Service and Director of the Consular Affairs and Crisis Management Division during the COVID-19 pandemic.

Invited guests include:

- Frederic Calinaud, Vice President, Australia Business France Association (ABFA)
- Lionel Grotto, CEO, Choose Paris Region
- Alexandra Dublanche, President, Choose Paris Region
- Stéphane Troussel, President, Conseil départemental de la Seine-St-Denis
- Delphine Chênerie, Director of Olympics, Conseil départemental de la Seine-St-Denis
- Céline Daviet, Cheffe de cabinet - Président du Département de la Seine-Saint-Denis, Conseil départemental de la Seine-St-Denis
- Michael Turner, Counselor for Cultural Affairs, Embassy of the United States of America – Paris, France
- Lawrence M. Randolph, Minister Counselor for Public Affairs, Embassy of the United States of America – Paris, France
- Rebecca A. Ross, Attachée for Paris 2024 Olympic & Paralympic Games, United States Embassy Paris
- Samuel Ducroquet, Ambassadeur pour le Sport, French Foreign Ministry
- David Izzo, Head of Economic Diplomatie, French Minister of Foreign Affairs
- Joyce Aboumoussa, AAM Global Program Lead, Group ADP
- Laurent Probst, Managing Director, Ile-de-France Mobilités
- Olivier Francois, Chief of Staff to CEO, Ile-de-France Mobilités
- Baptiste Tholoniati, Chargé de projet Asie du Sud & Océanie, MEDEF International
- Ingrid Barnsley, Chief of Staff – Office of the Secretary-General, OECD
- Lamia Kamal-Chaoui, Director – OECD Centre for Entrepreneurship, SMEs, Regions and Cities, OECD
- Nicolas Ferrand, Directeur du Programme Aval du Futur, Ornano
- Valérie Péresse, President, Region ile de France
- Franck d'Aboville, Head of International Relations, Region ile de France
- Sandra De-Jenkjen-Eversmann, Special Adviser to Olympic Games, Region ile de France
- Aude Rothenburger, Special Adviser to the President, Region ile de France
- Laetitia Quilichini, Chargée de mission Amériques - Nouveaux partenariats stratégiques (Inde Nouvelle-Zélande Australie), Region ile de France
- Addison Ferrell, Director of European Infrastructure, Skyports International
- Yann Krysinski, Director General, SOLIDEO - Société de Livraison des Ouvrages Olympiques
- Henri Specht, Director of Operations, SOLIDEO - Société de Livraison des Ouvrages Olympiques
- Louis de Poncheville, Director – International Development Waste, Suez
- Antoine Chinès, Director General, Territoires d'Événements Sportifs
- Frank Erb, Director Market Development (Digital Airspace Mobility Solutions), Thales
- Charles Ollivier, Head of Mobility and Partnerships for Paris 2024, Toyota
- Antoine Colas, CEO – International, Transdev
- Ivoa Alavoine, Déléguée générale aux Jeux Olympiques et Paralympiques et aux Grands Événements chez, Ville de Paris
- Anne Hidalgo, Mayor of Paris, Ville de Paris
- Pierre Rabadan, Deputy Mayor of Sports, Olympic & Paralympic Games & Vice President of the World Union of Olympic Cities & President of Paris Tourism, Ville de Paris

- Paul David, Délégué général aux relations internationales et conseiller diplomatique, Ville de Paris
- Benoit Herzbrun, Deputy General International Affairs, Ville de Paris
- Benjamin Raigneau, Secrétaire Général adjoint chargé de la Qualité de l'action publique, Ville de Paris
- Ludovic Piron-Hallouët, Counsellor-Sherpa to the Diplomatic Advisor (City of Paris) - French Water Partnership - Amicale française de Mauthausen, Ville de Paris
- Ivoa Alavoine, Déléguée générale aux Jeux Olympiques et Paralympiques et aux Grands Évènements chez, Ville de Paris
- Martha Yeghiayan, Collaboratrice de Cabinet du Maire de Saint-Denis, Ville Saint-Denis
- Mathieu Hanotin, Mayor – Président de Plaine Commune Paris 2025, Ville Saint-Denis
- Mohamed Abdi, Chief of Staff, Ville Saint-Denis
- Nicolas Macé, Paris 2024 Program Director, Visa International
- Oumarou Doucoure, Technical Advisor to President Departmental Council of Seine-Saint-Denis, Deputy Mayor of La Courneuve - Vice-President of Plaine Commune (in charge of city policy and integration)

Key learnings / outcomes

- The delegation attended a reception hosted by the Australian Ambassador to France at the Australian Embassy.
- This event was an opportunity to strengthen diplomatic ties with representatives in attendance from various local councils and relevant organisations, especially from the Paris 24 Games.
- The Australian Ambassador to France, Lynette Wood, provided an address at the reception expressing her gratitude and appreciation to the SEQ delegation for their attendance and highlighting the importance of fostering conversations between nations. Ms Wood emphasised the hard work and preparations behind the Paris 2024 Games and the challenges that came along with the city's transformation into a vibrant and confident host city. The Ambassador shared that they looked forward to Australia's opportunity to showcase the SEQ region and the culmination of events to lead to this gold and green decade.
- Lord Mayor Adrian Schrinner also provided an address at the reception on behalf of the SEQ delegates thanking the Australian Ambassador to France and various hosts for their hospitality.
- He provided some background on the Council of Mayors (SEQ) and the delegate's willingness to learn from their hosts, especially in preparation for hosting the Brisbane 2032 Olympic and Paralympic Games.
- His address highlighted the relationships and partnerships that have been both formed and strengthened from this trip. The Lord Mayor also urged the attendees, especially those from businesses, that SEQ is a crucial investment opportunity and that they would be willing to partner with businesses to secure the future of the city region.







7. Appendices



7 Appendices

7.1 Joint Media Release

Mayors lead global search to deliver lasting legacy for South East Queensland

January 30, 2025

The Mayors of South East Queensland will embark on a 10-day mission to meet with global leaders and examine legacy opportunities that will help keep South East Queensland moving now, during the 2032 Games and beyond.



[Mayors lead global search to deliver lasting legacy for South East Queensland](#)



MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

Held in the Council Chambers, Administration Building
1 Nicholas Street, Ipswich

The meeting commenced at 9.04 am

**ATTENDANCE AT
COMMENCEMENT**

Mayor Teresa Harding (Chairperson); Deputy Mayor Jacob Madsen (via audio link), Councillors Sheila Ireland, Paul Tully, Marnie Doyle, Andrew Fechner, Kate Kunzelmann, Russell Milligan and Nicole Jonic

**MEETING
ATTENDANCE VIA
AUDIO LINK**

Moved by Mayor Teresa Harding:
Seconded by Councillor Kate Kunzelmann:

That in accordance with section 254K of the *Local Government Regulation 2012* and 8.6.2 of Council's Meeting Procedures Policy, Deputy Mayor Jacob Madsen be permitted to participate in the meeting via audio link.

AFFIRMATIVE

Councillors:
Harding
Ireland
Tully
Doyle
Fechner
Kunzelmann
Milligan
Jonic

NEGATIVE

Councillors:
Nil

The motion was put and carried.

**WELCOME TO
COUNTRY OR
ACKNOWLEDGEMENT
OF COUNTRY**

Councillor Kate Kunzelmann

OPENING PRAYER

Councillor Sheila Ireland

**APOLOGIES AND
LEAVE OF ABSENCE**

Nil

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

5. CONDOLENCES Nil

6. TRIBUTES Nil

**7. PRESENTATION OF
PETITIONS** Nil

**8. PRESENTATIONS
AND DEPUTATIONS** Nil

**9. PUBLIC
PARTICIPATION** Nil

10. MATTERS OF PUBLIC INTEREST

**10.1 MATTER OF
PUBLIC INTEREST**

DOMESTIC AND
FAMILY VIOLENCE
PREVENTION MONTH

Moved by Councillor Kate Kunzelmann:

**That the Matter of Public Interest in relation to Domestic
and Family Violence Prevention Month be noted.**

AFFIRMATIVE

Councillors:

Harding
Madsen
Ireland
Tully
Doyle
Fechner
Kunzelmann
Milligan
Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

Attachments

1. Matter of Public Interest - Domestic and Family Violence
Prevention Month

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

11. DECLARATIONS OF INTEREST IN MATTERS ON THE AGENDA

COUNCILLOR
ANDREW FECHNER

In accordance with section 150EQ of the *Local Government Act 2009*, Councillor Andrew Fechner informed the meeting that he has a declarable conflict of interest in the following Items:

- Late Item 14.2 titled Nicholas Street Precinct – Clarification of Commercial Terms Associated with the Lease for Metro B Tenancy
- Item 15.6 titled Ipswich Central Redevelopment Committee's Report

The nature of the interest is that Councillor Fechner stands to gain a benefit or suffer a loss due to his business interest in both A1A Events Pty Ltd and Bar Heisenberg Pty Ltd which is located in the top of town at 164 Brisbane Street, Ipswich.

Councillor Andrew Fechner advised that he will leave the meeting room (including any area set aside for the public) while these matters are being discussed and voted on.

DEPUTY MAYOR
JACOB MADSEN

In accordance with section 150EQ of the *Local Government Act 2009*, Deputy Mayor Jacob Madsen informed the meeting that he has a declarable conflict of interest in the following items:

- Late Item 14.2 titled Nicholas Street Precinct – Clarification of Commercial Terms Associated with the Lease for Metro B Tenancy
- Item 15.6 titled Ipswich Central Redevelopment Committee's Report

The nature of the interest is that Deputy Mayor Madsen is a member of the Ipswich Trades Hall and Labour Day Committee Executive which manages the Ipswich Trades Hall which is adjacent to the CBD redevelopment works that Council is undergoing.

Deputy Mayor Jacob Madsen advised that he will leave the meeting while this matters are being discussed and voted on.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

COUNCILLOR NICOLE JONIC In accordance with section 150EQ of the *Local Government Act 2009*, Councillor Nicole Jonic informed the meeting that she has a declarable conflict of interest in Item 2 of Item 15.4 titled Event Sponsorship - 2022 Gulf Western Oil Winternationals.

The nature of the interest is the Councillor Jonic's husband, Julian Jonic, is a life-long member of Willowbank Raceway.

Councillor Jonic invited the other Councillors to decide if she should participate and vote on the matter.

It was moved by Mayor Teresa Harding and seconded by Councillor Andrew Fechner that Councillor Nicole Jonic does not have a declarable conflict of interest in the matter because there is no personal or financial benefit to Councillor Nicole Jonic and therefore a reasonable person would trust that the final decision is made in the public interest.

The eligible councillors present at the meeting decided that Councillor Nicole Jonic may participate in the meeting in relation to the matter, including by voting on the matter.

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

NEGATIVE

Councillors:

Nil

Councillor Jonic did not participate in the vote.

The motion was put and carried.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

COUNCILLOR PAUL
TULLY

In accordance with section 150EQ of the *Local Government Act 2009*, Councillor Paul Tully informed the meeting that he has a declarable conflict of interest in Item 3 of Item 15.4 titled Event Sponsorship – CMC Rocks 2022.

The nature of the interest is that 4-5 years ago Councillor Tully had an admission pass to a CMC Rocks event in an official capacity and has no other involvement of any other kind with the event.

Councillor Tully invited the other Councillors to decide if he should participate and vote on the matter.

It was moved by Mayor Teresa Harding and seconded by Councillor Kate Kunzelmann that Councillor Paul Tully does not have a declarable conflict of interest in the matter because there is no personal or financial benefit to Councillor Paul Tully and therefore a reasonable person would trust that the final decision is made in the public interest.

The eligible councillors present at the meeting decided that Councillor Paul Tully may participate in the meeting in relation to the matter, including by voting on the matter.

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

Councillor Tully did not participate in the vote.

The motion was put and carried.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

COUNCILLOR SHEILA
IRELAND

In accordance with section 150EQ of the *Local Government Act 2009*, Councillor Sheila Ireland informed the meeting that she has a declarable conflict of interest in Item 3 of Item 15.4 titled Event Sponsorship – CMC Rocks 2022.

The nature of the interest is that Councillor Sheila Ireland has received through Council, tickets to attend CMC Rocks

Councillor Ireland invited the other Councillors to decide if she should participate and vote on the matter.

It was moved by Mayor Teresa Harding and seconded by Councillor Kate Kunzelmann that Councillor Sheila Ireland does not have a declarable conflict of interest in the matter because there is no personal or financial benefit to Councillor Sheila Ireland and therefore a reasonable person would trust that the final decision is made in the public interest.

The eligible councillors present at the meeting decided that Councillor Sheila Ireland may participate in the meeting in relation to the matter, including by voting on the matter.

AFFIRMATIVE

Councillors:

Harding

Madsen

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

Councillor Ireland did not participate in the vote.

The motion was put and carried.

12. CONFIRMATION OF MINUTES

**12.1
CONFIRMATION OF
MINUTES OF
ORDINARY MEETING**

Moved by Mayor Teresa Harding:
Seconded by Councillor Russell Milligan:

**That the Minutes of the Ordinary Meeting held on
21 April 2022 be confirmed.**

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**SUSPENSION OF
MEETING
PROCEDURES**

Moved by Mayor Teresa Harding:

That the provision of these meeting procedures be suspended, as is necessary, for the purpose of bringing forward Late Item 14.2 relating to business outstanding for Item 12.2 titled Confirmation of Minutes of Special Meeting.

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

At 9.20 am Councillor Andrew Fechner left the meeting room and Deputy Mayor Jacob Madsen left the teams meeting via audio link due to a previously declared interest in Item 14.2.

**MOVE INTO CLOSED
SESSION**

Moved by Mayor Teresa Harding

That in accordance with section 254J(3)(g) of the *Local Government Regulation 2012*, the meeting move into closed session to discuss Item 14.2 titled - Nicholas Street Precinct – Clarification of Commercial Terms

MINUTES OF COUNCIL ORDINARY MEETING

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associated with the Lease for Metro B Tenancy.

The meeting moved into closed session at 9.22 am.

AFFIRMATIVE

Councillors:

Harding

Ireland

Tully

Doyle

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**MOVE INTO OPEN
SESSION**

Moved by Mayor Teresa Harding:

That the meeting move into open session.

The meeting moved into open session at 9.33 am.

AFFIRMATIVE

Councillors:

Harding

Ireland

Tully

Doyle

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**14.2
NICHOLAS STREET
PRECINCT -
CLARIFICATION OF
COMMERCIAL TERMS
ASSOCIATED WITH
THE LEASE FOR
METRO B TENANCY
2B03**

Moved by Mayor Teresa Harding:

Seconded by Councillor Marnie Doyle:

That Council note the report clarifying the commercial terms of the Agreement for Lease and Lease for Tenancy 2B03 in the Metro B Building (impacting part of Lot 1 on RP157021) ("Tenancy 2B03") within the Nicholas Street Precinct as detailed in the confidential report and attachments by the Project Manager dated 17 May 2022).

AFFIRMATIVE

Councillors:

Harding

NEGATIVE

Councillors:

Nil

MINUTES OF COUNCIL ORDINARY MEETING

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Ireland
Tully
Doyle
Kunzelmann
Milligan
Jonic

All Councillors except Deputy Mayor Jacob Madsen and Councillor Andrew Fechner were present when the vote was taken.

The motion was put and carried.

At 9.37 am Councillor Andrew Fechner returned to the meeting room and Deputy Mayor Jacob Madsen returned to the meeting via audio link.

**12.2
CONFIRMATION OF
MINUTES OF SPECIAL
MEETING**

Moved by Mayor Teresa Harding:
Seconded by Councillor Marnie Doyle:

That the Minutes of the Special Meeting held on 5 May 2022 be confirmed and that the late report – Item 14.2 titled Nicholas Street Precinct – Clarification of Commercial Terms associated with the Lease for Metro B Tenancy 2B03 resolved previously be recorded as a clarification of the resolution made at the Special Council meeting of 5 May 2022 at Item 6.1.

AFFIRMATIVE

Councillors:
Harding
Madsen
Ireland
Tully
Doyle
Fechner
Kunzelmann
Milligan
Jonic

NEGATIVE

Councillors:
Nil

The motion was put and carried.

13. MAYORAL MINUTE

**13.1
QUEENSLAND
HEALTH
INTERVENTION INTO
CURRENT WASTE
ODOUR EVENT IN
IPSWICH**

Moved by Mayor Teresa Harding:

- A. That Council endorse Mayor Teresa Harding to write a letter to the Hon. Yvette D'Ath, Minister for Health and Ambulance Services, to request a panel of inquiry into the current waste odour event in Ipswich.**

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

B. That Council endorse the Chief Executive Officer to write a letter to the Acting Director-General of Queensland Health, Mr Shaun Drummond, to request the current waste odour event in Ipswich be registered as an Environmental Health Event.

AFFIRMATIVE

NEGATIVE

Councillors:

Councillors:

Harding

Nil

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

The motion was put and carried.

**14. BUSINESS OUTSTANDING –INCLUDING CONDUCT MATTERS AND MATTERS
LYING ON THE TABLE TO BE DEALT WITH**

**QUESTION ON
NOTICE TO THE CHIEF
EXECUTIVE OFFICER –
COUNCIL MEETING
OF 24 MARCH 2022**

That the Chief Executive Officer follow up, as a matter of priority, the response for this Question on Notice and that a procedure be implemented to ensure prompt responses to any future Questions on Notice.

2011 FLOOD DATA

Response to Question on Notice in relation to the 2011 Flood Data provided at page 28.

**QUESTION ON
NOTICE TO THE CHIEF
EXECUTIVE OFFICER –
COUNCIL MEETING
OF 21 APRIL 2022**

It was noted that a response to this matter was circulated to councillors as a Mayor and Councillors briefing note.

Councillor Andrew Fechner requested that the response to this matter and any future Questions on Notice be provided as an Attachment to the minutes.

**PENALTY
INFRINGEMENT
NOTICES AND COURT
PROCEEDINGS**

Response to Question on Notice in relation to Penalty Infringement Notices and Court Proceedings provided at page 29.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

14.1

**COMMUNITY
ENGAGEMENT
REPORT ON THE
NAMING OF THE
BRIDGE ON
SINNATHAMBY
BOULEVARD,
SPRINGFIELD
CENTRAL AND THE
RENAMING OF
PISASALE DRIVE,
YAMANTO**

**VARIATION TO
MOTION**

RECOMMENDATION

- A. That the report be received and the contents noted.
- B. That Council note and consider the community sentiment and options for the potential renaming of these assets in line with Council's Naming Procedure.
- C. That having considered the community sentiment and suggested options, Council provide further direction to officers regarding the renaming of these assets.

Mayor Teresa Harding proposed a variation to Recommendation C:

- C. That having considered the community sentiment and suggested options, the Chief Executive Officer work with the relevant Indigenous groups to decide the new names for these assets in accordance with Council's Naming Procedure.

**MATTER TO LAY ON
THE TABLE**

Councillor Paul Tully proposed a procedural motion to Lay the Matter on the Table:

That the matter be laid on the table until the Council Ordinary meeting scheduled in June 2022.

Moved by Councillor Paul Tully:

That the matter be laid on the table until the Council Ordinary meeting in June 2022.

AFFIRMATIVE

Councillors:

Madsen

Ireland

Tully

Milligan

Jonic

NEGATIVE

Councillors:

Harding

Doyle

Fechner

Kunzelmann

The motion was put and carried.

Item 14.2 titled Nicholas Street Precinct – Clarification of Commercial Terms Associated with the Lease for Metro B Tenancy 2B03, was moved and dealt with prior to Item 12.2 titled Confirmation of Minutes of Special Meeting.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

15. RECEPTION AND CONSIDERATION OF COMMITTEE REPORTS

**15.1
GROWTH
INFRASTRUCTURE
AND WASTE
COMMITTEE**

Moved by Mayor Teresa Harding:
Seconded by Councillor Kate Kunzelmann:

**That the Growth Infrastructure and Waste Committee
Report No. 2022(04) of 5 May 2022 be noted.**

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**15.2
GOVERNANCE AND
TRANSPARENCY
COMMITTEE**

Moved by Deputy Mayor Jacob Madsen:
Seconded by Councillor Kate Kunzelmann:

**That Council adopt the recommendations of the
Governance and Transparency Committee No. 2022(04)
of 5 May 2022.**

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

This block motion adopts all items of the Governance and
Transparency Committee No. 2022(04) of 5 May 2022 as listed
below as resolutions of Council:

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

**GOVERNANCE AND
TRANSPARENCY
COMMITTEE – ITEM 1**

That the minutes of the Governance and Transparency Committee held on 7 April 2022 be confirmed.

CONFIRMATION OF
MINUTES OF THE
GOVERNANCE AND
TRANSPARENCY
COMMITTEE NO.
2022(03) OF 7 APRIL
2022

**GOVERNANCE AND
TRANSPARENCY
COMMITTEE – ITEM 2**

That the report be received and the contents noted

QUARTER 3 -
OPERATIONAL PLAN
2021-2022
QUARTERLY
PERFORMANCE

**GOVERNANCE AND
TRANSPARENCY
COMMITTEE – ITEM 3**

That Committee endorse the draft letter and quarterly performance reports (January – March 2022) set out in Attachments 2-7.

QUARTERLY REPORTS
TO THE DEPARTMENT
OF STATE
DEVELOPMENT,
INFRASTRUCTURE,
LOCAL GOVERNMENT
AND PLANNING

**GOVERNANCE AND
TRANSPARENCY
COMMITTEE – ITEM 4**

- A. That Council endorse the appointment of Gerard Pender as a Board member of Urban Utilities, effective from 1 July 2022, for a term of three years, expiring 30 June 2025.
- B. That the Chief Executive Officer be authorised to sign an Instrument of Appointment of Board Member of Urban Utilities and to do any other acts necessary to implement Council's decision in accordance with section 13(3) of the *Local Government Act 2009*.

APPOINTMENT OF
URBAN UTILITIES
BOARD MEMBER

**GOVERNANCE AND
TRANSPARENCY
COMMITTEE – ITEM 5**

- A. That pursuant to Section 234 of the *Local Government Regulation 2012* (Regulation), Council utilise LGA Arrangement NPN04.13 for the supply of Trucks (Cab Chassis) by Local Buy Pty Ltd, for the provision of the supply and delivery of six (6) side loading waste

PROCUREMENT:
18397 SUPPLY &

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

DELIVERY OF SIX (6)
WASTE COLLECTION /
COMPACTION TRUCKS

collection and compaction trucks (Council file reference number 18397), with Volvo Group Australia Pty Ltd (T/A Volvo Commercial Vehicles) (Supplier) who is a party to the LGA Arrangement.

- B. That under the LGA Arrangement with the Supplier, the approximate purchase price is \$2,869,220.00 excluding GST over the entire term, the end date of the initial term being 30 September 2023, with no current options for extension.
- C. That Council may enter into ancillary contractual arrangements with the Supplier, as allowed for by the LGA Arrangement.
- D. That pursuant to Section 257(1)(b) of the *Local Government Act 2009*, Council resolve to delegate to the Chief Executive Officer the power to take “contractual action” pursuant to section 238 of the Regulation, in order to implement Council’s decision.

15.3
COMMUNITY,
CULTURE, ARTS AND
SPORT COMMITTEE

Moved by Councillor Andrew Fechner:

Seconded by Councillor Kate Kunzelmann:

That Council adopt the recommendations of the Community, Culture, Arts and Sport Committee No. 2022(04) of 5 May 2022 with the exception of Item 4.

AFFIRMATIVE

NEGATIVE

Councillors:

Councillors:

Harding

Nil

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

The motion was put and carried.

This block motion adopts all items, with the exception of Item 4, of the Community, Culture, Arts and Sport Committee No. 2022(04) of 5 May 2022 as listed below as resolutions of Council:

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

**COMMUNITY,
CULTURE, ARTS AND
SPORT COMMITTEE –
ITEM 1**

That the minutes of the Community, Culture, Arts and Sport Committee held on 7 April 2022 be confirmed.

CONFIRMATION OF
MINUTES OF THE
COMMUNITY,
CULTURE, ARTS AND
SPORT COMMITTEE
NO. 2022(03) OF 7
APRIL 2022

**COMMUNITY,
CULTURE, ARTS AND
SPORT COMMITTEE –
ITEM 2**

That the Indigenous Accord 2020 – 2025 Milestone Report - April 2022 be received and the contents noted.

INDIGENOUS ACCORD
2020 - 2025
MILESTONE REPORT -
APRIL 2022

**COMMUNITY,
CULTURE, ARTS AND
SPORT COMMITTEE –
ITEM 3**

That the quarterly report concerning Council's Customer Experience Strategy and Immediate Action Plan be received and the contents noted.

CUSTOMER
EXPERIENCE
STRATEGY AND
IMMEDIATE ACTION
PLAN REPORT -
MARCH 2022

**COMMUNITY
CULTURE, ARTS AND
SPORT COMMITTEE -
ITEM 4 –**

Moved by Councillor Andrew Fechner:
Seconded by Councillor Kate Kunzelmann:

That the report be received and the contents noted.

GEORGIE CONWAY
LEICHHARDT
COMMUNITY SWIM
CENTRE
STAKEHOLDER

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

ENGAGEMENT
REPORT

**ADDITIONAL
RECOMMENDATION**

Councillor Andrew Fechner proposed an additional recommendation:

- B. That any Councillor who wishes to be briefed on the construction of the new pool at the Georgie Conway Leichhardt Community Swim Centre be briefed no later than Friday 27 May 2022.

The seconder of the original motion agreed with the additional recommendation.

Moved by Councillor Andrew Fechner:

Seconded by Councillor Kate Kunzelmann:

A. That the report be received and the contents noted.

B. That any Councillor who wishes to be briefed on the construction of the new pool at the Georgie Conway Leichhardt Community Swim Centre be briefed no later than Friday, 27 May 2022.

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**MATTER TAKEN ON
NOTICE - GEORGIE
CONWAY
LEICHHARDT
COMMUNITY SWIM
CENTRE – MATERIAL
CHANGE OF USE FOR
NEW POOL**

Councillor Andrew Fechner queried if a new Material Change of Use had been lodged for the new pool at the Georgie Conway Leichhardt Community Swim Centre.

That the General Manager Planning and Regulatory Services provide a briefing note to councillors on the status of the construction of the new heated pool at the Georgie Conway Leichhardt Community Swim Centre.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

**15.4
ECONOMIC AND
INDUSTRY
DEVELOPMENT
COMMITTEE**

Moved by Councillor Nicole Jonic:
Seconded by Councillor Sheila Ireland:

**That Council adopt the recommendations of the
Economic and Industry Development Committee
No. 2022(04) of 5 May 2022.**

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

This block motion adopts all items of the Economic and Industry Development Committee No. 2022(04) of 5 May 2022 as listed below as resolutions of Council:

**ECONOMIC AND
INDUSTRY
DEVELOPMENT
COMMITTEE – ITEM 1**

**That the minutes of the Economic and Industry
Development Committee held on 7 April 2022 be
confirmed.**

CONFIRMATION OF
MINUTES OF THE
ECONOMIC AND
INDUSTRY
DEVELOPMENT
COMMITTEE NO.
2022(03) OF 7 APRIL
2022

**ECONOMIC AND
INDUSTRY
DEVELOPMENT
COMMITTEE – ITEM 2**

**That Willowbank Raceway receive \$35,000 excl. GST
financial support for the Gulf Western Oil
Winternationals 2022.**

EVENT SPONSORSHIP
- 2022 GULF
WESTERN OIL
WINTERNATIONALS

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

**ECONOMIC AND
INDUSTRY
DEVELOPMENT
COMMITTEE – ITEM 3**

EVENT SPONSORSHIP
- CMC ROCKS 2022

That Council enter into a new four year event agreement with CMC Rocks Pty Ltd with a base payment of \$100,000 (ex GST) each event and a performance payment based on growth of interstate and/or overseas visitors to a total cumulative financial commitment of no more than \$630,000 (ex GST) over four (4) financial years.

**ECONOMIC AND
INDUSTRY
DEVELOPMENT
COMMITTEE – ITEM 4**

QUEENSLAND SMALL
BUSINESS MONTH -
ACTIVITY UPDATE

That the report be received and the contents noted.

**15.5
ENVIRONMENT AND
SUSTAINABILITY
COMMITTEE**

Moved by Councillor Russell Milligan:
Seconded by Councillor Andrew Fechner:

**That Council adopt the recommendations of the
Environment and Sustainability Committee
No. 2022(04) of 5 May 2022.**

AFFIRMATIVE

Councillors:
Harding
Madsen
Ireland
Tully
Doyle
Fechner
Kunzelmann
Milligan
Jonic

NEGATIVE

Councillors:
Nil

The motion was put and carried.

This block motion adopts all items of the Environment and Sustainability Committee No. 2022(04) of 5 May 2022 as listed below as resolutions of Council:

**ENVIRONMENT AND
SUSTAINABILITY
COMMITTEE – ITEM 1**

CONFIRMATION OF
MINUTES OF THE
ENVIRONMENT AND
SUSTAINABILITY

**That the minutes of the Environment and Sustainability
Committee held on 7 April 2022 be confirmed.**

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

COMMITTEE NO.
2022(03) OF 7 APRIL
2022

**ENVIRONMENT AND
SUSTAINABILITY
COMMITTEE – ITEM 2**

That the report be received and the contents noted.

RECOGNISING
EMERGENCY
SERVICES
VOLUNTEERS DURING
NATIONAL
VOLUNTEER WEEK
2022

At 10.14 am Councillor Andrew Fechner left the meeting room and Deputy Mayor Jacob Madsen left the teams meeting via audio link due to a previously declared interest in Item 15.6.

**15.6
IPSWICH CENTRAL
REDEVELOPMENT
COMMITTEE**

Moved by Councillor Marnie Doyle:
Seconded by Councillor Russell Milligan:

That Council adopt the recommendations of the Ipswich Central Redevelopment Committee Report No. 2022(04) of 5 May 2022.

AFFIRMATIVE

Councillors:
Harding
Ireland
Tully
Doyle
Kunzelmann
Milligan
Jonic

NEGATIVE

Councillors:
Nil

All Councillors except Deputy Mayor Jacob Madsen and Councillor Andrew Fechner were present when the vote was taken.

The motion was put and carried.

This block motion adopts all items of the Ipswich Central Redevelopment Committee No. 2022(04) of 5 May 2022 as listed below as resolutions of Council:

**IPSWICH CENTRAL
REDEVELOPMENT
COMMITTEE – ITEM 1**

That the minutes of the Ipswich Central Redevelopment Committee held on 7 April 2022 be confirmed.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

CONFIRMATION OF
MINUTES OF THE
IPSWICH CENTRAL
REDEVELOPMENT
COMMITTEE NO.
2022(03) OF 7 APRIL
2022

**IPSWICH CENTRAL
REDEVELOPMENT
COMMITTEE – ITEM 2**

**That the April 2022 Retail Sub-Project Steering
Committee Report be received and the contents noted.**

NICHOLAS STREET
PRECINCT - RETAIL
SUB-PROJECT
STEERING
COMMITTEE APRIL
2022

**IPSWICH CENTRAL
REDEVELOPMENT
COMMITTEE – ITEM 3**

**That the Nicholas Street Precinct Communications,
Engagement and Events Monthly Report be received and
the contents noted.**

NICHOLAS STREET
PRECINCT -
COMMUNICATIONS,
ENGAGEMENT AND
EVENTS REPORT
APRIL 2022

Item 4 of the Ipswich Central Redevelopment Committee of 5 May 2022 was resolved at the Special Council Meeting held on 5 May 2022.

**IPSWICH CENTRAL
REDEVELOPMENT
COMMITTEE – ITEM 4**

NICHOLAS STREET
PRECINCT -
APPROVAL OF AN
AGREEMENT FOR
LEASE FOR METRO B
TENANCY 2B03

- A. That Council enter into an Agreement for Lease and an associated document of the Agreement for Lease with the proposed lessee for Tenancy 2B03 in the Metro B Building (impacting part of Lot 1 on RP157021) ("Tenancy 2B03") within the Nicholas Street Precinct (under the commercial terms detailed in the confidential report and attachments by the Project Manager dated 26 April 2022).**
- B. That conditional upon Council satisfactorily executing the Agreement to Lease with the proposed lessee, (contained in recommendation A of this report), Council enter into a lease for Tenancy 2B03 with the proposed**

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

lessee (as detailed in the confidential report and attachments by the Project Manager dated 26 April 2022).

- C. That Council note, that in relation to Council's disposal of its leasehold interest in Tenancy 2B03 to the proposed lessee, that the Ministerial exemption under s236 (f) of the *Local Government Regulation 2012* applies to the disposal of Council's interest in Tenancy 2B03 (Ministerial exemption contained in Attachment 1 of this report).
- D. That pursuant to Section 257(1)(b) of the *Local Government Act 2009*, Council resolve to delegate to the Chief Executive Officer the power to take "contractual action" pursuant to section 238 of the Regulation, in order to implement Council's decision at Recommendation B.
- E. That Council be kept informed as to the progress and outcome of the execution and publication of details.

At 10.16 am Councillor Andrew Fechner returned to the meeting room and Deputy Mayor Jacob Madsen returned to the meeting via audio link.

16. OFFICERS' REPORTS

**16.1
CEO
ORGANISATIONAL
PERFORMANCE
REPORT FOR APRIL
2022**

Moved by Mayor Teresa Harding:
Seconded by Councillor Marnie Doyle:

That the Chief Executive Officer Organisational Performance Report for April 2022 be received and the contents noted.

AFFIRMATIVE	NEGATIVE
Councillors:	Councillors:
Harding	Madsen (abstain)
Ireland	
Tully	
Doyle	
Fechner	
Kunzelmann	
Milligan	
Jonic	

The motion was put and carried.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

**MATTERS TAKEN ON
NOTICE –**

**REPAIR OF COUNCIL'S
SPORTING CLUB
ASSETS**

**COUNCILLOR LOCAL
OFFICE SPACES**

Councillor Nicole Jonic queried two matters in relation to the CEO Organisational Performance Report:

- A. That a briefing be provided to Councillors on the program of actions to repair Council's Sporting Club assets damaged by the 2022 flooding and rain events (including advice on insurance of these assets in future).**
- B. That further information be provided on the action to provide Councillors with local office space.**

**16.2
MONTHLY FINANCIAL
PERFORMANCE
REPORT - APRIL 2022**

Moved by Mayor Teresa Harding:
Seconded by Councillor Marnie Doyle:

That the report on Council's financial performance for the period ending 30 April 2022, submitted in accordance with section 204 of the *Local Government Regulation 2012*, be considered and noted by Council.

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**MATTER TAKEN ON
NOTICE –**

**FINANCIAL MODEL BY
QTC RELEVANT TO
NICHOLAS STREET
PRECINCT**

Councillor Nicole Jonic queried the financial model due to be delivered by the Queensland Treasury Corporation (QTC):

That information be provided to Councillors on the financial model due to be delivered to Council by the Queensland Treasury Corporation (QTC) relevant to decision making on the Nicholas Street Precinct together with a timeline on a briefing session for Councillors.

ADJOURN MEETING

Moved by Mayor Teresa Harding:

That the meeting be adjourned at 10.38 am to reconvene at 11.08 am.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

The meeting reconvened at 11.08 am.

17. NOTICES OF MOTION

**17.1
NOTICE OF MOTION -
RIPLEY VALLEY
LIBRARY**

Moved by Deputy Mayor Jacob Madsen:

Seconded by Councillor Sheila Ireland:

- A. That Ipswich City Council commence planning for delivery of Library Services to the proposed Ripley Valley Library Catchment.**
- B. That council consider what options are available over the next few years to provide Library Services in the interim.**
- C. That a report be presented concerning the progress on A) and B) to a future Community, Culture, Arts and Sport (CCAS) Committee meeting.**

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

**17.2
NOTICE OF MOTION -
REDBANK PLAINS
LIBRARY**

Moved by Deputy Mayor Jacob Madsen:
Seconded by Councillor Sheila Ireland:

That a design be prepared and costed for conversion of the former Mobile Library Garage at Redbank Plains Library with said design to focus on delivery of:

- a. Community Meeting space with after-hours access**
- b. External landscaping to allow appropriate pathways to after-hours access and use by community on special occasions.**

AFFIRMATIVE

NEGATIVE

Councillors:

Councillors:

Harding

Nil

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

The motion was put and carried.

**17.3
NOTICE OF MOTION -
CARMICHAELS ROAD**

Moved by Councillor Sheila Ireland:
Seconded by Councillor Russell Milligan:

That Council commence planning for the upgrade of Carmichaels Road.

**VARIATION TO
MOTION**

Councillor Paul Tully proposed a variation to the recommendation:

That Council commence preliminary planning for the upgrade of Carmichaels Road.

The mover and seconder of the original motion agreed to the variation.

Moved by Councillor Sheila Ireland:
Seconded by Councillor Russell Milligan:

That Council commence preliminary planning for the upgrade of Carmichaels Road.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

Tully

Doyle

Fechner

Kunzelmann

Milligan

Jonic

NEGATIVE

Councillors:

Nil

The motion was put and carried.

**17.4
NOTICE OF MOTION -
SPRAY SEAL ROAD
MAINTENANCE
TREATMENTS**

Moved by Councillor Marnie Doyle:

Seconded by Councillor Russell Milligan:

- A. That a report be prepared which includes information on:**
- 1. The various road surface treatment options, including spray seals, available to local governments, and the relative cost and benefits of these treatments.**
 - 2. How council prioritises road maintenance projects.**
 - 3. How council determines when a spray seal is identified as the preferred treatment for a particular road.**
 - 4. The number of spray seals undertaken on council roads in the last three financial years, the number of complaints received about these treatments, and the number of complaints that required remediation.**
 - 5. Whether council's use of spray seals is consistent with their use by comparable local governments.**
- B. That the report be presented to a future meeting of the Growth, Infrastructure and Waste Committee, no later than the August 2022 meeting of that committee.**

AFFIRMATIVE

Councillors:

Harding

Madsen

Ireland

NEGATIVE

Councillors:

Nil

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

Tully
Doyle
Fechner
Kunzelmann
Milligan
Jonic

The motion was put and carried.

**17.5
NOTICE OF MOTION -
COUNCIL TO
DEVELOP A
DOMESTIC VIOLENCE
STRATEGY**

Moved by Councillor Marnie Doyle:

Seconded by Councillor Kate Kunzelmann:

- A. That a report be prepared which includes information on:**
- 1. How council is taking action in the community and in the council workplace to tackle Domestic and Family Violence.**
 - 2. How council works in partnership with all levels of government to reduce Domestic and Family Violence.**
 - 3. Identify opportunities for council to increase the support and services provided to combat Domestic and Family violence.**
 - 4. Identify grants currently offered by council, that can be accessed by domestic violence shelters and domestic violence support organisations.**
 - 5. Advice on building a Domestic and Family Violence strategy within council, including resources required to complete this work and estimated timeline from development to adoption by council.**
 - 6. Consider developing a web page on council's internet site that outlines council's strategy to combat family and domestic violence and lists services and support available for victims, and relevant grants available for Domestic and Family violence support service providers.**
- B. That the report be presented to a future meeting of the Community, Culture, Arts and Sport Committee, no later than the September 2022 meeting.**

AFFIRMATIVE
Councillors:
Harding

NEGATIVE
Councillors:
Nil

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

Madsen
Ireland
Tully
Doyle
Fechner
Kunzelmann
Milligan
Jonic

The motion was put and carried.

18. QUESTIONS ON
NOTICE

Nil

MEETING CLOSED

The meeting closed at 11.47 am

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

Response to Question on Notice (2011 Flood Data) relating to Item 14 – Business Outstanding on page 10

Response to Question on Notice raised at the Council Ordinary Meeting on 24 March 2022:

The historic 2011 flood level at Goodna was 16.5 metres AHD, as identified in the Brisbane Strategic Floodplain Management Plan (SFMP) applicable to Brisbane and Ipswich and utilised by Ipswich City Council, whereas the Supreme Court of New South Wales in the 2011 Flood Class Action was persuaded to accept a height of 16.91 metres AHD as the appropriate level:

- **Was the 16.5 metre AHD level at Goodna in 2011 surveyed or otherwise confirmed by or on behalf of the Ipswich City Council?**

Survey information of estimated flood extents is available in the Goodna area following the Jan 2011 floods. These are published on Council's internal GIS platform, iKnow. Depending on location, the surveyed values appear to range from 16.5m+ AHD to 16.7m+ AHD. The 2011 survey was completed by Council's survey area across the entire city. The information was shared with adjacent councils and state entities.

- **What data exists to confirm its accuracy?**

Survey information as noted above, aerial photography captured after the peak has passed (e.g. Nearmap) are the common data sources.

- **Is there any data showing that the 16.91 metre AHD level is correct, or more likely to be correct?**

Unable to confirm whether this value is correct or more likely to be correct.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

Response to Question on Notice (Penalty Infringement Notices and Court Proceedings) relating to Item 14 – Business Outstanding on page 10



SUBJECT	Questions on notice response: <ul style="list-style-type: none"> • Penalty Infringement Notices and Prosecutions related to: <ul style="list-style-type: none"> ○ Littering and illegal dumping; and ○ Unlawful signage. • Response to service requests outside of business hours
Requested by	Councillor Tully
Date	03/05/2022
Responsible Area	Compliance Branch, Planning and Regulatory Services
Contact Officer	Haiden Taylor – 07 3810 7602
Service Request #	N/A

The information contained in this briefing is: (Must check one option)

- ☐ Confidential
☒ Not Confidential
 Not Confidential, Caution should be exercised due to nature of topic
 Official Position of Council (Public Information)

PURPOSE

The purpose of this briefing note is to provide a response to the Question on Notice to the Chief Executive Officer at the Ipswich City Council meeting on 21 April 2022:

How many Penalty Infringement Notices (PINs) have been issued and how many court prosecutions have commenced from 1 July 2021 to 30 March 2022 in respect of:

- a) littering and illegal dumping; and*
b) unlawful signage.

This briefing note also includes information in relation to the response to service requests outside of business hours that was discussed at the Budget Workshop dated 8 April 2022.

RECOMMENDATION

That this Briefing Note be noted

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

<div>Endorsed</div> <div></div> <div>Peter Tabulo General Manager (PRS) Date: 6/05/2022</div>	<div>Endorsed</div> <div></div> <div>Sonia Cooper Chief Executive Officer Date: 11/05/2022</div>
Comments	Comments

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

ENFORCEMENT ACTION – ILLEGAL DUMPING AND UNLAWFUL SIGNAGEBackground

The Compliance Branch undertakes investigation and enforcement activities in relation to the breaches of State Legislation and Council's Local Laws. It is important to note that Penalty Infringement Notices (PINs) and prosecutions are two of a range of possible outcomes.

Littering and Illegal Dumping

During the period on 1 July 2021 – 31 March 2022 the Littering and Illegal Dumping team actioned 1,212 littering and illegal dumping related customer complaints. In addition to this, hot spots were proactively monitored to detect offences and deter offending.

Penalty infringement notices issued:

No.	Legislation	Value
22	<i>Waste Reduction and Recycling Act 2011</i>	\$30,267

Magistrate Court Prosecutions:

No.	Legislation	Value
2	<i>Waste Reduction and Recycling Act 2011</i>	\$4,105* <i>One matter still progressing through the Courts.</i>

In addition to the above infringements and prosecutions, the Compliance Officers were able to compel offenders to remove their dumped waste through compliance notices (clean-up notices). There were instances where a single infringement was issued, although the offender was compelled to clean up waste that was dumped in separate instances over a period.

Moving forward, the Compliance Branch was successful in obtaining additional funding from the Department of Environment and Science (DES) to employ two more Littering and Illegal Dumping Compliance Officers for a 12-month period. This brings the number of officers dedicated to littering and illegal dumping from two to four.

To maximise the reporting capability of the littering and illegal dumping program, a review of internal processes relevant to data capture and reporting was undertaken. The result of the review was to transition away from a manual process to an automated process. This will enable detailed reporting of the program's activities after June 2022.

Unlawful Signage

During the period on 1 July 2021 – 31 March 2022 the Local laws and Parking team has actioned 127 Unlawful Signage related customer complaints.

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

There have been no penalties or prosecutions in relation to unlawful signage issued for the period. However, this can be a consequence of processes, for example, a compliance notice may have been issued in relation to an unlawful sign. Any infringements associated with a failure to comply, would relate to failure to comply with a Compliance Notice, as opposed to specifically an unlawful signage provision.

The owner of a sign may also be contacted, if a sign has been placed or erected in a manner that is inconsistent with Council guidelines (election signage for example) and asked to remove the sign within a specified timeframe. Instances where the owner cannot be identified, or signs are in situ after the specified timeframe has expired, results in the sign being removed.

Signs that advertise services e.g., "Firewood 04xx xxx xxx" are, in most cases, removed by Compliance Officers as part of actioning the service request. In most of these cases, the owner of the sign is uncooperative, and/or not able to be formally identified.

Key Issues

- Penalty Infringement Notices and Magistrate Court prosecutions form part of the overall strategies employed by officers to resolve breaches of State Legislation and Council's Local Laws.
- For the period 1 July 2021 – 31 March 2022:
 - Officers issued 22 infringements for Illegal Dumping related offences.
 - Council initiated 2 Magistrate Court prosecutions – 1 of which is still before the Courts.
 - No infringements were issued in relation to Unlawful Signage.
- Further DES funding has been provided to Council for additional Littering and Illegal Dumping Officers.
- Improved processes will enable the program to better report on its activities after June 2022.

RESPONSE TO SERVICE REQUESTS OUTSIDE OF BUSINESS HOURS

Background

The Compliance Branch, due to the nature of its work, responds to service requests outside of business hours and in effect is available 24 hours a day, 7 days a week. The response, outside of business hours, resourced by:

- 1x Compliance Officer (Animal Management) who is on-call to respond to public safety issues that involve domestic animals (dog attacks etc.).
- 1x Compliance Officer (Local Laws and Parking) who is on-call to respond to public safety incidents, issues that negatively impact a person's health (smoke nuisance, illegally dumped hazardous materials etc.) and on-going/persistent/emergent nuisance complaints (use of regulated devices outside of hours, unlawful camping etc.).
- 4x Compliance Rangers whose ordinary hours include working on either a Saturday or Sunday (on a rotating basis – 1x officer on any given Saturday or Sunday). These Rangers also work on a roster that enables the Compliance Branch to respond to incidents, without having to call an

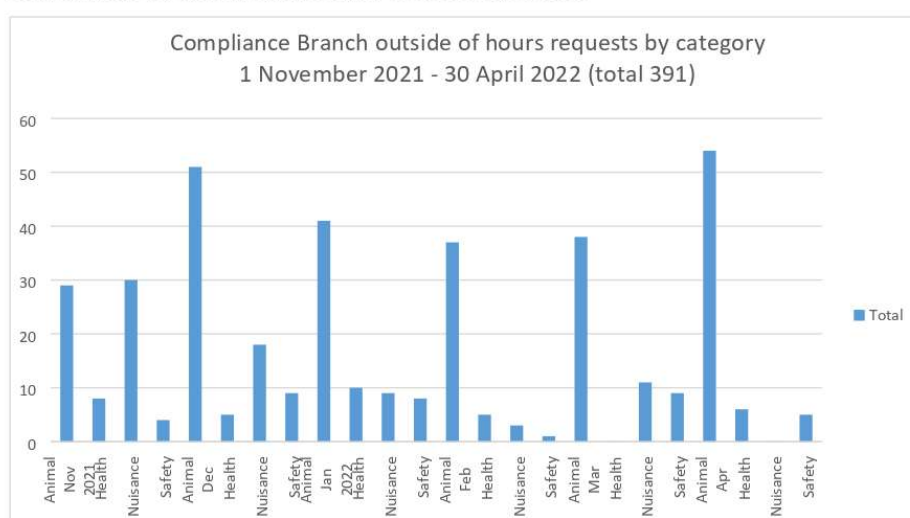
MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

on-call officer in from their home, over a broader span of hours. Specifically, the Rangers are available from 6am – 8pm Monday to Friday as part of their normal shift pattern.

The utilisation of the outside of hours response fluctuates, with issues involving domestic animals generally being the highest volume of request types.

The graph below which shows requests that were assigned to an officer for response outside of business hours for the period 1 November 2021 to 30 April 2022.



Over the same period, the following service request types were received within each category:

Service Request Summary	Category
Dog attacks reported to Council or that occurred outside of hours. Dogs that are currently roaming and are acting aggressively. Dogs that are currently roaming. Dog fencing issues that are likely to result in a dog roaming. Livestock that is currently roaming.	Animals
Smoke causing a concern to the health/comfort of adjoining residents. Illegally dumped asbestos.	Health
Noise from regulated devices. Odour nuisances from commercial business or premises. Lights impacting a resident's sleep/comfort. Illegal dumping of waste.	Nuisance

MINUTES OF COUNCIL ORDINARY MEETING

19 MAY 2022

Damage/risk of damage to protected trees. Unlawful camping in public parks/reserves. Trail bikes being used unlawfully in Council parks and reserves.	
Illegally Parked Vehicles or Trucks (blocking access or causing traffic safety issues)	Safety

Note: There were no service requests for the period in relation to illegal signage.

As evidenced in the above chart and table, the out of hours response is not available to all service request types, it is a limited service that is targeted towards community safety, health, and the management of nuisances where an immediate response is required to resolve the issue (e.g., where the matter cannot be deferred to the next business day).

The out of hours response operates within these constraints to ensure compliance with the relevant Certified Agreement and the Fatigue Management Procedure. These documents provide a number of provisions for staff who work outside Council's core hours, with the most notable being the requirement for 10 hours of continuous break between shifts. This requirement, for a continuous break between shifts, can result in officers who responded to a service request outside of hours being unavailable during Council's core hours, where the majority of service requests are resolved.

Key Issues

- The Compliance Branch responds to service requests outside of business hours and in effect is available 24 hours a day, 7 days a week.
- The service requests being responded to are limited to requests related to public safety, issues that have a negative effect on health, and requests that cannot be deferred to the next business day.
- During core hours, Compliance Officers and Rangers respond to and resolve 94% of the service requests received by the Compliance Branch.
- Responding to incidents outside of business hours can reduce capacity and response capability during business hours, due to mandatory break requirements.
- Adjustments to the outside of hours service need to be carefully considered, to ensure compliance with the Certified Agreement and to ensure service delivery standards in business hours is maintained.

Financial Impacts

The outside of hours service is currently funded through the Compliance Branch Labour Budget. The fixed costs in relation to the service are:

- Standby nightly allowance, currently \$42.03 per night — there are currently two compliance officers per night.
- Vehicle related costs for the use of a Council vehicle to and from the officer's home — one vehicle for each of the two compliance officers on standby for outside of hours work.

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19 MAY 2022

- Overtime rates from the officer's home to the outside of hours incident location and back (paid door to door).
- Overtime rates for work completed from home, if a physical response to an incident is not required. A minimum of 30 minutes is payable in these instances.
- Compliance Ranger hourly loadings:
 - Ordinary hours worked on a Saturday will attract a 50% loading.
 - Ordinary hours worked on a Sunday will attract a 100% loading.
 - Ordinary hours worked after 6:00pm Monday to Friday will attract a 25% loading.

COUNCIL
MEETING AGENDA

19 MAY
2022

Doc ID No: A8052432

ITEM: 13.1

TITLE: MAYORAL MINUTE - QUEENSLAND HEALTH INTERVENTION INTO CURRENT
WASTE ODOUR EVENT IN IPSWICH

AUTHOR: MAYOR TERESA HARDING

RECOMMENDATION

- A. That Council endorse Mayor Teresa Harding to write a letter to the Hon. Yvette D'Ath, Minister for Health and Ambulance Services, to request a panel of inquiry into the current waste odour event in Ipswich.
- B. That Council endorse the Chief Executive Officer to write a letter to the Acting Director-General of Queensland Health, Mr Shaun Drummond, to request the current waste odour event in Ipswich be registered as an Environmental Health Event.

SUMMARY

This is a Mayoral Minute seeking Queensland Health's intervention in managing the current health and environmental catastrophe being caused by the actions of private waste operators in Ipswich.

On 10 April 2022 our community held a "Stop the Stink" public meeting at the Riverview and District Community Centre in response to significant odour issues impacting the suburbs surrounding the Cleanaway site in New Chum.

State Minister for Environment, the Hon. Meaghan Scanlon, attended the event and has committed to an independent review into nuisance provisions. However, this does little to address the pressing concerns of the local community in regard to the negative health impacts of the odours and landfill sites.

Immediate intervention is required from the Queensland Government to acknowledge this issue as an Environmental Health Event and to seek its consideration in establishing a panel of enquiry to address the long-term health and environmental impacts of this event. The *Public Health Act 2005* defines an Environmental Health Event as:

Section 47 Meaning of *environmental health event*

- (1) An environmental health event is an event involving human exposure to a substance or other thing that is known to have, or is reasonably suspected of having, an adverse effect on human health.
- (2) Exposure may happen in connection with—
 - (a) a single identifiable event; or
Example of a single identifiable event— an outbreak in a hospital of a new strain of a previously controlled bacterial infection
 - (b) a situation that happens over a period of time.
Example of a situation that happens over a period of time— the exposure to industrial fumes, over a period of years, of persons in a populated area.

Section 48 Environmental health event register

- (1) The chief executive may establish and keep a register (an environmental health event register) for an environmental health event if the chief executive considers the event has or may have significant direct or indirect adverse effects on human health.
- (2) The chief executive may keep the register in a form the chief executive considers appropriate, including an electronic form.
- (3) Before establishing the register, the chief executive must obtain and consider the views of a human research ethics committee about the register.

Under Section 294 of the *Act*, the Minister has the power to establish a panel of inquiry to investigate a serious public health matter.

Section 294 Minister may establish or re-establish panels of inquiry

- (1) The Minister may, by gazette notice, establish a panel of inquiry to inquire into a matter the Minister considers to be a serious public health matter.
- (2) The notice, or a later gazette notice, may state matters relevant to the inquiry including, for example—
 - (a) the membership of the panel; and
 - (b) if the panel consists of more than 1 member, the chairperson of the panel; and
 - (c) the panel's terms of reference.
- (3) The Minister may take action under this section for a serious public health matter whether or not a panel of inquiry has previously inquired into the matter.

Item 16.2 / Attachment 2.

COUNCIL
MEETING AGENDA

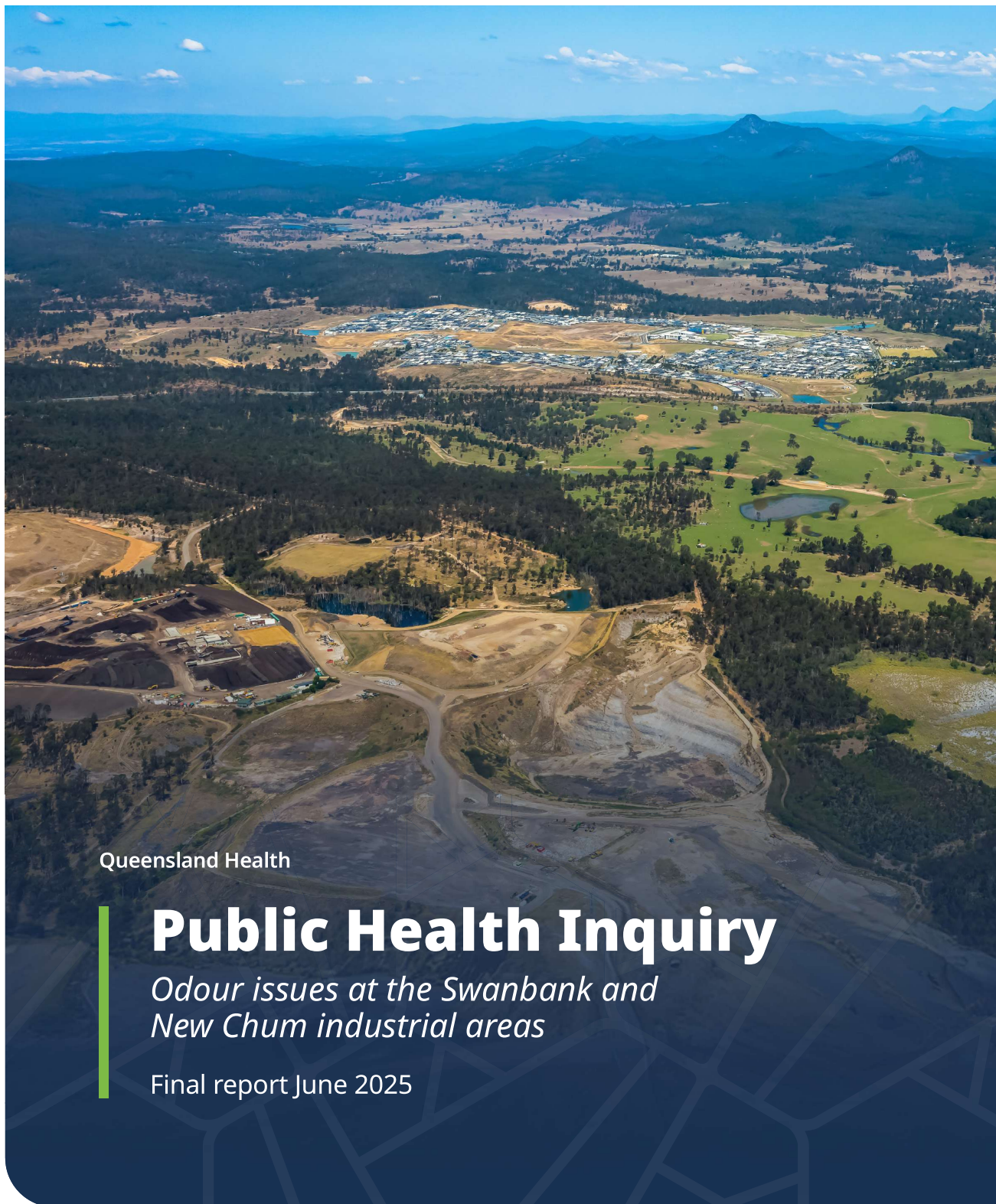
19 MAY
2022

Residents impacted by odours from private waste operators report a range of negative health impacts including headaches, sore eyes and throats, nausea and vomiting, chest pains and respiratory irritation.

Understandably, residents are concerned about the long-term health impacts of breathing in these odours over an extended period. These odours are also having a significant and detrimental impact on their mental health and quality of life.

Impacted residents cannot go outside their homes, keep doors and windows closed, cannot dry washing outside as it gets contaminated by the smell, and have reported pet birds dying as a result of the stench.

Under the aforementioned sections of the *Public Health Act 2005*, this Mayoral Minute recommends that Ipswich City Council makes representations to Queensland Health seeking its immediate intervention in the serious health matter.



Queensland Health

Public Health Inquiry

*Odour issues at the Swanbank and
New Chum industrial areas*

Final report June 2025



Queensland
Government

Public Health Inquiry

Odour issues at the Swanbank and New Chum industrial areas

Final report June 2025

Published by the State of Queensland
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June 2025

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Acknowledgements

The Department of Health respectfully acknowledges the Traditional and Cultural Custodians of the lands, waters and seas across Queensland and pays our respects to Elders past and present. We value the culture, traditions and contributions First Nations people have made to our communities and recognise our collective responsibility as government, communities and individuals to ensure equitable recognition and advancement of First Nations people in Queensland.



Queensland Health

The Honourable Tim Nicholls MP
Minister for Health and Ambulance Services

Dear Minister

I am pleased to provide you with the final report from the Public Health Inquiry into odour issues at the Swanbank and New Chum industrial areas, in accordance with the Inquiry's Terms of Reference.

Yours sincerely

Dr John Gerrard
Chair

Public Health Inquiry – Swanbank and New Chum industrial areas

30 June 2025

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Foreword

The Swanbank and New Chum industrial areas have long played a vital role in Queensland's economic and environmental landscape. From mining and power generation to waste management, resource recovery, and other industrial activity, the areas have been critical to the state's growth. Yet, as Ipswich and its surrounding communities have expanded rapidly, the intersection of industry and residential life has created a complex and pressing public health challenge.

This Public Health Inquiry (**the Inquiry**), Queensland's first of its kind, was commissioned in response to deep and sustained community concern about odour impacts from these industrial precincts. Over the course of the Inquiry, the panel of inquiry (**the Panel**) heard directly from residents, community groups, local government, regulators, industry and health professionals. Their collective voices and experiences have shaped this report and its recommendations.

The Inquiry's findings are clear: odour from the Swanbank and New Chum industrial areas is having a tangible and negative affect on the health and wellbeing of many Ipswich residents. Residents have described a daily reality of living with persistent, often offensive odours— affecting their physical health, mental wellbeing and quality of life. Many report symptoms such as headaches, respiratory irritation, sleep disturbance, and stress, as well as broader consequences including reduced outdoor activity, reluctance to welcome visitors and concerns about community reputation.

This report does not seek to assign blame, but rather to chart a constructive path forward. It highlights the unique confluence of factors at Swanbank and New Chum: the scale and diversity of odour-producing activities, the proximity to rapidly growing residential areas, and the legacy of planning and regulatory frameworks not designed for today's urban realities. It also acknowledges the efforts of many operators and agencies to mitigate odour impacts, and the recent legislative and regulatory reforms that provide new tools for improvement. The efforts of the Department of the Environment, Tourism, Science and Innovation (**DETSI**) are worthy of particular recognition.

The Inquiry's recommendations call for sustained, collaborative action—across government, industry and the community—to enhance odour management, strengthen regulatory oversight, increase transparency and ensure public health remains at the centre of decision-making. Addressing these issues will require ongoing vigilance, innovation, and a willingness to adapt as the city continues to grow.

I would like to thank DETSI, Ipswich City Council, West Moreton Hospital and Health Service, local medical professionals, schools, early childcare providers, epidemiologists, industry bodies and business operators for their valuable contribution. I would also like to thank the team who have supported me throughout the Inquiry—fellow panel member Dr Lyn Denison, Robert Samut from legal firm Barry Nilsson, Professor Rachel Thomson from University of

Queensland and Susan Greenbank, Scott Brown, Matthew Brown, Noore Alam and other staff from the Department of Health.

Ipswich is a city with a proud heritage and a resilient, engaged community. The courage and candour of residents who shared their experiences have been instrumental in shaping the Inquiry. It is my hope this report not only validates their concerns, but also serves as a catalyst for meaningful change—ensuring the health and wellbeing of all Queenslanders are safeguarded as we navigate the challenges of sustainable urban and industrial development.



Dr John Gerrard

Chair

Public Health Inquiry—Swanbank and New Chum industrial areas

Executive summary

Background

On 9 January 2025, The Honourable Tim Nicholls MP, Minister for Health and Ambulance Services commissioned a Public Health Inquiry (**the Inquiry**) into odour issues at Swanbank and New Chum industrial areas (**the industrial areas**).

The Inquiry was conducted in accordance with Chapter 7 of the *Public Health Act 2005* by a 'panel of inquiry' (**the Panel**), chaired by specialist physician and Queensland's former Chief Health Officer, Dr John Gerrard. Dr Gerrard was joined on the Panel by Dr Lyn Denison, an expert in air quality and human health.

The Inquiry's scope was to investigate the health effects of odour from the industrial areas and to recommend actions to mitigate the impacts.

Methodology

The Inquiry gathered evidence through personal interviews, a randomised survey of local residents, written submissions, epidemiological analysis, site visits and a review of the published medical literature. Stakeholder engagement and information gathering, community consultation and health outcome data analysis were key phases of the Inquiry.

Summary of findings

The Inquiry concluded the odour from the industrial areas is highly offensive and affecting the health and wellbeing of thousands of Ipswich residents. Planned residential growth near the industrial areas will further exacerbate the problem in the coming years.

The most common symptoms attributed to the odour are respiratory, ear-nose-throat, neurological, gastrointestinal, skin and mental health. These symptoms were generally not mild or transient. The symptoms reported by the community are credible and are consistent in their detail and with the published medical literature.

The Inquiry also found:

- Odorous chemicals in the air do not need to be at toxic levels to impact human health.
- There is no evidence of an increased risk of cancer in the exposed population.
- Composting generates offensive odour. Enclosed composting systems substantially reduce odour, if operated and maintained correctly. However, enclosed composting systems may not eliminate all odour.
- There are other potential sources of offensive odours in the industrial areas such as landfill, fertiliser production sites, recycling/resource recovery sites and asphalt plants.
- The approach to air quality monitoring undertaken by the community may not adequately reflect the range of pollutants they might be exposed to.

- The existing legislative framework may not support effective assessment and management of odour.
- The existing legislative instruments may not enable rapid enforcement to mitigate odour.
- The Inquiry could not determine whether current odour management practices meet best industry practice.

Summary of recommendations

The Inquiry was tasked with recommending actions that may mitigate any health-related impacts on local communities. It was not within the remit of the Inquiry to consider any regulatory or compliance matters except to the extent they provide context for any health impacts experienced by the community.

The recommendations contained in this report provide a pathway to addressing the odour issues over time to mitigate the health impact. As a priority, the recommendations seek to address the most highly offensive odours from composting. Other potential odour sources should be addressed over the medium- and long-term. Improvements to air quality monitoring and suggested improvements to legislative instruments to better manage odour issues are also identified.

The Inquiry recommends the Queensland Government:

1. Provide immediate relief from the most offensive odours by working with composters to cease the acceptance of highly odorous waste sooner than the established timeframe of September 2026.
2. Take action to provide long-term relief from highly offensive odour from composting. There are two options to achieve this:
 - 2.1. Supporting industry to find a new location to compost.
 - 2.2. Supporting industry to ensure construction of permanent enclosed facilities within the timelines ordered by the Queensland Courts or negotiated with DETSI.
3. Apply the first and second recommendations to the other commercial composting site operating in Ipswich.
4. Audit all remaining odour-producing companies in the industrial areas and develop an overarching odour management plan for the entire area.
5. Consider undertaking an expanded air monitoring program including canister monitoring of volatile organic compounds and bioaerosols in the industrial areas and surrounding communities.
6. Prohibit future residential developments from encroaching within buffer distances for the industrial areas.
7. Leverage existing laws and consider legislative improvements to better manage odour.

The Inquiry also recommends the Queensland Government establish an inter-departmental Steering Committee to implement the Inquiry's recommendations, with opportunities for input from local government, the Ipswich community and industry.

1 Terms of Reference

1.1 Purpose

On 9 January 2025, The Honourable Tim Nicholls MP, Minister for Health and Ambulance Services commissioned a Public Health Inquiry (**the Inquiry**) into odour issues at Swanbank and New Chum industrial areas (**the industrial areas**).

The Inquiry's Terms of Reference (**ToR**) can be found at Appendix A.

Notification of the establishment of the panel of inquiry was published in the Queensland Government Gazette on 21 February 2025, as per Appendix B.

The purpose of the Inquiry is to report on the circumstances and possible causes of odour-related health concerns of the community living in the vicinity of the industrial areas since 2016 and recommend actions to mitigate the impacts.

In accordance with the ToR, every attempt has been made to:

- Describe industrial activities occurring over time in the industrial areas and summarise available data on odour and air quality in surrounding communities.
- Determine whether the odour issues from the industrial areas contributed to an increase in health impacts.
- Document measures taken by regulatory agencies to address odour-related complaints and health concerns.
- Identify measures taken to address odour related complaints and health concerns of the community in the vicinity of the industrial areas.
- Draw on relevant domestic and internal policy experiences, standards and best practices, where appropriate in the conduct of the Inquiry.

The Inquiry was conducted in accordance with Chapter 7 of the *Public Health Act 2005* (**Public Health Act**) by a 'panel of inquiry' (**the Panel**), chaired by specialist physician and Queensland's former Chief Health Officer, Dr John Gerrard (**the Chair**). A record of proceedings of the Inquiry was maintained.

Chapter 3 of the report describes the approach taken to conduct the Inquiry.

1.2 Panel membership

The Minister appointed the following Panel members:

- Dr John Gerrard, as Chair of the Panel on 6 January 2025.
- Dr Lyn Denison, an expert in air quality and human health on 28 January 2025.

The panel was supported by Queensland Department of Health staff with expertise in public health, environmental health/science, epidemiology, community engagement and communications.

Legal firm, Barry Nilsson, was appointed to provide legal support to the Inquiry.

Refer to Appendix C for biographies of the panel members.

1.3 Scope and limitations

The Inquiry was conducted in accordance with the ToR, focusing on the extent of the health effects of the odours from the industrial areas. Apportioning blame for the impact of the odours was outside of the Inquiry's ToR and scope of investigation.

The Inquiry acknowledges there are other sources of odour in the Ipswich area. These other sources were out of scope of the Inquiry's investigations. However, the recommendations contained in this report could apply more broadly to address odours emitted from other sources.

The Inquiry also acknowledges odour issues have been a long-standing issue for the Ipswich community. The ToR limited the Inquiry to focus on evidence from 2016 to the present day.

1.4 Acknowledgements

The Panel would like to thank all those who contributed to the Inquiry's work, with special thanks to Simone Ventura, Director (Compliance), Swanbank Project from the Department of the Environment, Tourism, Science and Innovation.

The Panel would also like to thank the following government agencies and peak industry bodies:

- Department of the Environment, Tourism, Science and Innovation
- Ipswich City Council
- Ipswich Historical Society
- Queensland Health's Health Contact Centre (13 HEALTH)
- Queensland Health's Forensic Scientific Services (research librarians)
- West Moreton Hospital and Health Service
- Swanbank Community Reference Group
- Waste and Recycling Industry of Queensland
- Department of Education
- Queensland Cancer Register–Cancer Alliance Queensland
- Department of Health.

A special thanks to individual community members and business operators who took the time to meet with the Inquiry team.

The Panel would also like to thank those who made a written submission to the Inquiry. The information contained in these submissions made a valuable contribution to the evidence supporting the Inquiry's findings.

2 Background

This chapter provides some historical context to the industrial areas and details the site's location, current industrial activity and sources of odour.

2.1 Historical context

Ipswich boasts a rich industrial heritage, particularly in coal mining, which began in the mid-1800s. The area's coal industry began in 1843, when John Williams opened the first recorded coal mine at Redbank to supply fuel for the steamship Sovereign^{1,2}. By the turn of the 20th century, major coal fields stretched from Bundamba through Blackstone, Swanbank, Redbank Plains, New Chum, and Redbank². By the early 20th century, Ipswich was producing 80% of Queensland's coal, cementing its status as the state's primary coal mining centre¹. Up until the 1960s, almost all of Ipswich's coal production came from underground mines².

Industrial growth and railways

The expansion of Ipswich's coal industry was supported by the construction of Queensland's first railway line in 1865, connecting Ipswich to Grandchester, then Bigge's Camp³. This railway made it possible to transport coal efficiently to broader markets and further strengthened Ipswich's industrial base. During the colonial era, Ipswich's economic importance was so significant it was even considered as a potential capital for Queensland⁴.

Community and innovation

The coal industry attracted many immigrants, especially from England and Wales, who sought work in the underground mines and supporting industries¹. By the early 1900s, more than a thousand miners were employed in Ipswich¹, and the city became known for its mining innovations, such as the introduction of Queensland's first electric coal cutters at Box Flat in 1905⁵.

Major mines and tragedy

The Swanbank area became synonymous with coal mining, particularly after the opening the Box Flat Mine in 1897¹. Years later, in a new location slightly to the south, the Box Flat Extended mine was established and played a significant role in supplying coal to the Swanbank Power Station², which began operating in the 1960s¹. Tragically, the mine is remembered for the disaster of July 31, 1972, when a catastrophic underground explosion claimed the lives of 17 men, with another man passing away from injuries just over 18 months later, making it one of Queensland's worst mining disasters¹. The explosion was so powerful that it was mistaken for an earthquake by the local community¹. Box Flat Extended

Mines No.5 and No.7 were permanently sealed¹, and a memorial now stands on Swanbank Road to honour those who lost their lives.



Figure 1. Morning of the Box Flat Mine disaster, 1972⁶

Change and decline

The 1974 floods brought further challenges, flooding five underground mines and leading to the permanent closure of three of these mines; a fourth underground mine was already closed at the time of flooding². These two disastrous events—the explosion and the flooding—combined with economic pressures, expedited a shift from underground mining to open-cut operations, which allowed for larger-scale extraction using modern machinery².

In the late 1970s and early 1980s, many family-owned mines were purchased by larger Australian and international companies, bringing new investment and further changes to the industry².

By the late 1980s and early 1990s, stagnant coal prices led to the closure of the last underground mines—Newhill Mine at Swanbank and Oakleigh Mine at Rosewood—in 1997. Open-cut mining continued until December 2019, when the Jeebropilly Mine closed, ending 176 years of coal mining in the Ipswich-Rosewood region. Over this period, more than 300 underground and 185 open-cut mines operated in the area².

Modern legacy

The large voids left by open-cut mining became ideal for landfill and waste disposal, shaping the region's current industrial landscape². The rehabilitation of mining voids through waste disposal became a key aspect of land management⁷. Although the era of coal

mining has ended, its legacy remains visible in Ipswich's landscape, community and identity, reflecting the city's significant contribution to Queensland's economic growth and industrial history².

The Inquiry would like to acknowledge Mr Hugh Taylor, President of the Ipswich Historical Society for sharing his time, knowledge and expertise to support the Inquiry team to understand the history of mining in Ipswich.

2.2 Location and size

The industrial areas of Swanbank and New Chum are located approximately six kilometres east of the Ipswich CBD and 27 kilometres west of Brisbane CBD, spanning 2200 hectares^{7,8}. This makes it one of Queensland's, and possibly Australia's, largest developed industrial areas, stretching 10 kilometres in length and up to four kilometres in width—large enough to encompass 4400 football fields and surpassing the area of the Amberley Air Base (Figure 2)⁹.

The area presents complex challenges for development due to the legacy of historic underground and open-cut mining, as well as the presence of subterranean fires that persist from past disasters. Despite these challenges, the Swanbank and New Chum precincts remain vital industrial hubs, with their history deeply intertwined with both the prosperity and tragedies of Ipswich's mining era.

The site holds significant strategic importance for the future of industrial growth in South East Queensland, but importantly in managing South East Queensland's waste. Industrial scale waste disposal, recycling, resource recovery, energy from waste and composting operations are carried out within the industrial areas.

NB: The Ebenezer industrial area (also located in Ipswich) is a future industrial area which is also set to become one of Queensland's largest industrial areas.

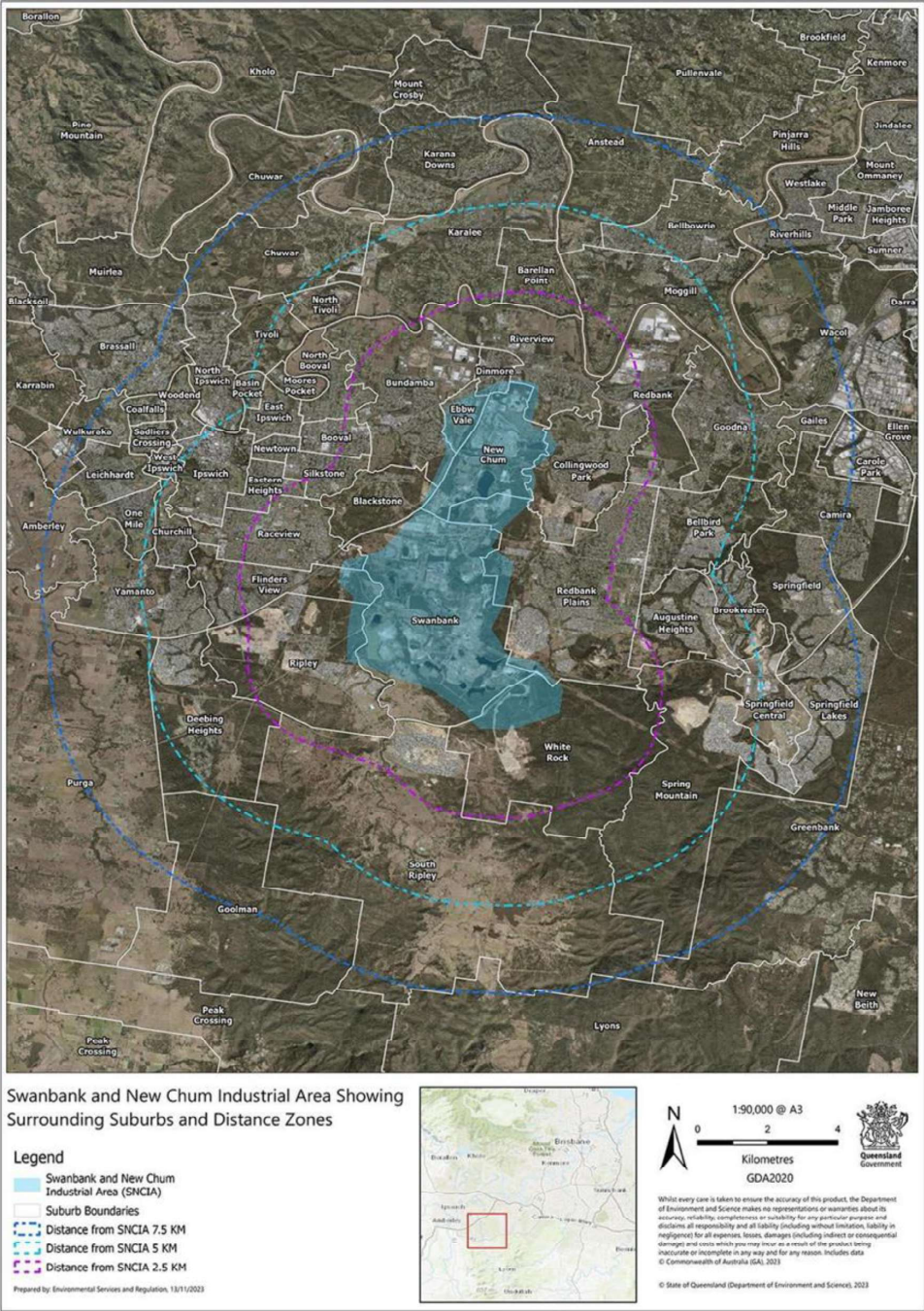


Figure 2. Swanbank and New Chum industrial areas showing surrounding suburbs and distance zones⁹

growth areas in Australia¹¹. The orange border in Figure 4 illustrates the geographical size of the Ripley Valley priority development area.

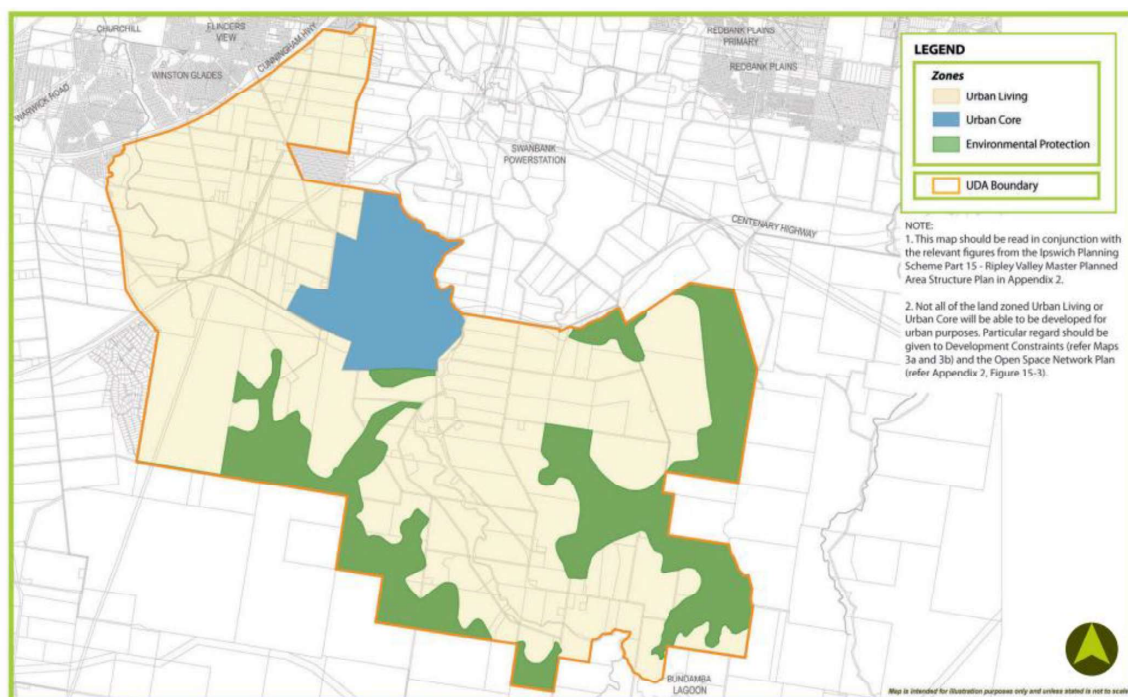


Figure 4. Ripley Valley Priority Development Area¹⁷

2.3.2 Urban encroachment

In Ipswich, encroachment has been occurring near the industrial areas over the last two decades, where previously approved isolated industrial activities have become incompatible with adjacent land uses due to the growing proximity of residential development. This is a significant factor contributing to odour impacts being experienced by the community.

Census data for the years 2016 and 2021 from the Australian Bureau of Statistics indicate an increase in the number of dwellings in Ripley (530 to 1705) and Redbank Plains (6367 to 8464)¹⁸. These two suburbs have been the most significantly impacted by odour, representing approximately 60 per cent of community notifications received during 2024 from in and around the industrial area. Figures 5–7 show the progress of residential development from 2010 to 2024.





Figure 6. Aerial imagery of the industrial areas in 2022 (Source: Nearmap)



Figure 7. Aerial imagery of the industrial areas in 2024 (Source: Nearmap)

2.4 Current industrial activity

Ipswich's new planning scheme¹⁹ (Ipswich City Plan 2025) is expected to come into effect this year with a planned commencement date of 1 July 2025. Under the new scheme, the Industrial areas are predominantly zoned *Industry Investigation* (refer to Appendix D). An Industry Investigation zone protects land that may be suitable for future industrial development²⁰. In the interim, limited activities may occur on or near these lands that do not constrain their possible future industrial use.

Today, there are 40 sites within the industrial areas operated by multiple companies, state government agencies, Ipswich City Council (ICC) and individuals¹¹. The following industrial activity is occurring at the sites¹⁴:

- clay mining and quarrying (10 sites)
- landfilling—putrescible, construction and demolition/industry and regulated waste (six sites)
- concrete batching plants (four sites)
- tyre recycling (four sites)
- power generation/fuel combustion (three sites)
- resource recovery (two sites)
- asphalt plant (two sites)
- composting (two sites)
- other—fertiliser works, machinery maintenance, explosive precursors, soil conditioners, ash deposition (five sites).

Almost half of Queensland's waste (by weight) is received at the industrial areas¹¹. This includes household waste, green waste, commercial and industrial waste, construction and demolition waste and other regulated waste. Waste and resource recovery operations in the Ipswich Local Government Area (LGA) manage around two million tonnes or 47 per cent of Queensland's total waste^{12,21}, much of which is generated outside of the Ipswich local community.

The industrial areas are strategically significant to *South East Queensland's Waste Management Plan* and the Queensland Government's *Waste Management and Resource Recovery Strategy*.

South East Queensland's Waste Management Plan notes that although the aggregated landfill capacity across South East Queensland is not constrained, several South East Queensland's LGAs will reach landfill capacity with the next ten years. These LGAs, and the community more broadly, will need access to available landfill capacity. The industrial areas provide South East Queensland with landfill capacity for decades to come.

To help extend the life of existing landfills, *South East Queensland's Waste Management Plan* focuses on organics recovery (mulching, composting) to remove organics from general waste stream²². ICC will begin a city-wide Garden Organics (GO) service from 1 July 2025, with all

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eligible households receiving a GO bin to be collected on a fortnightly basis²³. Removing green waste from landfills reduces methane emissions (a major contributor to global warming) and helps extend the life of South East Queensland landfills. There is significant organic waste diversion and composting activity undertaken at the industrial areas.

The *Waste Management and Resource Recovery Strategy* sets out a vision for Queensland to become a zero-waste society, where waste is avoided, reused and recycled¹⁶. Significant resource recovery, recycling, composting and other landfill diversion activities are conducted onsite at the industrial areas.

2.5 Odour from the industrial areas

The information in Section 2.5 has been drawn from the DETSI submission to the Inquiry¹¹.

The industrial areas are characterised by the close proximity of multiple heavy industry activities, which can compound environmental impacts, including odour emissions. An increase in the intensity of operations can potentially affect nearby communities. In locations like the industrial areas, where multiple industries operate in close quarters, odour issues can also be amplified due to overlapping emissions. Important sources of odour from the industrial areas are composting sites and landfills.

Landfills primarily operate under anaerobic (low-oxygen) conditions, leading to the production of odorous gases such as hydrogen sulphide, which has a strong rotten egg smell. Additionally, landfills generate methane which is odourless but often mixed with other volatile organic compounds (**VOCs**) that contribute to the overall smell.

In contrast, composting occurs under aerobic (oxygen-rich) conditions, resulting in different odour compounds, including ammonia, which has a pungent, sharp smell, and terpenes, which can give off earthy or woody odours. When composting is poorly managed, anaerobic pockets can form, leading to sulphur-based odours similar to those from landfills.

The key distinction is that landfill odours tend to be more persistent and sulfurous, while composting odours are often more transient but can be particularly strong if aeration and moisture levels are not properly controlled.

Other potential sources of odour in the industrial areas include fertiliser production sites, recycling/resource recovery sites and asphalt plants.

DETSI has been investigating and responding to concerns raised by the community about odour, dust and other environmental nuisance in and around the industrial areas for over 10 years.

DETSI advised the concentration of waste, composting and other potential odour generating activities within close proximity to residential development is a unique situation within

Queensland. DETSI has not undertaken this type of resource intensive, enforcement and community engagement approach in any other location in Queensland.

DETSI has taken the lead on this issue, with support from ICC and Queensland Health.

The suburbs surrounding the industrial areas are shown in Figure 2.

DETSI regulates many ERAs within the industrial areas, the majority of which are related to waste management. These businesses must hold an environmental authority (EA or licence) to operate. Table 1 and Figure 8 detail the key licenced operators within the industrial areas and the type of waste management operations undertaken within their relevant EA.

Further details about the history, compliance and actions relating to the sites in Table 1 can be found in the site profiles provided in Appendix E.

Table 1. Details of key waste management operators within the industrial areas

Licence holder and number	Common name	Waste types	More information
Chip Tyre Pty Ltd EPPR00948613	Chip Tyre (Tyre Recycling)	Tyre recycling facility receiving tyres and other rubber products.	Refer to Appendix E.
Chum Street Pty Ltd EPPR00422413	Previously Claypave Brick Factory	Landfilling permitted for clay and brickworks waste, but not operational.	No site profile in Appendix E. The site historically undertook waste disposal but is no longer operating a landfill for brick/clay waste.
Cleanaway Solid Waste Pty Ltd EPPR00445713	Cleanaway New Chum Landfill	Landfilling operation receiving: general waste including inert construction and demolition material including concrete, bricks and tiles non-reactive inflammable scrap metal green waste including trees, branches, non- chemically treated timber and other plant material. limited regulated waste asbestos shredded tyres treatment tank sludge contaminated soil.	Refer to Appendix E. At the time of writing, Cleanaway is not currently accepting waste on site.

Licence holder and number	Common name	Waste types	More information
Lantrak Waste and Recycling Pty Ltd EPPR00703413	Lantrak Landfill	Landfilling, waste reprocessing and transfer station operation receiving: Construction and demolition waste Asbestos Contaminated soil.	Refer to Appendix E.
NuGrow Ipswich Pty Ltd EPPR00696713	NuGrow Composting Facility	Composting operation receiving solid and liquid waste material.	Refer to Appendix E.
Re-Direct Recycling Pty Ltd EPPR00706313	Previously Bio-Recycle Greenspot Landfill	Landfilling operation receiving construction and demolition waste and green waste.	Refer to Appendix E.
Remondis Australia Pty Ltd EPPR00823413	Remondis Landfill	Transfer station landfilling, reprocessing, treatment and composting operation receiving: general waste regulated waste limited regulated waste Enclosed composting facility operation is permitted however has not yet been constructed or commenced.	Refer to Appendix E.
Veolia Environmental Services (Australia) Pty Ltd EPPR00633413	Veolia Wattle Glen Landfill	Waste transfer station operation including commercial waste, recyclable waste and limited regulated waste. Landfilling operation permitted, but not operational.	No site profile in Appendix E. The landfill operation is closed and the site only sorts recyclable materials.
Wood Mulching Industries (WMI) Pty Ltd EPPR00816413	WMI Composting Facility	Composting operation receiving solid and liquid waste material.	Refer to Appendix E.

NB: More information on each waste operator is available in Appendix E.

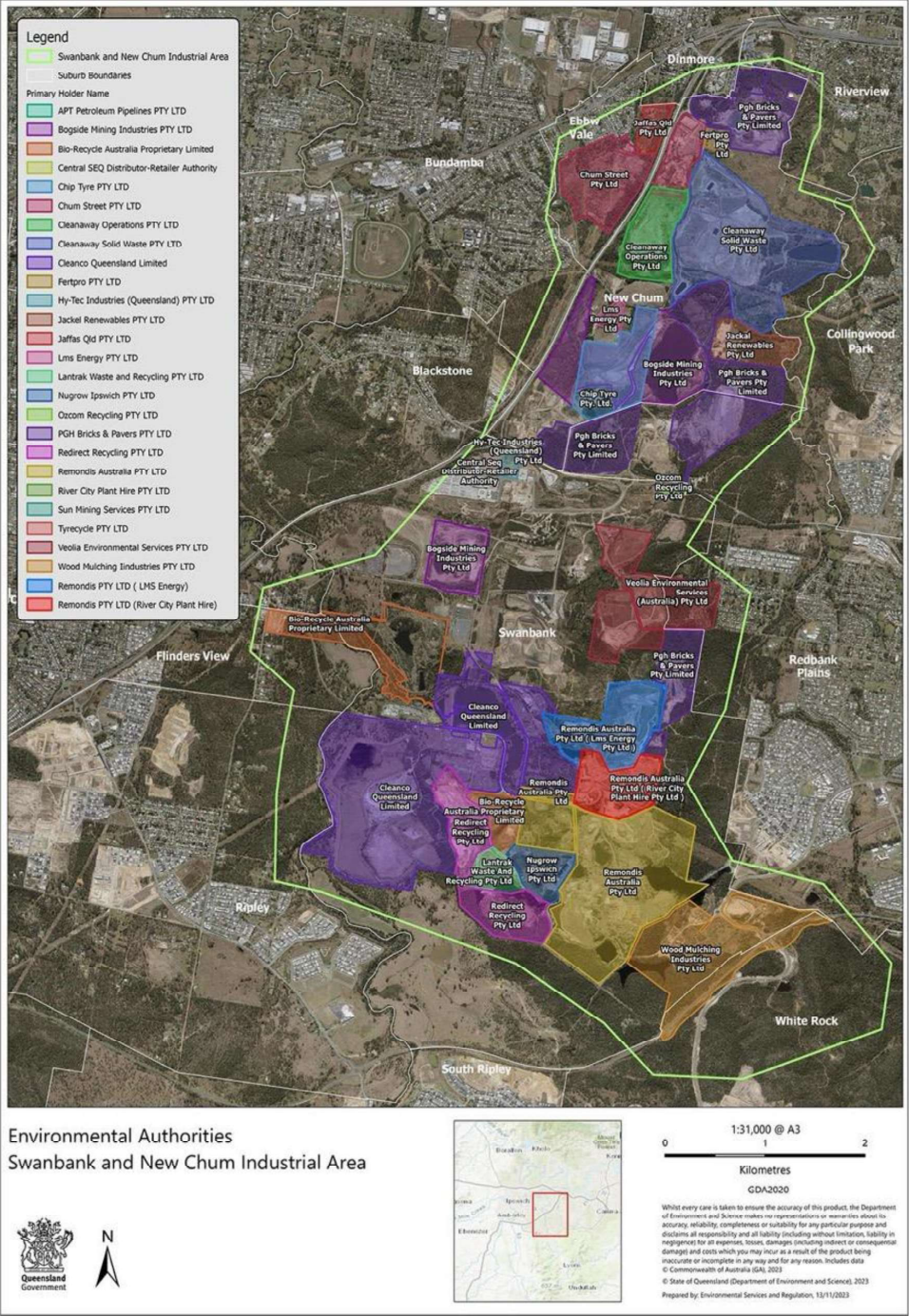


Figure 8. Environmental authorities within the industrial areas

2.5.1 Composting and leachate

Important sources of offensive odour from the industrial areas include composting and leachate. This section summarises the challenges.

Composting

Composting is the controlled biological decomposition of organic materials under aerobic and thermophilic or naturally self-heating conditions^{24,25}. The science of composting is complex. It requires a complex inter-relationship of specific environmental conditions (temperature, air, pH and water), metabolic activity (microbial species, diversity and activity) and nourishment with a food source (feedstock)²⁵. The physico-chemical composition of the compost is also critical (particle size, porosity, and carbon-to-nitrogen ratio). Managing these requirements carefully generally provides optimal conditions for composting²⁵.

However, as composting involves biological degradation²⁶, odours will form during composting even under optimal conditions^{25,26} as microorganisms break down organic matter, releasing VOCs and other odorous compounds. Odour emissions can vary significantly throughout the composting process.

Over the life of a stockpile, odour emissions typically start out relatively high, depending on the type and freshness of the feedstocks, and can increase further as the thermophilic (high temperature, >45°C) stage progresses^{27,28}. Once the thermophilic stage has concluded and the compost enters the curing or maturation stage, odour emissions begin to decrease until they reach an earthy character of background concentration levels²⁹.

Failing to maintain optimal conditions for composting can rapidly generate offensive odours and lead to poor product quality²⁵. The most offensive odours from composting are associated with the release of different VOCs and other odorous compounds^{25,26,29} from compost that:

- is too high in nitrogen, producing excessive ammonia gas (pungent gas)
- has become anaerobic, producing hydrogen sulphide gas—rotten egg smell, which is offensive at low levels
- has too much sulphur containing materials such as food, paper, gypsum, manure and biosolids—this can lead to release of mercaptans and other volatile organic sulphur compounds
- has excessive moisture which hinders aeration and favours anaerobic bacteria
- has been nourished with feedstock high in proteins.

Numerous feedstocks used to nourish compost are considered to have a high and very high odour potential. These include²⁹:

- abattoir waste (for example, animal effluent, bone material, blood, paunch material, tallow waste)
- acid sulfate soils and sludge
- animal manure including wastewater from holding yards
- animal processing waste, other than fish or poultry processing waste (for example, dead animals, or parts of dead animals, milk waste, mixed animal manure and animal bedding waste)
- biosolids that are not stabilised biosolids
- brewery and distillery effluent
- fish processing waste (for example, fish bones and other remains, wastewater from fish processing)
- food processing treatment tank, or treatment pit, liquids solids or sludges
- grease trap waste—liquid and solid
- food processing effluent and solids
- poultry processing waste (for example, abattoir effluent and sludges, egg waste, feathers, meat and bones)
- protein-based food organics (for example, expired protein-based food from supermarkets)
- a substance used for manufacturing fertiliser for agricultural, horticultural or garden use (for example, ammonium nitrate, dewatered fertiliser sludge).

There are also multiple areas within a compost facility that can be a source of odour. These include receival and mixing areas, storage areas for feedstock, open-air windrows undergoing the thermophilic stage of composting, windrow turning (for aeration), leachate ponds and biofilters^{25,26}.

Composting systems

The composting systems commonly used in Queensland include turned open windrows, forced aeration and enclosed or in-vessel systems²⁹.

Turned open windrows²⁹. The most common type of composting system in Queensland and Australia is the turned open windrow. Turned open windrow composting involves the composting material being formed in long rows—left in the open air (that is, are not enclosed) during the composting process. The system involves turning the piles to aerate the mass, improve oxygen levels, alleviate compaction and avoid odour formation. Water may also be added to maintain suitable moisture content for microbial decomposition and to reduce dust generation when turning piles. The size, shape and slope of open windrows depend on the feedstock being composted and the type of machinery used to establish and turn the windrow²⁴. Windrows that have a height greater than 3.5 metres can overheat easily and develop anaerobic conditions which result in odour generation^{25,30}. Windrows with a height of one metre or less may fail to heat up at all due to heat loss from the windrow

surface³⁰. Turning windrows can generate significant odours, particularly in the first few weeks of composting, when odour emissions are typically at their peak²⁵. Covering windrows either under a roof or with textile covers is effective at controlling odours from windrows²⁸.

Forced aeration. In forced aeration systems, oxygen is forced through the composting material (usually through a network of aeration pipes³¹) reducing the need for turning and providing more rapid decomposition, which can shorten the total composting time²⁹.

Enclosed and in-vessel systems. In enclosed or in-vessel systems, the early (and highly odorous) phase of composting is undertaken within an enclosed structure (for example, a building or part of a building) or a vessel (for example, enclosed concrete rectangular tunnel). These systems are designed to minimise odour from the composting process. Most enclosed and in-vessel systems also use a system of forced aeration to oxygenate the enclosed compost mass²⁹.

The advantages of enclosed or in-vessel systems include^{25,29}:

- more precise process control of composting conditions (for example, temperature, aeration/air flow and moisture addition)
- rapid pasteurisation and rapid rates of decomposition due to more uniform distribution of high temperatures throughout the compost mass
- protection from the elements when under a roof, in a building or vessel
- improved systems for odour containment and control including the use of biofilters.

Although enclosed and in-vessel systems are designed to minimise odour from composting, even a well-located and designed composting facility with the most sophisticated enclosed technology can still generate offensive odour if not maintained or operated correctly²⁵. This will occur when:

- risks associated with any given feedstock are not well understood
- physico-chemical characteristics of the mix are not right
- careful process control and monitoring are not followed
- biofilters are not maintained properly
- odour prevention strategies to circumvent potential problems are not implemented²⁵.

NB: Windrows can be covered with a semi-permeable membrane. A semi-permeable membrane used in combination with another system, such as a forced aeration system, can significantly reduce odour emissions²⁹.

Leachate

Leachate is a fluid that has been in contact with waste or other contaminants. It is typically liquid that has passed through, or emerged from, landfill or other waste operations²⁹. It is characteristically very odorous due to the presence of VOCs and sulphur-containing compounds like hydrogen sulphide²⁹.

When leachate escapes from waste management sites, it can contaminate groundwater, surface water and soil with harmful organic and inorganic pollutants. Therefore, ensuring

adequate measures are in place to monitor, prevent and treat leachate is essential for protecting human health and the environment³².

The physical appearance of leachate is a black-, yellow- or orange-coloured cloudy liquid. The smell is acidic and offensive and may be very pervasive because of hydrogen-, nitrogen- and sulphur-rich organic species such as mercaptans³². In Australia, waste management sites must manage leachate in accordance with strict conditions of approval. This can involve capturing leachate in ponds to treat onsite or offsite at wastewater treatment plants.

2.5.2 Bioaerosols and volatile organic compounds

Commercial composting and most landfill operations process organic matter from domestic and municipal waste. Composting typically involves aerobic decomposition (oxygen-dependent microbial activity), while landfills generally rely on anaerobic decomposition (oxygen-limited conditions)^{33,34}. These processes generate bioaerosols and VOCs during organic breakdown, and both are associated with odour^{35,36}.

Bioaerosols

Bioaerosols are airborne particles containing biological agents like bacteria, fungi, viruses, pollens, and fragments and metabolites that are derived from organic matter^{37,38}. While they are released by waste and composting industries as a result of organic decomposition, they are also common in agriculture and are naturally occurring in ambient air at highly variable concentrations^{33,39-43}.

There appear to be no established threshold health limits for community exposure to bioaerosols. The risk of health problems attributable to bioaerosols is dependent on numerous factors, including bioaerosol concentration, the type of organism, exposure, duration and the pre-existing medical conditions of exposed individuals. There is also a lack of knowledge regarding dose response relationships^{40,44}. These factors make it difficult to establish absolute threshold health values for bioaerosol concentrations.

For the bioaerosols emitted from composting facilities, high level exposures have been associated with a range of conditions. While two recent systematic reviews concluded there is insufficient evidence to comment on the risk of exposure to nearby residents, they acknowledged the most commonly reported health issues are respiratory system problems (for example, rhinitis, asthma, bronchitis and sinusitis), through allergic and non-allergic pathways^{39,45}.

Volatile organic compounds

VOCs are organic molecules that have a high vapor pressure at room temperature (that is, they turn to gas more easily), and include the mercaptans, organic sulphides, amines, indoles, volatile fatty acids, terpenes, alcohols, ketones and aldehydes^{46,47}.

The volumes of these aerosols are influenced by waste management practices, including the:

- porosity of organic material (affecting oxygen availability)

- frequency of mechanical agitation (for example, turning compost or compacting landfill waste), which increases aerosolization^{45,46,48}.

VOCs are considered to be the main source of odour from facilities that manage organic waste as many of these compounds can be smelled at extremely small concentrations⁴⁹. There may also be interactions between various VOCs, bioaerosols and non-odorous co-pollutants that can contribute to malodour and give rise to health concerns³⁵.

Nationally and internationally, public concerns about odour from industrial waste are widely acknowledged^{46,47,50,51}. The literature has frequently recognised that, even when bioaerosols and VOCs are below threshold levels, their odour has potential to impact upon workers and nearby residents^{51,52}.

Part A—Health impacts of the odour



Dr John Gerrard and Dr Lyn Denison visit DETSI's air monitoring station, Ripley, January 2025

Part A of the report provides an overview of the approach and structure of the Inquiry, a review of the literature as it relates to the human response to odour and an analysis of the health impacts of the odour on the local community.

3 Approach and structure of the Inquiry

The scope of the Inquiry considered any relevant health-related evidence from 2016. This timeframe allowed for accounts of early complaints from the community about odour impacts, up until the commencement of the Inquiry.

As per the ToR, the Inquiry was tasked with:

- Investigating the extent of the health effects of the odours from the Swanbank and New Chum industrial areas.
- Recommending actions that may be taken to mitigate any health-related impacts on local communities.

The Inquiry did not consider any regulatory or compliance matters led by either the State of Queensland or Local Government, except to the extent that it provided context for any health impacts experienced by the community.

The Inquiry was undertaken in three key phases:

- stakeholder engagement and information gathering
- community consultation
- health outcome data analysis.

3.1 Stakeholder engagement and information gathering

3.1.1 Stakeholder engagement

Engagement with the community, industry, local government, and other stakeholders was key to the Inquiry's processes.

DETSI was a key stakeholder and met with the Inquiry team on a regular basis, organised a site visit to the industrial areas and provided a formal submission to the Inquiry.

The Inquiry met with ICC during the information gathering phase of the Inquiry and both ICC and the Ipswich Mayor provided a formal submission to the Inquiry.

The Inquiry participated in multiple site visits of industries based within the industrial areas, as well as a site visit to a recycling facility in Yatala. Site visits were organised by DETSI, the Waste and Recycling Industry of Queensland (**WRIQ**) and individual companies.

The Inquiry sent letters to all odour-producing companies with ERAs operating in the industrial areas overviewing the scope of the Inquiry and inviting a formal submission on their operations and activities, especially as they relate to the mitigation of odours from their premises.

In the conduct of the Inquiry, natural justice was afforded to anyone directly concerned in the matter providing the opportunity to make a defence to all claims made against them. This was achieved by writing to all odour-producing companies with ERAs overviews the relevant key findings and possible recommendations and seeking feedback on these.

The Inquiry wrote to and met with West Moreton Hospital and Health Service (**West Moreton Health**), the Department of Education and the Department of State Development, Infrastructure and Planning (**DSDIP**). The Inquiry also wrote to all companies based in the industrial areas with an existing ERA requesting a formal submission.

The Inquiry sought more information in writing and provided an opportunity to meet with Dr Gerrard to discuss the health effects of patients from local medical specialists—specifically those practicing in dermatology, ear, nose and throat, respiratory and sleep, and psychiatry—and practice managers of in-catchment medical practices. The Panel also sought advice from researchers and medical specialists, where appropriate.

The Inquiry also wrote to directors of kindergartens and childcare centres and principals of all state, Catholic and independent schools seeking information on the impact of odour on the health of staff and students, including the type and severity of health conditions and the length of absence from work/school.

The Inquiry met with Brisbane City Council to gain an understanding of their management of odorous industries and associated odour complaints and approach to air quality, planning, the use of performance-based frameworks inclusive of benchmarks and odour criteria and other planning instruments.

All information provided informed the Inquiry's findings and recommendations.

3.1.2 Information gathering

A market research agency was commissioned to conduct a telephone survey of 400 residents (specifically from the following suburbs—Augustine Heights, Bellbird Park, Blackstone, Booval, Bundamba, Collingwood Park, Dinmore, Eastern Heights, Ebbw Vale, Flinders View, Newtown, Raceview, Redbank Plains, Ripley, Riverview, South Ripley, Silkstone) to seek quantitative data to determine the extent of the health impact of odours from the industrial areas on local residents.

The Inquiry commissioned air quality monitoring data to be collected via sampling at six sites on a one-in-six-day frequency (for 24 hours), over a four-week period, for the full United States Environmental Protection Agency TO-15 suite of VOCs. To provide a spread of geographic locations, sampling was undertaken at three sites in the community—South Ripley ID 1003; Church ID 1001; Riverview 1004 and three sites within the industrial areas—Swanbank ID 3001; 3004; 2002 as per the locations detailed here:

<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/air-monitoring>.

To address concerns previously raised by the community, an epidemiological analysis was undertaken to review the incidence and morbidity of certain types of cancers in the

residential areas surrounding the industrial areas, compared with a control, to ascertain if there are any statistically significant differences between the two areas. This focussed on information available from 2016 to present and specifically cancer (lung, liver, kidney and all cancers).

3.2 Community consultation

The Inquiry sought to obtain information from affected community members via a number of public consultation events with residents living in the vicinity of the industrial areas to understand their experiences and the impact of odour on their everyday lives.

The Inquiry met with DETSI and the Swanbank Community Reference Group (**the CRG**) on 5 February 2025 to overview the scope of the Inquiry and plans for community consultation.

On 6 February 2025, Dr Gerrard emailed members of the CRG thanking them for taking the time to meet the day prior and reiterating his commitment to hearing firsthand, people's

personal experiences and health concerns. Expressions of interest opened this day for affected community members to register their interest in meeting with Dr Gerrard.

This process was managed by Queensland Health's Health Contact Centre and individuals could telephone or complete a detailed online form (refer to Appendix F). The scope of consultation included all residents of Ipswich, not just those in suburbs surrounding the industrial areas.

A social media tile was provided to members of the CRG to share on their social media pages. This was also provided to DETSI and ICC to share on social media and in newsletters.

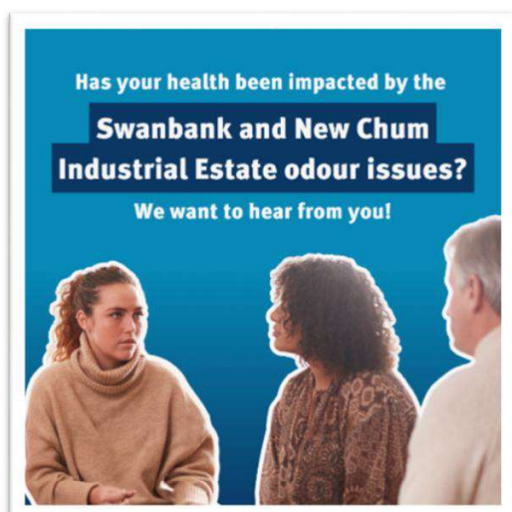


Figure 9. Social media tile

A poster promoting the Inquiry and encouraging community participation was distributed to CRG members, ICC, DETSI, West Moreton Public Health Unit (**WMPHU**), and displayed on community notice boards, at shopping centres, and at medical centres in the following locations: Redbank Plaza – Coles, Target, Big W, Australia Post and Redbank Medical Centre; Collingwood Park Family Medical Centre; Redbank Plains Town Square – Coles, Family Services Australia, Redbank Plains Family Health Centre; Medical Centre Mt View; Ripley Town Centre – Coles, Ripley Medical and Skin Clinic, Minka Place; Winston Glades Shopping Centre – Drakes, Winston Glades Family Practice; Silkstone Village – Coles; Silkstone Doctors.

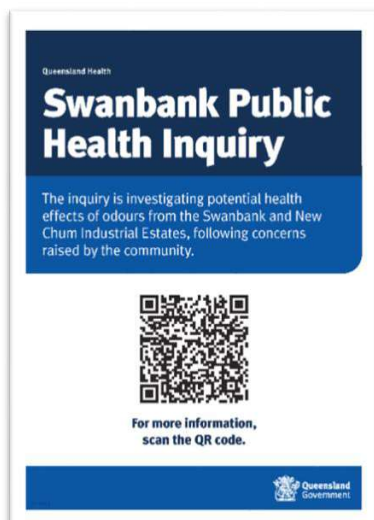


Figure 10. A3 poster

The Inquiry team hosted pop-up displays in local shopping centres as an opportunity to engage with local community members and discuss their experience of the odours and any health impacts they have experienced. These were held at Redbank Plaza and Ripley Town Centre.



Figure 11. Pop-up display at Redbank Plaza, 19 February 2025



Figure 12. Pop-up display at Ripley Town Centre, 20 February 2025, with members of the CRG



Figure 13. Social media tile

A call for formal submissions to the Inquiry was launched online on 24 February 2025 encouraging responses from community, industry, and other stakeholders to be submitted to the Inquiry by 31 March 2025. An email and social media tile (refer to Figure 13) were sent to the CRG, the Ipswich Residents Against Toxic Emissions (**IRATE**) group, DETSI, Neighbourhood Watch Riverview, and ICC encouraging them to promote the online submission process.

A public notice promoting the call for submission process to the general public was published in the Ipswich Tribune, Ipswich West Moreton Today and Local Ipswich Today

newspapers. A notice was also published on the Queensland Times online website (refer to Appendix G for copies of all published notices).

A 30-second radio ad, recorded by Dr Gerrard was aired for one week from 17 March 2025 (ten spots per day) on Ipswich River 94.9 encouraging the public who have health-related concerns to make a submission to the Inquiry.

Meetings with community members who registered their interest to meet with Dr Gerrard to discuss their health concerns were held on 18 and 19 March 2025 at the West Moreton Health Learning Centre, South Street, Ipswich.

NB: these meetings were originally scheduled for 4 and 5 March 2025 however were postponed due to the impending Tropical Cyclone Alfred.

3.3 Health outcome data analysis

Sixty-one community members contacted the Health Contact Centre, completed an online form, or submitted a written submission providing details of health conditions they attribute to the odour. Of these, twenty-eight individuals requested a meeting with Dr Gerrard. An analysis of all responses received was undertaken.

Four hundred residents participated in telephone interviews designed to seek quantitative data to understand community sentiment, attitudes, perceptions and experiences in relation to odour from the industrial areas. An analysis of all interviews was undertaken.

Approximately 20 people shared their experiences related to the odour with the Inquiry team during shopping centre pop-up visits. All but one of these people reported health concerns related to the odour. Around 10 people at each shopping centre declined to speak with the Inquiry team noting they lived out of the area, had no health concerns or were too busy to speak to the Inquiry team. Due to the qualitative nature of these discussions, they have not been analysed as part of the health outcome data analysis.

Information provided from schools, kindergartens and childcare centres, medical practices and local specialists has been included in this analysis.

During interviews with community members, one individual reported they had experienced an uncommon bloodstream infection with a Nontuberculous Mycobacterium (NTM) and had heard of others in the community with similar infections. The individual expressed concern this infection might be related to dust or water from the industrial areas. The Inquiry sought expert advice to determine whether an epidemiological association existed. This report is included in this analysis.

4 The human response to odour

This chapter explores how humans process odours, how it affects people and how health impacts arise from odours. The information presented is derived from a review of over 80 published papers on odours and their impact on health.

4.1 What is odour?

An odour, or a smell or scent, is the sensation we experience when certain chemicals in the air interact with the millions of receptors in our nose. These chemical compounds are volatile, meaning they easily evaporate into the air, allowing us to detect them. Odours can come from a wide range of sources, such as food, plants, animals, industries, chemical reactions, and even other people. For example, body odour is caused by bacteria breaking down substances like sweat on the skin into smaller molecules that emit smells^{53,54}.

Humans, like all animals, perceive odours on a spectrum from good to bad based on a complex interplay of biology, experience and context.

For example, the smell of blood repels many animals (including humans), while hunters like wolves are naturally attracted by it⁵⁵. In contrast, sweet or floral aromas like fresh fruit can signal safety and nutritional value⁵⁶.

Genetic differences between individuals can also play a role. Some people experience specific anosmia—a diminished smell sensitivity to particular compounds.⁵⁷ Others experience hyperosmia—a heightened smell sensitivity—which means they are more sensitive to both pleasant and unpleasant odours⁵⁸.

Experiences and memories associated with odour are known to trigger powerful emotional responses, and they can be positive, negative and evocative. A favourite meal might trigger a positive response like comfort and happiness, while the odour of hospital disinfectant may provoke a negative reaction like anxiety. The scent of one's kindergarten can transport someone back to that emotional state. These are examples of a phenomenon known as 'olfaction-associated memories'^{57,59}.

Cultural background and personal context can further influence odour perception. For example, a molecule (3-methylbutanoic acid) can smell like parmesan cheese in one context, or like vomit in another. Similarly, some aromatic cooking compounds and spices may be appealing to some people, while others may dislike them⁵⁶.

4.2 How we process odour

Odour is a response to stimulation of the nose's olfactory cells by gaseous molecules, and the perception of odour occurs according to two physiological and psychological channels³⁶. There is a physiological response resulting from an interaction between the odorous substances and olfactory receptors, and there is a psychological response resulting from the experiences, memories and emotions that an individual associates with a specific odour⁶⁰. As a result, the perception of odour is subjective, and varies between individuals.

At elevated concentrations, an individual's odour receptors may send signals to the brain causing different reactions. Odour sensations processed in the central nervous system can induce pleasant reactions, positive mood and emotions. However, they can also induce negative responses like irritation, pain, sneezing, salivation, nasal obstruction, bronchoconstriction, mucus secretion and inflammation. Bad odour is often acknowledged as an environmental trigger of health conditions like headache, irritation of the eyes and nose, and fatigue⁶¹⁻⁶⁴.

4.3 How we perceive odour

The human sense of smell allows us to evaluate and guide our responses to our environments. However, describing the role of smell in human lives necessitates an acknowledgment that individuals vary in their perception of and response to odour in their environment. For some, the smell from a bakery may be unpleasant. For others, the smell from garbage may be imperceptible. Some of this can be attributed to inter-individual variation in sensitivity. For ambient environmental odour there is robust evidence in the literature (from field studies through to systematic reviews) that an important source of differences in response may also stem from cognitive factors, such as an individual's beliefs and expectations about the consequences of exposure to an odour^{34-36,39,45,49,61,62,64-68}.

As a result, the study of odour is complex. The relationship between odour, health and wellbeing has a long history. Prior to germ theory, it was generally believed that disease was caused by 'miasma', or bad air⁶⁹. In contrast, the field of aromatherapy is centred on the view that odour can have beneficial impacts on health and wellbeing⁷⁰. Yet concerns persist about the potential health risks associated with exposure to odorous products and environments, even in those fields where 'good odour' is intended to have health benefits⁷¹.

There is general awareness of the direct effects of exposure to toxic gases. However, most studies that consider the effects of odour on human health and wellbeing are in circumstances where the odour is not at toxic levels. Many volatile chemicals produce an odour, and this can elicit a range of responses in many people. Some odorous compounds can be pungent and perceived negatively by some, and favourably by others⁷².

In addition, studies have shown that *expectation* can affect odour perception and symptoms. In one example, a group was told that a range of odorous compounds were healthy and

natural, and another group was told the same compounds were potentially hazardous. The latter group showed a higher degree of sensitivity to the compounds.⁷² In another example, in 1899 a lecturer in gas diffusion asked that students raise their hands when they smelt a strong chemical odour, and—unbeknown to the students—he proceeded to pour out distilled water. Within a minute the majority of the class had raised their hands and those seated near the front claimed to feel unwell⁷³. These examples are not intended to diminish the experiences of those who perceive unpleasant odour—the students may well have perceived unrelated unpleasant smells emanating from a laboratory—but instead is intended to highlight that the study of odour is complex and has many confounders, including high variability in perception from person to person.

4.4 Key terminology

In describing the impact of odour, there is a differentiation in the literature between odour *nuisance* and odour *annoyance*⁷⁴. These are closely related but have distinct meanings, and understanding the difference is important when considering community concerns and in implementing any management strategies.

4.4.1 Odour nuisance

Odour nuisance refers to a persistent and measurable disruption caused by odours that interfere with the normal use and enjoyment of property or public spaces. It is often framed in legal or regulatory terms, where the presence of odours exceeds acceptable thresholds or violates environmental standards^{46,74}. Odour nuisance results when:

- the appraisal of the odour is negative
- the perception occurs repeatedly
- it is difficult to avoid perception of the odour
- people believe that the odour has a negative effect on their wellbeing⁷⁴.

In this context, a formal assessment of odour nuisance needs to account for a number of parameters. These are collectively known as 'FIDOL', which refers to the following:

- Frequency
- Intensity
- Duration
- Offensiveness
- Location of the odour^{46,75}.

While there is reasonable consensus in the scientific community that these factors should be considered in evaluating odour nuisance, odorous compounds are not all easy to quantify individually—let alone collectively—as they interact. For example, perceptions of offensiveness will vary from person to person. The offensiveness of an odour is often measured in terms of the 'hedonic tone', which is an individual's judgment of the relative

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like (pleasantness) or dislike (unpleasantness) of the odour⁷⁶. Of all the FIDOL elements, some reports suggest offensiveness (hedonic tone) is more likely to correlate to the degree of annoyance and perceptions of impact than odour concentration. However, it is odour *concentration*, not odour *offensiveness*, that is most commonly the regulatory measure^{46,75,77,78}.

4.4.2 Odour annoyance

Odour annoyance is a subjective emotional or psychological response to unpleasant smells. It reflects an individual's perception and tolerance of odours rather than measurable environmental conditions^{64,79}. It is:

- Noted to occur even when odour concentrations are below levels known to be toxic^{47,64}.
- Strongly influenced by personal factors such as prior exposure, sensitivity, perceived control over the situation and attitudes toward the odour source^{46,74}.
- Associated with stress responses, mental health impacts (for example, anxiety, depression), and behavioural changes like avoiding outdoor activities or keeping windows closed^{64,79}.

Odour annoyance clearly represents a public health risk.

4.5 How health impacts arise from odour

The relationship between environmental odour, annoyance and health symptoms is multi-factorial and complex. Numerous studies have sought to determine whether an individual's response to an odour is due to stimulus factors (frequency, duration, hedonic tone) or perceiver factors (attitudes, experience, personality). It is noteworthy that individuals with occupational exposure to odours frequently report less annoyance or symptoms to that odour than naive observers⁸⁰. This could be due to the reduction in perceived intensity or unpleasantness following olfactory adaptation, as well as to reduced concerns about the hazardous nature of the chemical itself.

One area of particular interest—especially for regulators—has been whether health symptoms in response to an odour are *directly triggered by* or are *mediated by* the degree of annoyance that individuals experience⁶⁸. In the context of commercial waste management, the literature notes that impacts—including on health—are unlikely to be *directly* associated with exposures to any toxicological mechanisms, because odours that reach residential areas are nearly always at concentrations well below toxicity thresholds^{61,66,81,82}.

Instead, most research suggests that adverse effects from odour exposure arise *indirectly*. In these cases, the association between odour exposure and symptoms has been found to be mediated by odour annoyance^{49,64,66,76,81,83-85}. In other words, the link between being exposed to something and experiencing symptoms is influenced by the extent to which the odour disrupts or annoys the person.

As a result, the sensory irritation and psycho-hygienic affects arising from the annoyance potential of odour exposure are important considerations⁵¹. There is evidence of strong dose-response associations between exposures and annoyance, and between annoyance and symptoms, with the research noting that the link between exposures and symptoms (like nausea, headache, dizziness, difficulty concentrating, unnatural fatigue, stress) is annoyance-mediated and indirect^{49,66}.

Similar suggestions are made in other domains where sensory stimuli affect people's health and quality of life. For example, studies of noise pollution have noted that noise annoyance has a significant and negative affect on both physical and mental health, and that there is also a significant relationship between noise annoyance and odour annoyance^{65,85-87}.

It is worth noting that, in the context of whether or not odour annoyance is *directly* or *indirectly* responsible for health impacts, such a debate is probably academic. In addition to eliciting symptoms, odour annoyance is a negative health affect per se, in accordance with the World Health Organization's (WHO) definition of health. WHO has defined health as a 'complete state of physical, mental and social wellbeing and not merely the absence of disease or infirmity'⁸⁸. Among recognised health determinants, the environment and its characteristics (for example, air quality, noise pollution, temperature, and crowding) have received growing attention over the last decades and have been consistently linked to impaired physical and mental health^{84,89-91}.

4.6 Inescapability: links between odour, stress and health

Odorous air does not need to be toxic for it to impact upon health.

Environmental exposures are shown to impact human health and wellbeing by indirect means: through stress responses when environmental demands exceed human adaptative capabilities. The role of stress and annoyance in the relationship between environmental factors and health has been documented in numerous studies and reviews^{43,44,65,66,84,89,92-94}.

This evidence is not limited to studies involving humans. There is strong evidence of similar stress-related impacts arising when animals are exposed to non-toxic levels of VOCs. For example, exposing animals to predator odours induces a range of stress-related responses including sleep disruption, respiratory changes, avoidance behaviours including loss of appetite, activity inhibition and odour hypervigilance⁹⁵⁻¹⁰².

These human and animal studies show close links between the olfactory system, odour, stress responses and a range of physiological and behavioural impacts. They also reinforce that the processing of odour is subjective and the response is variable. For example, even

when prey species are exposed to predator odour, not all animals elicit the same response or degree of impact⁹⁶.

Furthermore, the evidence from the animal studies dismisses the possible implication that human health impacts arising from living with non-toxic odours are—essentially—‘all in people’s minds.’ For people living in an odorous environment, the regular presence of an offensive smell, its variability in strength, and the sense that one cannot escape from it, even when at home, creates stress, tension and anxiety among those affected³⁶.

4.7 Understanding the stress response

A useful description of the mechanism explaining the link between environmental stressors and health is described in *Cantuaria et al*⁸⁴. This study examined exposures to three environmental stressors: odour, noise and smoke. It used an influential model to explain stress responses developed by Lazarus and Folkman (*Stress, Appraisal and Coping*, 1984¹⁰³). The below explanation is adapted from these sources and contextualised to odour:

Stage 1: Odour exposure and individual evaluation

Residents exposed to odours from waste facilities assess whether the odour poses a threat to their health, comfort or wellbeing. This evaluation determines whether the situation is perceived as harmful or merely unpleasant. For instance, individuals may appraise odours as threatening if they associate them with potential health risks, such as respiratory issues or toxic exposure. Stress arises when the odour is deemed significant and harmful¹⁰⁴.

Stage 2: Coping

After identifying the odour as a stressor, individuals evaluate their ability to cope with it. This includes considering if they can reduce exposure (for example, by closing the windows or avoiding outdoor physical activities), access complaints mechanisms or get community support. If they perceive insufficient options for mitigating the odour or its impacts, then feelings of helplessness may intensify the stress (that is, an annoyance response).

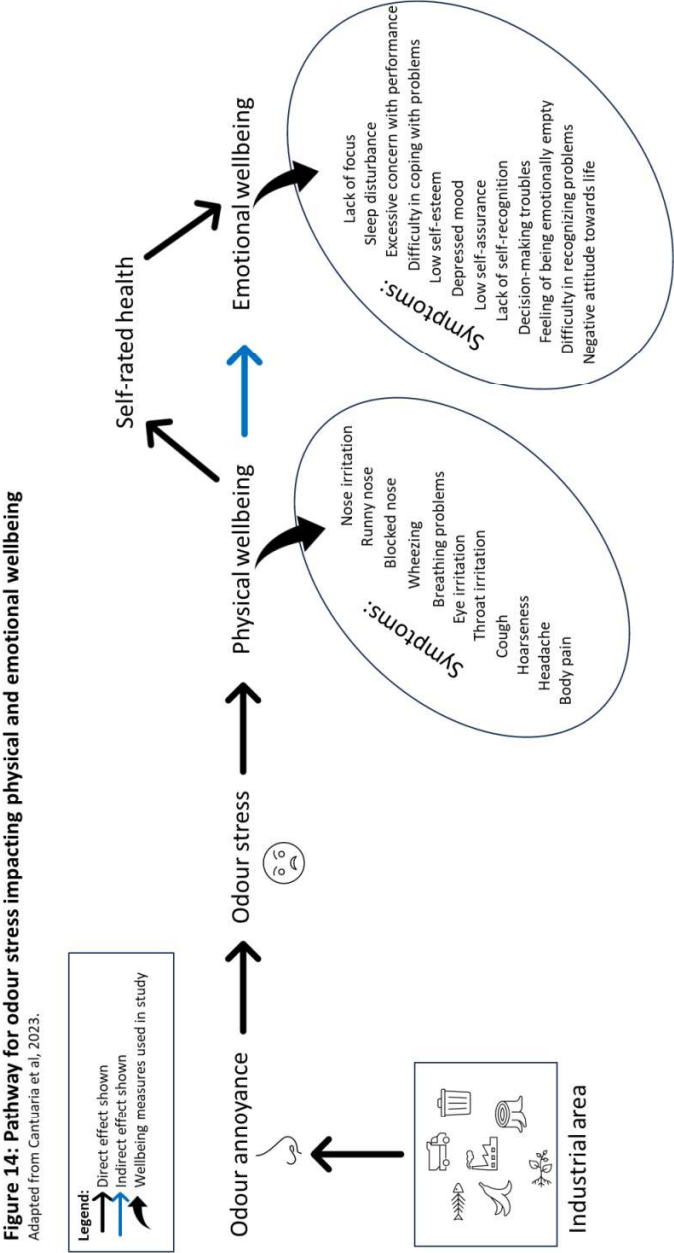
Stage 3: Reappraisal over time

As circumstances change—such as improvements in waste facility management or worsening odour emissions—individuals reassess the situation. Reappraisal can either heighten or alleviate stress depending on whether new information confirms or mitigates perceived threats. For example, if authorities implement measures that successfully reduce odour intensity, individuals may reappraise the situation as less threatening. Alternatively, re-occurrence and intensifying of environmental odours can exacerbate the stress/annoyance response.

The analysis by Cantuaria et al concluded⁸⁴:

[The] findings suggest that environmental stress responses have a direct effect on physical wellbeing and an indirect effect on emotional wellbeing; and that the perception the individuals have regarding their health play a very important role on these relationships.

The pathway for the direct impact of odour stress on a range of physical and emotional wellbeing symptoms is shown in Figure 14.



5 Analysis of health impacts

This chapter describes the qualitative and quantitative data collected throughout the Inquiry to inform the public health impact of the odour on the residents of affected communities.

Importantly this chapter includes a thematic analysis of all submissions from the community inclusive of one-on-one meetings with Dr Gerrard, feedback collected from shopping centre pop-up visits, submissions from education providers and companies located in the industrial areas, and meetings and submissions from local medical specialists and general practitioners.

The Inquiry also commissioned market research to be conducted amongst residents of affected suburbs to seek quantitative data on the impact of odour from the industrial areas on the everyday lives of residents. This research employed a robust methodology designed to understand community sentiment, attitudes, perceptions, and experiences related to odour issues at the industrial areas, with particular focus on quantifying the prevalence and nature of health affects attributed to these odours.

This chapter includes a summary of this research, along with an epidemiological analysis focussed on cancer and a summary of Nontuberculous Mycobacterial infections in the Ripley/Swanbank/Ipswich region.

The chapter concludes with a combined summary of all relevant health findings including a table describing the evidence from the medical literature as it relates to these findings.

5.1 The impact of odour on the community

The Inquiry sought to understand the impact of odour on the general public who have health-related concerns they attribute to odour from the industrial areas. Community involvement and input was sought in the following ways:

- All residents of Ipswich were invited to contact Queensland Health's Health Contact Centre via telephone or online to complete a detailed form capturing their health status. It included their contact details, suburb they have spent the most time in since 2016, their symptoms, any relevant chronic health conditions, details of their healthcare providers and details of any treatment they have had including prescription and over the counter medication (refer to Appendix F). All individuals were required to provide their consent to the collection and use of their personal and sensitive information, including their health information; and to acknowledge the information they provided was true and accurate to the best of their knowledge, noting it would be unlawful for them to provide information

which is false or misleading to the Inquiry. As part of this process, individuals were asked whether they would like a one-on-one interview with Dr Gerrard.

- Written submissions were sought from community members on the following matters:
 - The suburb they spent the most time in since 2016 when they were affected by the odour and how long they lived there, including if they are a current or past resident.
 - Their experiences and the impact of the odour on their everyday life since 2016.
 - Their health condition which they attribute to the odour including symptoms, frequency of symptoms, whether or not they have seen a medical professional, received a diagnosis, received treatment, and/or received a prescription to manage their symptoms.
- A total of 61 individuals were interviewed, provided written submissions or provided information to the Health Contact Centre on the impact of the odour on their health and wellbeing. Of these, 28 individuals requested a meeting with Dr Gerrard.
- The Inquiry team hosted two shopping centre pop-up displays at Redbank Plaza and Ripley Town Square. Approximately 20 people shared their experiences and the impacts of the odour on their health and wellbeing, and in many cases, on their family. Apart from one individual, everyone reported health concerns related to the odour. An additional 20 people declined to speak with the Inquiry team noting they lived out of the area, had no health concerns or were too busy at the time. Due to the subjective nature of these discussions, they have not been analysed as part of this health outcome data analysis. Despite this, the Inquiry team found these conversations incredibly valuable and are grateful to everyone who took the time to share their experiences and concerns.
- Four hundred residents from nearby suburbs participated in computer assisted telephone interviews to seek quantitative data to understand community sentiment, attitudes, perceptions and experiences in relation to odour and the nature of health affects arising from the industrial areas. An analysis of all interviews was undertaken.
- All school principals, and directors of kindergartens and childcare centres within the surrounding suburbs were approached in writing seeking to understand the nature and extent of health conditions experienced by staff and students, and to obtain any available information on the number of staff and students who have reported a health condition attributed to the odour from the industrial areas since 2016, including details on the type and severity of the health condition, and the length of absence from work/school.
- Practice managers of medical centres and local medical specialists practicing in dermatology, chronic inflammatory skin conditions, respiratory and sleep medicine, psychiatry and otolaryngology (ear, nose and throat medicine) within the surrounding suburbs were written to seeking advice as to whether any patients had presented to the practice with symptoms they attributed to odour from the industrial areas. They were also invited to have a meeting with Dr Gerrard to discuss their experiences noting they would not be required to refer to any specific patients nor would there be a requirement to provide medical records of individual patients.

- WMPHU were asked to provide de-identified information on people who had contacted the WMPHU with a health condition they attributed to odour.

5.2 Interviews and personal written submissions

Section 5.2 summarises findings from interviews and personal written submissions from individuals experiencing symptoms attributed to exposure to odours from the industrial areas. Interviews were undertaken in March 2025, and conducted by Dr Gerrard and Queensland Health staff.

5.2.1 Demographics

The data includes reports from 61 individuals ranging in age from 12 to 73 years. There were 47 females (77 per cent) and 14 males (23 per cent). Most respondents resided in areas surrounding the industrial areas including Ripley, Redbank Plains, South Ripley, Augustine Heights, and other nearby suburbs.

5.2.2 Symptom overview

Respondents reported a wide range of symptoms across multiple body systems, with many experiencing symptoms in multiple categories. The most commonly reported symptoms were respiratory issues, headaches and skin conditions.

Respiratory symptoms

Respiratory symptoms were among the most frequently reported, with 30 individuals (49 per cent) experiencing respiratory issues.

Several respondents reported their respiratory symptoms improved when they were away from the area and worsened upon return.

A young man stated, 'I was diagnosed with asthma after moving to Redbank Plains. I had a regular, constant cough and became short of breath regularly.'

A woman in her 60s said she experienced heavy chest tightness, and difficulty breathing when exposed to the smell, with gagging and occasional vomiting.

A woman in her 40s said, my asthma has worsened in the last 15 years. Previously I only had exercise-induced asthma, now I require preventer medication. I was hospitalised in ICU two months ago because of a severe asthma attack due to the smell.



A man said, ‘The smell causes tightness in my chest like a concrete block sitting on it, sometimes with coughing and gagging.’

A woman said, upon moving in, we were immediately affected by a strong, overwhelming, toxic smell. The odour was so pervasive it would wake us in the middle of the night, leaving us coughing and struggling to breathe. I was particularly concerned for my daughter, who was only five months old at the time, and I watched her health worsen because of the environment we were in. Due to the worsening health effects and the lack of resolution, I made the decision to leave the area in May 2023. It was clear the odour was directly related to the health issues both my daughter and I were facing, and continuing to live there was no longer an option.

Table 2. Overview of all symptoms

Symptom	Frequency (n)	Percentage	Notable patterns
Coughing/wheezing	25	41%	Often described as persistent and worsening with odour exposure
Asthma (new or worsened)	13	21%	Several cases of new-onset asthma after moving to the area
Shortness of breath	12	20%	Particularly during odour events
Chest tightness	8	13%	Described as ‘heavy’ or like a ‘concrete block’

Ear, nose and throat symptoms

Ear, nose and throat (ENT) symptoms were reported by 27 individuals (44 per cent), often occurring alongside respiratory symptoms.

A 36-year-old female reported, I have had nothing but sinus issues for the past five years. I have to close up my house and use air conditioning to prevent it getting worse when the odour is about. I've experienced nose bleeds and have been using steroid and over-the-counter nose sprays on and off for over four years to be able to breathe.

A woman in her 50s reported the odours caused sinus issues and itchy eyes for approximately 10 years, with symptoms worsening over time. Symptoms include constant sneezing, itchy eyes, and a feeling of sinus congestion.

A woman in her 60s reported persistent sinusitis, sinus headaches, and nasal congestion since moving to Redbank Plains in 2021, exacerbated by outdoor odour exposure. Frequent upper respiratory tract symptoms including cough, sore throat, hoarse voice, and loss of voice every one to two weeks.

A woman said, 'My headache and hay fever-like symptoms are not fair as I do not ever suffer with these issues ... well not until a few months ago when I moved into this area.'

Table 3. Overview of ENT symptoms

Symptom	Frequency (n)	Percentage	Notable patterns
Watery/irritated eyes	20	33%	Often described as burning, stinging, or itchy
Sore throat	19	31%	Frequently described as 'scratchy'
Congested/blocked nose	19	31%	Frequently accompanied by post-nasal drip
Sinus congestion	17	28%	Many reporting chronic sinus infections resistant to treatment
Nose bleeds	4	7%	Some requiring medical intervention
Ear congestion/pain	3	5%	Less common but reported by several individuals
Reduced sense of smell	2	3%	Noted as progressive over years of exposure

Neurological symptoms

Neurological symptoms, particularly headaches and migraines, were reported by 32 individuals (53 per cent).

A man described migraines that had worsened since moving to Redbank Plains.

A woman in her 60s said she experienced 'pounding headaches within 10 to 15 minutes of exposure to odours.'

A woman in her 20s said she experienced 'headache and nausea when exposed to the smell.'

A woman in her 60s said the smell caused her to develop 'headaches, and nausea despite a strong stomach.'



A man said, the odour, often resembling rotten food/meat or decaying waste, is particularly noticeable in the early mornings and evenings, depending on wind conditions. It has caused discomfort and health concerns, including headaches, nausea, throat irritation, and difficulty breathing. Despite previous complaints and regulatory actions, the problem persists.

A man said, my wife and I both suffered increased frequency of headaches bordering on migraines, allergy related symptoms such as the constant feeling of having a head cold, asthma, sore throats, sinusitis and general lethargy due to these symptoms. We suspect these to be related to the smell as when we have been away on holidays neither of us suffers from the symptoms. During this period, we chewed through paracetamol, ibuprofen and a range of antihistamines.

Table 4. Overview of neurological symptoms

Symptom	Frequency (n)	Percentage	Notable patterns
Headaches/migraines	30	49%	Often described as severe, triggered by odour exposure
Dizziness	5	8%	Sometimes accompanied by nausea
Visual disturbances	3	5%	Including blurred vision during migraines
Metallic taste	2	3%	Reported during or after odour exposure

Gastrointestinal symptoms

Gastrointestinal symptoms were reported by 15 individuals (27 per cent).

A woman in her 50s reported symptoms include headaches, nausea and anxiety related to the odours.

A woman in her 30s reported gastrointestinal symptoms including severe nausea, inability to retain food, and persistent gastrointestinal disturbances since 2021.

A woman in her 30s, ‘migraines only since living here. Headaches as well nausea approximately once a week. All symptoms get much worse on “stinky days”’

Table 5. Overview of gastrointestinal symptoms

Symptom	Frequency (n)	Percentage	Notable patterns
Nausea	15	25%	Often triggered by odour exposure
Vomiting	7	12%	Typically during strong odour events
Abdominal pain	2	3%	Less commonly reported

Skin symptoms

Skin-related symptoms were reported by 26 individuals (43 per cent).

A woman in her 30s who moved to Redbank Plains four years ago developed extensive eczema and hives approximately one month after moving. She was diagnosed with atopic dermatitis, chronic spontaneous urticaria, and allergic contact dermatitis, and developed new allergies to various substances.

A woman in her 60s said that since 2018, she has experienced rashes on her arms after exposure to industrial areas. Rashes become lumpy, itchy, and flare up. One episode of facial skin flare-up, redness, and heat associated with the smell.

A woman said, my daughter, who has a history of eczema, experienced significant flare-ups during our time in the area. As for me, I began to experience hives when I never have before.

The impact on our everyday life was tremendous; we couldn't sleep properly, our health deteriorated, and the constant discomfort made living in the area increasingly unbearable.

Having to live with the windows closed even in summer and not being able to enjoy the outdoor areas.

Table 6. Overview of skin symptoms

Symptom	Frequency (n)	Percentage	Notable patterns
Rashes	20	33%	Various types including hives, eczema
Itchy skin	14	23%	Often without visible rash
Dryness/flaking	7	12%	Particularly on face and extremities

Burning sensation	5	8%	Described as painful or uncomfortable
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Mental health impact

26 individuals (43 per cent) reported mental health symptoms including anxiety, depression, stress, and sleep disturbances related to odour exposure and its health impacts.

A woman in her 60s said she experiences psychological impact from the odours, leading to depression when unable to go outside for three or more consecutive days.

A woman commented, my stress and anxiety has been constant for a number of years, due to the inability to be able to live a normal lifestyle. My everyday freedoms of being able to enjoy outdoor activities, hang washing on the clotheslines, open windows at night for fresh air, has been taken away from myself and family. To maintain a normal lifestyle, I have had to purchase an air purifier and air conditioner for my bedroom, as I am unable to open windows at night for fear of some noxious odour filtering in through my windows in the early hours of the morning. Unfortunately, the waste industry in this city has left me with psychological issues that are triggered everyday by their presence, including media reports.

Another woman said, I find it very depressing to be in my own home when the stench is around. I care for my husband with dementia, and I like to encourage him to step into the garden and be outdoors. Instead, some days we have to close our windows and sit with air conditioning on. The constant smell gets to me and I feel really down and like I am in hell.

Table 7. Overview of mental health symptoms

Mental health symptom	Frequency (n)	Percentage
Mental health symptoms (overall)	26	43%
Depression/anxiety	20	33%
Increased stress/worry	18	30%
Difficulty sleeping	15	25%
Irritability/behaviour changes	11	18%

Temporal and spatial patterns

Many respondents noted that their symptoms:

- Worsened during or immediately after exposure to odours.
- Improved when away from the area.
- Were more severe during certain weather conditions (wind direction, humidity).
- Had developed or worsened since moving to the area.

5.2.3 Lifestyle impacts

Respondents reported using various strategies to manage their symptoms:

- Keeping windows closed and using air conditioning.
- Using air purifiers.
- Taking medications (antihistamines, inhalers, pain relievers).
- Limiting outdoor activities during odour events.
- Some relocated or are considering relocation.

Many people told the Inquiry how much they love Ipswich and how desperately worried they are about the odours.

A woman at Redbank Plaza said she suffers from chronic sinusitis, headaches, and runny nose that she attributes to the odour and then said, when my nephew visited from interstate, he thought my backyard smelt like dog poo – but I don't have a dog. I was so embarrassed. I have stopped running due to smell. I really worry about the atmosphere. It does cause stress. I love Ipswich. I love where I live. The only thing I hate is the smell. I wish it would just go away.

Another woman the Inquiry spoke to at Ripley Town Centre described her lived experience. She said, the smell makes me throw up. I don't go outside. My husband and kids do not go outside. I can't enjoy the garden. My husband can't cook outside on nights when it smells. We have to close up the house. It is absolutely putrid. We live in such a beautiful community with such lovely neighbours. We have all agreed to call the kids inside when it smells. It has mental health impacts.

5.3 Community survey

Section 5.3 overviews findings from a survey of a random sample of the affected community to quantify the effect of the odour.

5.3.1 Background and summary

In summary, 400 residents from suburbs surrounding the industrial areas (Augustine Heights, Bellbird Park, Bundamba, Ipswich East, Collingwood Park, Raceview, Redbank Plains, Ripley, Riverview) were surveyed to assess odour detection, perception, health effects, and impact on daily activities.

Key findings indicated 65 per cent of respondents had detected odour. Of these, 46 per cent said they were strong/very strong and 48 per cent said they were offensive/very offensive. 11 per cent (95% CI: 8.15–14.35%) of the total sample (n=400) surveyed directly attributed health effects to the odour.

When extrapolated to the total population of 131,932¹³ people in the affected area, this would represent 14,800 individuals (95% CI: 10,800–18,900) who attribute adverse health effects to the odour.

Of those who reported health effects, the most common health effects were respiratory symptoms (56 per cent), headaches/migraines/dizziness (33 per cent), and gastrointestinal issues (29 per cent). With 78 per cent of affected individuals reporting moderate to severe symptoms and 71 per cent experiencing these symptoms for three or more years. These findings suggest significant and ongoing health concerns within the community related to the odour.

NB: A sample of 400 residents has a margin of error of $\pm 4.9\%$ at a 95% confidence interval.

A confidence interval (CI) is a range around a measurement that reflects the uncertainty surrounding an estimate. With a 95% CI, if this survey were to be repeated the true value would fall within this range 95% of the time.

5.3.2 Objective

The primary objective of this research was to quantify community sentiment, attitudes, perceptions, and experiences related to odour issues at the industrial areas, with particular focus on quantifying the prevalence and nature of health affects attributed to the odour.

5.3.3 Methodology

The research used a Computer Assisted Telephone Interview (**CATI**) methodology with random sampling from a list of phone numbers of residents in target suburbs. Other than being advised that the phone call was not related to the pending Federal election, residents were



not told what the survey was about until after they agreed to participate. Eligible participants included any person aged 18 and over living in a target suburb.

A sample size of 400 respondents was achieved, providing a margin of error of $\pm 4.9\%$ at the 95% confidence level. The average interview length was 12 minutes and 27 seconds for those who had detected odour.

Surveys were conducted by professional market research interviewers from Q&A Market Research and carried out in accordance with ISO 20252. Fieldwork was conducted between 17 to 23 March 2025.

Table 8. Demographics of sample

Demographic characteristic	Frequency (n)	Percentage
Age groups		
18–34 years	85	21%
35–54 years	169	42%
55–74 years	116	29%
75+ years	30	8%
Sex		
Male	184	46%
Female	216	54%
Length of residence		
Less than 1 year	11	3%
1–2 years	23	6%
3–5 years	51	13%
6–10 years	64	16%
More than 10 years	251	63%

5.3.4 Prevalence of odour detection

Overall detection rates

The survey revealed nearly two-thirds (65 per cent) of respondents had detected odour from the industrial areas at some point, with 21 per cent of the overall sample having noticed the odour in the last week and 40 per cent of the overall sample with the last month. Conversely, 35 per cent of the overall sample reported never having detected the odour.

Table 9. Timing of last odour detection

Timing	Percentage
Within last week	21%
Within last month	40%
Within last six months	51%

Frequency of detection

Among those who had detected the odour (n=260), the frequency of detection was relatively high. Approximately 42 per cent reported noticing odour at least once a week, with 9 per cent experiencing them daily. An additional 33 per cent noticed odour on a fortnightly or monthly basis, while 25 per cent detected them less frequently than once a month.

Table 10. Frequency of odour detection among those who detected odour

Frequency of detection	Frequency (n)	Percentage
Daily	23	9%
2–5 times a week	42	16%
Weekly	44	17%
Fortnightly	31	12%
Monthly	57	22%
Less than once a month	65	25%
At least weekly (total)	109	42%

Variation by suburb

The prevalence of odour detection varied significantly across different suburbs. The highest rates of detection were observed in Ripley (82 per cent), Redbank Plains (76 per cent), and Collingwood Park (76 per cent). In contrast, Bellbird Park had a significantly lower rate of odour detection at 37 per cent.

Table 11. Odour detection by suburb

Suburb	Frequency (n)	Detected odours	95% CI
Ripley (including South Ripley)	38	82%	70–94%
Redbank Plains	95	76%	67–85%
Collingwood Park	41	76%	63–89%
Raceview (including Flinders View)	73	73%	63–83%
Riverview*	10	70%	42–98%
Augustine Heights*	11	45%	16–74%
Ipswich East	52	48%	34–62%
Bundamba	37	54%	38–70%
Bellbird Park	43	37%	23–51%
Total	400	65%	60–70%

NB: responses for Augustine Heights and Riverview should be interpreted with caution due to the sample size being <30 for these suburbs.

5.3.5 Characteristics of odours

Strength, offensiveness, and annoyance levels

Among those who had detected odour from the industrial areas, the vast majority found them to be noticeable and problematic. Over 90 per cent described the odour as at least noticeable in terms of strength, with 46 per cent characterising them as strong or very strong. Almost all respondents (98 per cent) who had detected odour described it as offensive to some degree, with nearly half (48 per cent) rating the odour as very or extremely offensive. Similarly, 92 per cent reported the odour caused them annoyance, with 43 per cent describing the odour as very or extremely annoying.

Table 12. Characteristics of odour among those who detected it

Characteristic	Rating	Frequency (n)	Percentage
Strength	Weak	21	8%
	Noticeable	117	45%
	Strong	73	28%
	Very strong	47	18%
	Strong/Very strong (Total)	120	46%
Offensiveness	Not at all offensive	5	2%
	Mildly offensive	39	15%
	Moderately offensive	94	36%
	Very offensive	78	30%
	Extremely offensive	47	18%
	Very/Extremely offensive (Total)	125	48%
Annoyance	Not at all annoying	21	8%
	Mildly annoying	57	22%
	Moderately annoying	70	27%
	Very annoying	62	24%
	Extremely annoying	49	19%
	Very/Extremely annoying (Total)	111	43%

Description of odour

When asked to describe the odour in their own words, the most commonly terms used by community members were 'annoying', 'disgusting', 'rotten' and 'foul,' The top ten descriptors mentioned were:

1. Annoying (40 mentions)
2. Disgusting (39 mentions)

- Respondents frequently compared the odour to rot, rubbish, chemicals, and sewerage, highlighting the negative sensory experience associated with them.



Figure 15. Word cloud of collated responses to the question: Finally, what three words would you use to describe the odour?

5.3.6 Health impacts

Percentage reporting health affects

Of the total survey population (n=400), 11 per cent (n=45) directly attributed health affects they had experienced to the odour from the industrial areas. An additional 11 per cent (n=42) were unsure whether their health issues could be attributed to the odour. Among only those who had detected odour previously (65 per cent, n=260), these percentages increase to 17 per cent directly attributing health effects and 16 per cent being unsure.

Table 13. Attribution of health affects to odour

Attribution	Percentage of total sample (n=400)	95% CI	Percentage of those who detected odour (n=260)	95% CI
Yes	11%	8–14%	17%	13–22%
No	43%	38–48%	67%	61–73%
Unsure	11%	8–14%	16%	12–21%
Not noticed odour	35%	30–40%	-	-

Community impact estimate

Based on the survey results, it is possible to estimate the total number of individuals in the community who may be experiencing health effects attributed to the odour. With 11 per cent of the survey sample reporting health effects they attribute to the odour, and a total population of 131,932 in the surveyed area, approximately 14,800 people may be experiencing health impacts directly attributable to the odour. With a 95% confidence interval of 8 per cent to 14 per cent, this estimate ranges from approximately 10,800 to 18,900 affected individuals.

If we include those who are unsure whether their health issues are attributable to the odour (an additional 11 per cent, with up to 14% at 95% CI), the total number of potentially affected individuals could be up to 28,700.

Table 14. Estimated population impacted

Impact category	Percentage	Estimated number of people	95% CI (people)
Directly attribute health effects to odour (n=45)	11%	14,800	10,800–18,900
Unsure if health effects attributable to odour (n=42)	11%	13,900	9900–17,800
Potential total impact (n=87)	22%	28,700	20,700–36,700

Types of health effects

Among those who attributed health effects to the odours (11 per cent, n=45), respiratory symptoms were most common, with 56 per cent reporting coughing, wheezing, or an irritated or sore throat. Other common health affects included headaches, migraines, or dizziness (33 per cent) and gastrointestinal issues such as nausea, vomiting, or diarrhoea (29 per cent).

Table 15. Health effects attributed to odour (NB: more than one response allowed)

Health effect	Frequency (n)	Percentage
Coughing/wheezing/irritated or sore throat	25	56%
Headache/migraines/dizziness	15	33%
Nausea/vomiting/diarrhoea	13	29%
Congested/blocked/runny nose	12	27%
Eye irritation	9	20%
Skin condition (for example, rash, dermatitis)	7	16%
Sleep problems	7	16%
Moodiness (depression, anxiety, stress)	6	13%
Loss of appetite	2	4%
Other	3	7%

Of those who attributed a health concern to the odour, when asked which of their health concerns is the most significant, the top three health effects were:

1. Coughing/wheezing/irritated or sore throat – 31 per cent
2. Nausea/vomiting/diarrhoea – 20 per cent
3. Headache/migraines/dizziness – 16 per cent.

Severity and duration of symptoms

The health effects attributed to the odours were generally not mild or transient. Among those reporting health effects (11 per cent, n=45), 78 per cent described their symptoms as moderate (49 per cent) or severe (29 per cent). These symptoms were also persistent, with 71 per cent reporting they had been experiencing the health issues for three years or more. Moreover, 58 per cent experienced these health issues at least weekly, indicating a frequent and ongoing impact on their wellbeing.

Table 16. Severity and duration of health effects

Characteristic	Category	Frequency (n)	Percentage
Severity	Mild	10	22%
	Moderate	22	49%
	Severe	13	29%
	Moderate/severe (Total)	35	78%
Duration	Less than 1 year	7	16%
	1–2 years	6	13%
	3–5 years	16	36%
	6–10 years	9	20%
	More than 10 years	7	16%
	3+ years (Total)	32	71%
Frequency	Daily	5	11%
	2–5 times a week	12	27%
	Weekly	9	20%
	Fortnightly	9	20%
	Monthly	8	18%
	Less than once a month	2	4%
	At least weekly (Total)	26	58%

Medical attention sought

The impact of these health effects was significant enough that 60 per cent of those experiencing them (n=27 out of 45) had sought medical attention for their symptoms. Among those who sought medical help, the vast majority (89 per cent) consulted a general practitioner, while 33 per cent saw a specialist doctor and 11 per cent visited an emergency department. Almost all (93 per cent) of those who sought medical attention received some form of treatment or medication for their symptoms.

Table 17. Medical attention sought for health effects

Characteristic	Category	Number (n)	Percentage
Sought medical attention	Yes	27	60%
	No	18	40%
Medical professional seen	General practitioner	24	89%
	Specialist doctor	9	33%
	Emergency department	3	11%
Treatment/medication received	Any treatment/medication	25	93%
	Other medications	13	48%
	Antihistamines	11	41%
	Antibiotics	9	33%
	Ointment/cream	5	19%
	Other (inhalers, nasal spray, etc)	10	37%
	No treatment received	2	7%

Impact on daily activities

The odour from the industrial areas not only affected health but also disrupted daily activities for many residents. Among those who had detected the odour (65 per cent, n=260), nearly two-thirds (63 per cent) reported having altered their daily activities due to the odour. These alterations included avoiding outdoor activities such as exercising or entertaining, or keeping windows closed to prevent odour from entering their homes.

Pollution Hotline usage

Despite the significant impact of odour on health and daily activities, very few residents had made formal complaints about the issue. Of those who had detected odour from the industrial areas (65 per cent, n=260), only 13 per cent had made a complaint to the Pollution Hotline. Most of these complaints were not recent, with 49 per cent having been made prior to 2024.

Table 18. Pollution Hotline usage among those who detected odours

Response	Frequency (n)	Percentage
Called Pollution Hotline	35	13%
Did not call	218	84%
Unsure	7	3%

5.3.7 Conclusion

The Inquiry has revealed significant impacts from odour on the health and wellbeing of local communities. With 65 per cent of surveyed residents having detected odour from the industrial areas, and 11 per cent directly attributing health affects to the odour, the issue affects a substantial portion of the population. When extrapolated to the entire community of 131,932 people, an estimated 14,800 individuals (95% CI:10,800–18,900) attribute health impacts to the odour.

On top of that number, a similar sized group is unsure whether symptoms experienced are related to exposure to odour from the industrial areas.

The health effects reported were not trivial or transient. Among those attributing health effects to the odour, 78 per cent described their symptoms as moderate or severe, 71 per cent had been experiencing these symptoms for three or more years, and 58 per cent experienced them at least weekly. The most commonly reported health effects were respiratory (56 per cent), neurological (33 per cent), and gastrointestinal (29 per cent). Furthermore, 60 per cent of those experiencing health effects had sought medical attention, with 93 per cent receiving treatment or medication.

Beyond direct health impacts, the odour significantly disrupted daily life, with 63 per cent of those who had detected odour reporting that they had altered their daily activities as a result. These alterations included avoiding outdoor activities and keeping windows closed.

Despite these significant impacts, formal reporting of the issue was low, with only 13 per cent of those who had detected odour having made a complaint to the Pollution Hotline. This suggests the official record may substantially underestimate the extent of the problem.

5.4 Education – schools and early childcare providers

Fifteen school principals from schools within suburbs near to the industrial areas were contacted to determine the nature and extent of health issues experienced by staff and students. Five school principals responded to this request, and all noted they had no reports of health impacts from the odour on staff and students. One school noted that although the

odour has not hindered the school's operations, it does have a negative impact on the student and staff experience.

Further, the Queensland Department of Education conducted a search of their workplace health and safety reporting system and advised there have been no reports submitted relating to the impact of odour from the industrial areas.

Directors of 19 early childhood and kindergarten providers from suburbs near to the industrial areas were also contacted to understand the nature and extent of health issues experienced by children and staff. A response was received from one provider, who had opened in 2020, noting they have had no record of health conditions or absences from staff or children which identified the odour as the cause of their health condition or absence.

5.5 Local medical specialists, general practitioners and Public Health Unit

Information was sought from nineteen local medical centres based within the surrounding suburbs seeking advice as to whether any patients had presented to the practice with symptoms they attributed to odour from the industrial areas. They were also invited to have a meeting with Dr Gerrard to discuss their experiences noting they would not be required to refer to any specific patients nor would there be a requirement to provide medical records of individual patients.

An interview was held with one general practitioner (GP) who noted they see four to five new patients per week with rashes or asthma that they attribute to odour from the industrial areas. The GP also indicated:

- the smell can be quite intense where they work
- they feel the incidence of rashes and asthma is higher than they would expect in a GP practice
- the rashes are variously diagnosed as eczema, psoriasiform or palmoplantar pustulosis.

Medical specialists practicing in dermatology, chronic inflammatory skin conditions, respiratory and sleep medicine, psychiatry and otolaryngology (ear, nose and throat medicine) at nine clinics within the surrounding suburbs were also approached regarding any patients who had presented with symptoms they attributed to odour from the industrial areas. There was a response from one respiratory physician advising that while they had received anecdotal feedback from patients about the odour issue, they, along with colleagues, had not seen any cluster of disease or exacerbations of chronic respiratory symptoms.

WMPHU advised they had been contacted by three people with symptoms they attributed to odour as outlined in Table 19.

Table 19. Individuals who contacted West Moreton Public Health Unit with symptoms they attributed to odour

Date of report	Symptoms	Symptoms occur with odour	Frequency	Examination findings	Outcome
29 September 2023	Worsening dermatitis	Symptoms worse	Daily	Atopic dermatitis	Seen by specialist who does not believe symptoms are due to odour
6 October 2023	Chest irritation, tickly cough	Yes	Daily	Nil	Individual did not want to be contacted
19 March 2024	Worsening asthma	Symptoms worse	Daily	No examination occurred	Unsure if worsening asthma caused by odour

5.6 Industry

All odour-producing companies with ERAs located within the industrial areas were asked to provide details of the health impact of odours on staff including the number of staff affected, occurrences, types of illness attributed to odours and time off work.

A consistent theme across the written submissions received from industry was that no health impacts related to odour have been reported amongst staff and that there have been no recorded cases of illnesses or time off work attributable to odour.

5.7 Assessment of selected cancer incidence rates around the Swanbank and New Chum industrial areas: 2018–2022

5.7.1 Summary of findings

The epidemiological assessment found the age standardised rates of the selected cancers (lung, liver and kidney), and all cancers for the pooled data for the nine exposed suburbs (**SA2s**) were similar to those of socioeconomically comparable SA2s that were partially exposed, and unexposed SA2s for the same period.

The observed rates of selected cancers for specific SA2s tended to be slightly higher than those of the partially exposed or unexposed SA2s. However, these differences were not statistically significant, nor were there any clear patterns within the exposure groups. That is, the SA2s within the exposed group did not have consistently higher rates for the cancers of interest.

5.7.2 Methods

Study design

This was an ecological (epidemiological) study, which compared the geographical pattern of cancer rates between a defined geographic area and the same for the comparable geographic areas based on the exposure in question and socioeconomic status.

Geographic areas in scope

For this assessment, selected SA2s as per the Australian Statistical Geography Standard (**ASGS Edition 3**) were used. SA2s are generally small geographic areas with a population between 3000 and 25,000. SA2s are used for the release of Australian Bureau of Statistics (ABS) vital data including estimated resident population, health and other vitals data¹⁰⁵.

Nine SA2s surrounding the industrial areas were identified as the 'exposed group' (Appendix H). All of the nine SA2s are administratively located within the LGA of Ipswich¹⁰⁶. Their populations ranged from 3067 (Riverview) to 24,349 (Redbank Plains). For comparison, 11 SA2s were randomly selected from beyond the 'exposure' area outside of the industrial areas' periphery and outside Ipswich LGA. A further 11 SA2s adjacent to the industrial areas were purposively selected from across the periphery of the affected SA2s and classified as 'partially exposed' SA2s. The majority of the 'partially exposed' SA2s are located in the Ipswich LGA except Karalee – Barellan Point and Karana Downs which fall under the Brisbane LGA¹⁰⁷. Thus, the three groups of SA2s ('in-scope SA2s') were: 'exposed' (n=9), 'partially exposed' (n=11) and 'non-exposed' (n=11).

Data sources

Cancer data were sourced from the Queensland Cancer Register through the Cancer Alliance Queensland (data provided on 11 March 2025)¹⁰⁸. Due to small numbers, rates were aggregated for five years: 2018-2022. The in-scope SA2s were comparable according to their socio-economic status categorised by the ABS Socio-Economic Indexes for Areas (SEIFA) quintiles, where quintile 1 = most disadvantaged, and quintile 5 = most advantaged¹⁰⁷.

Data analysis

Analysis of selected cancer (lung, liver, kidney) rates among three sets of SA2s were conducted following two different methods:

- **Directly age standardised rates:** for selected cancers for the 'exposed' SA2s were compared with those of 'partially exposed' and 'unexposed' SA2s as well as the Queensland rates.

- **Indirect standardisation:** due to the small numbers for most SA2s, an indirect standardisation method was used by applying the age-specific cancer rates of the Queensland population (standard) to the study populations. A Standardised Incidence Ratio (SIR) for all SA2s was used to determine if the occurrence of cancer (observed cases) in the exposed SA2s with relatively small populations was different (higher or lower) than Queensland rates if the population in the exposed SA2s had a similar age structure to that of Queensland. The SIR was calculated by dividing the observed number of cases by the expected number cases.

5.7.3 Results

Directly age standardised rates comparison

Age standardised incidence rates (ASR) for the cancers of lung, liver and kidney and all cancers combined for the 'exposed' SA2s were similar to those of 'partially exposed' and 'unexposed' SA2s as well as the Queensland rates. (Refer to Table 20 and Appendix I).

Table 20. Age standardised incidence rates per 100,000 for selected cancers (95% confidence intervals) by exposure category, 2018–2022

Exposure category	ASR per 100,000 (95% CIs)			
	Lung	Liver	Kidney	All cancers
Combined exposed SA2s (n=9)	58.8 (52.1–65.9)	9.1 (6.7–12.0)	18.4 (14.8–22.4)	553.8 (533.0–575.0)
Combined partially exposed SA2s (n=11)	55.5 (49.2–62.3)	9.1 (6.7–12.0)	15.7 (12.5–19.4)	542.5 (522.4–563.0)
Combined unexposed SA2s (n=11)	55.9 (50.4–61.6)	9.9 (7.7–12.4)	14.9 (12.2–17.9)	530.0 (512.8–547.5)

The only exception, however, was kidney cancer in Raceview, an 'exposed' SA2, which had more than double the ASR of kidney cancer (37.8 per 100,000) compared to that of the combined 'exposed' SA2s (18.4), 2.4 times the combined 'partially exposed' SA2s (15.7) and 2.5 times the 'unexposed' SA2s (14.9) (Appendix I). Although not statistically significant, the SIRs for all cancers for the combined 'exposed' SA2s (ASR 553.8 per 100,000) were somewhat higher than for Queensland (543.7 per 100,000), most likely reflecting the greater mix of areas with lower SEIFA among the selected SA2s.

Overall, when looking at the specific cancers, a lot of the counts were very small, even for five years of aggregated data (Appendix H). The associated ASRs consequently had very wide confidence intervals demonstrating imprecise estimate, rendering them less useful for comparison purposes. Thus, an alternative method, indirect standardisation, was used.

Comparison between observed and expected rates – indirect standardisation

The indirectly standardised rates, comparing 'observed' rates with 'expected rates' expressed as standardised incidence ratios or SIRs, showed 24 per cent, and 29 per cent higher rates for cancers of the lung, and kidney respectively for the combined exposed SA2s compared to the standard (Queensland) population. However, if the SIRs for the exposed SA2s are compared with partially exposed and unexposed SA2s, the difference was not statistically significant as indicated by the large overlapping of the respective confidence intervals (refer to Table 21).

Table 21. Standardised incidence ratio (observed over expected rates with 95% confidence intervals) by exposure category, 2018-2022

Exposure category	SIR (95% CIs)			
	Lung	Liver	Kidney	All cancers
Combined exposed SA2s (n=9)	1.24 (1.10–1.40)	1.21 (0.88–1.62)	1.29 (1.03–1.59)	1.02 (0.98–1.06)
Combined partially exposed SA2s (n=11)	1.16 (1.03–1.31)	1.17 (0.85–1.57)	1.13 (0.89–1.40)	1.00 (0.96–1.04)
Combined unexposed SA2s (n=11)	1.17 (1.06–1.30)	1.31 (1.02–1.66)	1.05 (0.86–1.27)	0.97 (0.94–1.00)

NB: although indirect standardisation is a more appropriate approach in this situation, the counts for some of the SA2s were nonetheless so small that the SIRs were associated with very wide confidence intervals, indicating imprecise estimates, particularly for liver and kidney cancers.

When the SIRs for the individual SA2s were examined, the SIRs tended to be slightly higher for the exposed SA2s compared to the partially exposed or unexposed SA2s. However, these differences were generally not statistically significant, nor were there any clear patterns within the exposure groups, that is, the SA2s within the exposed group did not have consistently higher SIRs for the cancers of interest (Appendix I).

Despite the small numbers, one of the main findings is that the observed rate for kidney cancer in Raceview (an exposed SA2) was 2.7 times higher than the expected rate (SIR 2.67, 95% CI: 1.82–3.77, in contrast to the pooled results for kidney cancer in the exposed SA2's (SIR 1.29, 95% CI: 1.03–1.59. Appendix I).

5.7.4 Summary and conclusion

Overall, the observed rates of selected cancers and all cancers for the exposed area were not statistically significantly different from those for the partially exposed or unexposed areas. The higher number of observed versus expected cases (SIR >1.0) within an SA2 for a particular cancer could be due to random variations of cancer incidence. It is possible the higher number

in the exposed group could also be linked to other explanations including lifestyle factors other than the exposure of interest as some of the unexposed SA2s had higher rates of some cancers. For example, the observed number of liver cancer in Inala–Richlands (an unexposed SA2) was nearly three times the expected numbers, despite this SA2 being outside of the exposure area (21 compared to 7.1, SIR 2.95, 95% CI: 1.83–4.51. Appendix I).

Based on the above findings, risk communication is proposed. The observed difference of selected and all cancer rates, most of which are not statistically significant, may be considered as random variations rather than due to the exposure in question. Accordingly, these results may be communicated to the affected community. Risk communication is crucial for building trust and ensuring risk management decisions are transparent and credible¹⁰⁹.

5.8 Nontuberculous mycobacterial infections in Ripley/Swanbank/Ipswich region

During the course of interviews held with community members, one individual explained they had experienced an uncommon bloodstream infection with a Nontuberculous Mycobacterium (NTM) and had heard of others in the community with similar infections. The individual expressed concern this infection might be related to dust or water from the industrial areas. The Inquiry asked Professor Rachel Thomson, an internationally recognised expert in the field from the University of Queensland, to determine whether an epidemiological association existed. Professor Thomson's report appears below with some details redacted to preserve patient confidentiality.

In brief, no association between NTM infection and residence near the industrial areas could be identified (noting that because of the rarity of this infection, numbers are small).

Nontuberculous mycobacteria

Pathogenic NTM comprise many species and strains found in water and soil. NTM have been isolated from drinking water pipelines, water tanks, hot tubs, residential faucets, hospital faucets and ice machines, diagnostic laboratories, bottled and municipal water, commercial and hospital ice, potting soil, house dust, water damaged building materials, showerheads, shower aerosols, hot- tub aerosols, coniferous forest soils, brook waters, cigarettes, livestock, coastal mosses and seawater. Reports span multiple countries (including the USA, Australia, the UK, France, the Netherlands, Denmark, Czechoslovakia, Italy, Finland, Germany, Madagascar, Tanzania, Taiwan, Japan and Korea) and various climates. While many isolates were not directly associated with human disease, these reports show that NTM reside in a variety of natural and artificial environments¹¹⁰.

Inhalation of aerosols appears to be the primary transmission route of NTM causing pulmonary disease. This usually occurs in artificial water environments such as hot-tubs and

showers but may involve garden soil and house dust. Mycobacteria may aerosolise more readily than other bacteria as they have highly hydrophobic cell walls. NTM have been isolated from natural water environments in which aerosolization increases the concentration of NTM in the air^{111,112}.

To elucidate NTM disease risk, clinical and environmental NTM strains need to be matched to identify critical environmental reservoirs and routes of transmission. Species-level identification of NTM isolates is sufficient to determine the presence or absence in an environment, but strain level identification is required when matching clinical and environmental isolates. A review of studies where clinical and environmental strains of mycobacteria have been matched and a discussion of the limitations to the methodologies employed was published in 2015¹¹⁰.

There are many areas of uncertainty in the epidemiology of NTM disease, as pathogenicity varies between species, contamination of human samples from environmental sources is common (for example, dust particles and fomites that contain NTM may contaminate samples and the laboratory process), and clinical reporting is not standardised. Furthermore, there is likely to be a lag time between infection and clinical presentation, making it difficult to accurately determine specific exposures and risk factors linked with infection. In most countries, NTM disease is not a notifiable condition and high-quality data are often not available. The state of Queensland in Australia has maintained a mandatory reporting scheme for NTM infections since the introduction of tuberculosis control around 1950. All cases of NTM are notifiable under the Queensland Public Health Act and associated regulations (Parliamentary Counsel, 2005) and recorded in the Notifiable Conditions (NoCS) database. The availability of NTM data over many years, together with Queensland's large geographic expanse over many climatic zones, has provided a unique opportunity to examine epidemiological associations over time and space.

Relevant information about the case

The case in question had three samples positive for NTM. The first was a positive blood culture on 22 December 2023. The laboratory was unable to identify the isolate to the species level, but antimicrobial susceptibility testing noted it was unusually sensitive to multiple antimicrobial agents. Portacath fluid was sampled in January 2024 and an NTM organism was isolated, but not identified by MALDI-TOF. 16S rDNA gene fragment sequencing identified the isolate as most closely resembling *M. fortuitum/acetamidolyticum* with 98.77 per cent similarity; *hsp65* gene fragment sequencing identified it as most closely resembling *M. diernhoferi* (95.63 per cent similarity); this organism had the same antimicrobial susceptibility pattern as the organism identified in blood culture. These isolates were notified to the Queensland Health Notifiable Conditions (NoCS) database as 'NTM not typed.' A further positive blood culture was reported in December 2023 and no identification was reported.

The *M. fortuitum* group (**MFG**) currently includes 17 NTM species *M. alvei*, *M. boenickei*, *M. brisbanense*, *M. conceptionense*, *M. farcinogenes*, *M. fortuitum* (subs. *fortuitum/acetamidolyticum*), *M. houstonense*, *M. neworleansense*, *M. peregrinum*, *M. porcinum*, *M. senegalense*, *M. septicum*, and *M. setense*¹¹³. At the time of the 2015 review, there were no

published studies that had identified definitive matching of *M. fortuitum* strains from patients and the environment. *M. fortuitum* subspecies *acetamidolyticum*, first reported in 1986, is a nonphotochromogenic mycobacterium with an intermediate growth rate. It shares 94 per cent DNA homology with *M. fortuitum*, but has a different mycolic acid pattern, therefore was designated as a subspecies of *M. fortuitum*. It was isolated from a 56-year-old patient with lung disease and considered to be a lung pathogen¹¹⁴. This is the only case report of human infection due to this subspecies specifically, in the literature to date, though not all studies report or identify MFG isolates to the subspecies level.

Several members of the MFG are implicated in human and animal diseases. *M. fortuitum* is recognised as a cause of pulmonary, bone, skin and soft tissue diseases following surgery and catheter-associated infections¹¹⁵. *M. fortuitum* group has been widely reported in environmental sampling studies. Twelve MFG species have been isolated from the environment and non-vertebrates, including from peat, soil and earthworms, aquariums and fishponds, prawns used for fish feed and aquarium plants, alluvial wooden material in karstic caves. Only five MFG species have **not** ever been reported in the environment (including *M. fortuitum/acetamidolyticum*)¹¹³. MFG species were identified in drinking water from Brisbane Drinking Water Distribution system sampling in 2007–08. Nineteen isolates were identified using 16s rDNA gene fragment sequencing¹¹⁶. It is not known if any of these were subspecies *acetamidolyticum*. However, when these water isolates were compared to 53 clinical isolates from patients received by the Queensland Mycobacterium Reference Laboratory in the same time period, none were closely related¹¹⁷. Eleven cases of *M. fortuitum* infection in Queensland patients with laparoscopically inserted gastric bands was reported in 2014¹¹⁸.

NTM and landfill

Studies of the microbiological composition of landfill, and of the biocover remediation of landfill sites to reduce odour, have a reported mycobacteria (not identified to species level)¹¹⁹. Methanotrophs (bacteria that utilise hydrogen sulphide and reduce odour) include mycobacteria, and they have been reported in remediation of landfill sites, particularly in warmer temperatures¹²⁰. They have also been reported to contaminate aquifers adjacent to landfill remediation sites¹²¹. In a geospatial analysis of NTM in Queensland, soil pH was identified as a significant predictor variable for *M. fortuitum* group infection¹²².

Queensland NTM notification data

NTM infections in Queensland are notified to the NoCS database, with each notification defined as an incidence case. In this study, all NTM notifications in Queensland, Australia from 1 January 2016 to 31 December 2024 were used. For notifications, if a positive culture is received after a 12-month period from the initial specimen collection (regardless of how many positive cultures were received during that 12-month period), this is classified as a new incidence case. For notifications where the individual had multiple species in a single infection, incidence was duplicated per species. Patient demographic data included age at specimen collection, sex, Indigenous status, sampling dates, and residential address

(including suburb, LGA and Hospital and Health Service). Clinical and microbiological data including site of infection, specimen type and NTM species were also available.

Calculation of NTM incidence rates and suburb population data

The digital boundary files of all suburbs and localities (**SAL**) in Australia, 2021 (ASGS Edition 3) was obtained from the ABS (<https://www.abs.gov.au/statistics/standards/australian-statistical-geographystandard-asgs-edition-3/jul2021-jun2026/access-and-downloads/digital-boundaryfiles>). A subset of the LGAs of Brisbane, Ipswich and Logan was used for ease of visualisation. The centroid of the Swanbank suburb, a 5 kilometre and 10 kilometre radius from the Swanbank centroid, and all suburbs that intersect with these radii were calculated from the SAL digital boundary files.

NTM incidence rates (based on the NTM notifications data) were calculated per suburb per 100,000 population. Incidence rates were initially averaged over the 9-year period. Suburb population data was obtained from the 2021 Census data from the ABS (<https://www.abs.gov.au/census/find-census-data/search-byarea>).

For the suburbs with the highest NTM incidence rates overall (n=21), the incidence rate per year (2016-2024) was calculated by dividing the NTM notification counts for that year by the Census 2021 suburb population and extrapolated to 100,000 population for standardisation. Geometry calculations and plots of (i) NTM incidence rate averaged over the 9-year period for suburbs within the 10 kilometre radius from the centre of Swanbank, (ii) NTM incidence rate per year of the top 21 suburbs with the highest NTM incidence rates within a 10 kilometre radius of the centre of Swanbank, (Figure 16) and (iii) a count of each species for the top 21 suburbs were generated using the *sf* v1.0-16, *dplyr* v1.1.4, *tidyverse* v2.0.0 and *ggplot2* v3.5.1 packages in R v4.2.2. (Figure 17).

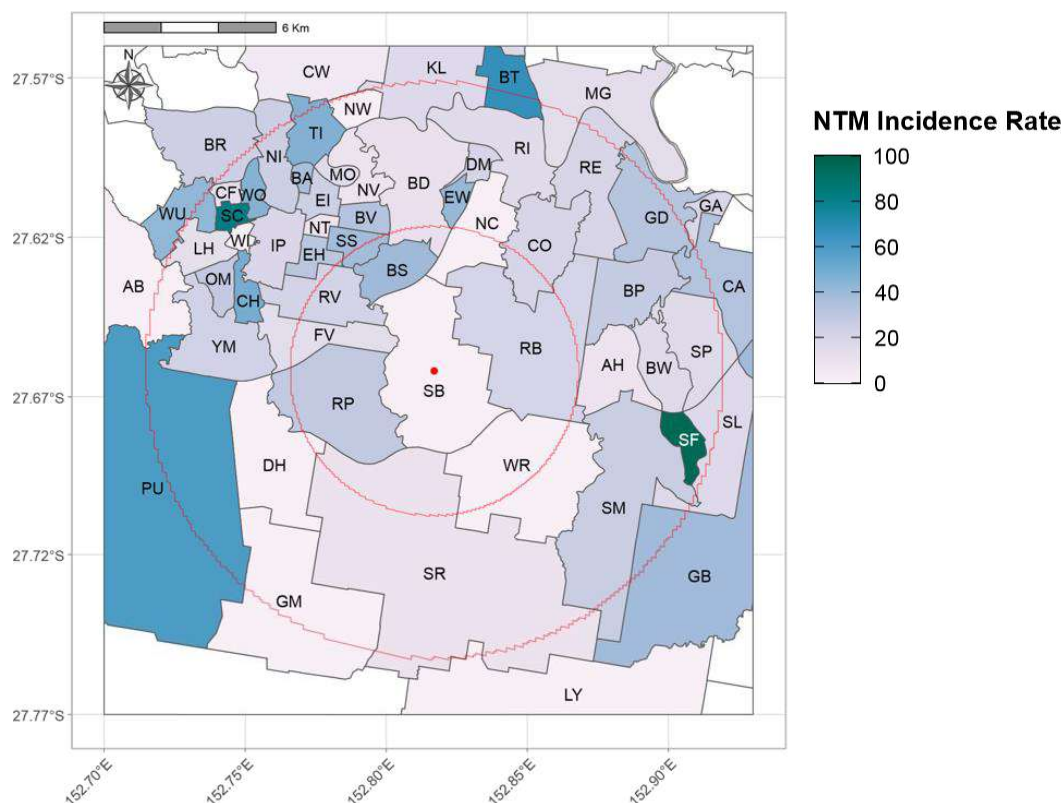


Figure 16. NTM incidence rate 2016–24 (averaged over 9-year period) for suburbs within a 10 kilometre radius of the centre of Swanbank

Suburbs							
AB	Amberley	CW	Chuwar	MO	Moores Pocket	SC	Sadlers Crossing
AH	Augustine Heights	DH	Deebling Heights	NC	New Chum	SF	Springfield Central
BA	Basin Pocket	EH	East Ipswich	NI	North Ipswich	SL	Springfield Lakes
BD	Bundamba	EI	Dinmore	NT	North Tivoli	SM	Spring Mountain
BP	Bellbird Park	EW	Eastern Heights	NV	North Booval	SP	Springfield
BR	Brassall	FV	Ebbw Vale	NW	Newtown	SR	South Ripley
BS	Blackstone	GA	Gailes	OM	One Mile	SS	Silkstone
BT	Barellan Point	GB	Greenbank	PU	Purga	TI	Tivoli
BV	Booval	GD	Goodna	RB	Redbank Plains	WI	West Ipswich
BW	Brookwater	IP	Ipswich	RE	Redbank	WO	Woodend
CA	Camira	KL	Karalee	RI	Riverview	WR	White Rock
CF	Coalfalls	LH	Leichhardt	RP	Ripley	WU	Wulkaraka
CH	Churchill	LY	Lyons	RV	Raceview	YM	Yamanto
CO	Collingwood Park	MG	Moggill	SB	Swanbank		

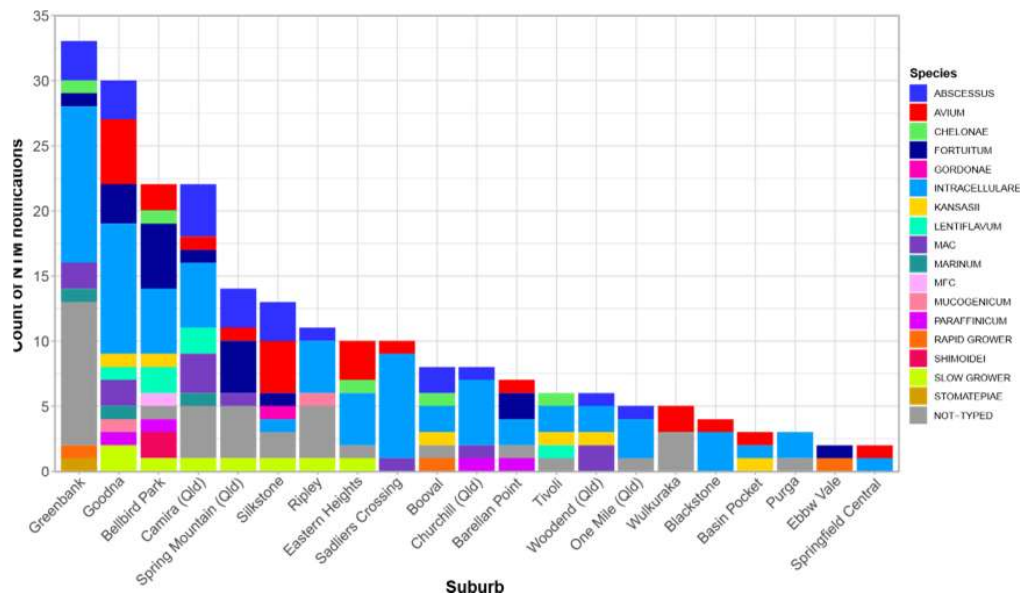


Figure 17. Species counts for the top 21 suburbs with the highest NTM incidence rates within a 10 kilometre radius of the centre of Swanbank

NTM notifications in the Swanbank vicinity

Between 2016–2018 there were 16 notifications of positive isolates of *M. fortuitum* group from people living in the Ipswich area, and 28 notifications from 2019–24. However, these notifications only included cases where *M. fortuitum* complex was definitively reported by the laboratory. For the case in question, it was not reported as such, only ‘Mycobacterium not-typed.’ Therefore, there may be other cases, reported similarly that have not been identified using NoCS data. An individual manual search of the laboratory database backnotes for each individual notification (74 records for 2016 to 2024) that was recorded as ‘Mycobacteria not typed’, or ‘rapid grower not speciated’, would be required to identify any other potential cases. Due to time and resource constraints this has not been performed. Of note, for those notified as *M. fortuitum* group, the subspecies was also not named in the NoCS reporting.

Other cases in Ripley

During the time period 2016 to 2018, there were two notifications of NTM in Ripley (both from sputum and not speciated). From 2019 to 2024 there were six individuals notified with NTM infections. One individual had three notifications (*M. intracellulare* separate infections 2018,2022; *M. abscessus* 2023), another individual had two notifications (*M. intracellulare* 2022 and 2024).

None of the 2016 to 2024 *M. fortuitum* group notifications had a residential address in Ripley or South Ripley, two resided in Flinders View, two in Raceview, one each in Silkstone, Collingwood Park and Booval, three in Redbank Plains and none in Eastern Heights.

NB: the case in question was notified as 'Mycobacteria not typed.'

As environmental organisms that naturally aerosolise from soil and water, it is highly likely there is NTM aerosolisation from the Swanbank site. As the prevailing wind in the area is south easterly, it is feasible the higher notifications of NTM in the suburbs north east of the Swanbank site relate to a higher environmental exposure of residents living in those areas. Refer to Figure 17.

Conclusion

There are multiple environmental factors that may influence NTM disease distribution, including soil variables (for example, top soil depth, pH, nitrogen content), agricultural land use, prevailing winds, climatic events (such as floods, storms, cyclones, dust storms), proximity to surface water, surface water heavy metal concentrations (molybdenum, vanadium), and factors associated with drinking water distribution systems, such as method of disinfection, distance from water treatment plants, bioavailable carbon, and plumbing factors in the home, such as pipe diameter, and hot water storage temperatures.

NTM exposure for Queenslanders in other areas of the state may be equal or higher than for those in the Swanbank vicinity, as demonstrated in previous geospatial analyses^{122,123}. For the individual case in question, the infecting strain has almost certainly come from an environmental source, however proving which source is impossible without widespread environmental sampling (including aerosols) and strain typing of organisms, as there have not been previous similar strains identified from environmental sampling done to date. Humans also frequent multiple environments in day-to-day life and determining which contributed to the infection is also impossible.

The data presented here are raw population data, and no statistical analysis has been performed to account for any of the variables listed above, which may confound the interpretation of the results, that is, proximity to the Swanbank site may not explain the incidence rates seen and other factors should be taken into consideration, including individual host risk factors. Each suburb of interest had relatively small numbers of NTM cases, which also makes statistical analysis and interpretation difficult.

In summary, NTM are environmental organisms, and will be present in landfill and biocover used for remediation of sites such Swanbank. However, there are multiple environmental sources of NTM, and individual host risk factors that influence the risk of acquiring infection. There is limited definitive evidence that residence in the vicinity of Swanbank poses an excess risk of acquisition of an NTM infection than other areas of the state.

5.9 Overview of health impacts

Chapter 5 concludes with a summary providing an overview of the frequently reported health risks associated with odour exposure for residents living near landfill, composting and other relevant waste management facilities from the published medical literature.

The symptoms people attribute to the odours described earlier in this chapter are consistent with those described in this section.

Where possible, this review considered research most closely aligned with the context at the industrial areas that are the subject of the Inquiry: it endeavours to consider examples from similar industries, and exposures below toxic and other threshold levels. It integrates systematic reviews, meta-analyses, and community studies.

Several limitations are noted:

- Most community studies rely on self-reported symptoms rather than objective clinical measures.
- Cross-sectional designs are common in the literature, which limit causal inference.
- Exposure assessment is challenging, with few studies directly measuring personal exposure.
- Multiple potential confounders exist in community settings, including socioeconomic factors, pre-existing health conditions, attribution bias, and other environmental exposures.
- Publication bias may favour positive findings over negative or null results.

In these circumstances, five important insights should be noted:

1. Odour annoyance and stress are strong mediators for a range of health conditions. Chronic exposure may result in elevated cortisol levels, exacerbating mental and physical health. Even if a symptom is psychosomatic, it can significantly impact quality of life.
2. Dose responses are noted in the research for a range of conditions, suggesting closer proximity and higher odour frequency and intensity may increase risks.
3. This literature review acknowledges more research is needed to determine the role that low level exposures play in generating these health conditions.
4. This summary finds support for physiological and psychological mechanisms across a range of conditions. For other conditions, there is weaker evidence when research was examined in the context of the relevant industrial areas.

5. Research suggests that interventions that reduce ambient pollutants, but which do not eliminate all odours, may not remediate the concerns and anxieties of residents.^{68,124}

The evidence on a range of health conditions is provided in Table 22.

Table 22. Overview of evidence on health conditions associated with relevant odours

Domain	Condition	Overview of evidence
Respiratory	Nasal congestion and irritation, including: <ul style="list-style-type: none"> sneezing hay fever 	<p>Nasal complaints arising from landfill and composting odour are frequently reported in field studies and reviews.^{39,43,49,61,64,84,125-129} Most commonly, these report nasal congestion and/or irritation. Other complaints like sneezing and hay fever-like symptoms (for example, tickling nose) are infrequently reported,^{39,68,127} with the possibility that these and other similar conditions are included as subsets of nasal congestion and irritation.</p> <p>The response to odour, detected by the olfactory receptors of the nasal epithelium, may result in vasodilation which can result in nasal obstruction, mucus secretion and inflammation.⁶⁴ This may occur in response to irritation arising from ambient bioaerosols and VOCs^{47,130} and in instances of stress-mediated responses derived from odour annoyance.^{64,84} Some reviews also acknowledge the risk of confounding associated with pre-existing conditions and potential for attribution bias.¹³¹⁻¹³³</p>
	General, including: <ul style="list-style-type: none"> cough shortness of breath throat irritation 	<p>General respiratory complaints are commonly reported by residents in response to malodour.^{34,36,64,84,92,129} The strength of the association is moderate for general complaints, with annoyance and stress potentially worsening the conditions.^{36,45}</p> <p>In many reviews, respiratory conditions are often aggregated together which makes individual symptom reports harder to ascertain. Cough, shortness of breath and throat irritation are frequently reported.^{39,84} One review noted that associations with cough had a biological plausibility, potentially arising from odour modulating autonomic system responses or stress.⁶⁴ One cross-sectional study involving a composting site found an association with cough,⁹⁴ however several reviews considered this paper and caution should be exercised with its self-reported methodology.</p> <p>Similarly, there was evidence for breathlessness and throat irritation moderated by odour annoyance^{49,84}.</p>

Domain	Condition	Overview of evidence
Neuro- psychological	Headache	Reviews found that headaches are commonly reported near composting and landfill facilities at statistically increased rates for exposed populations. ^{34,39,64} It is reported at lower exposure thresholds for a range of odorous gases. ³⁶ The evidence supports a moderate association, with odour intensity, stress, and annoyance often playing a role in the frequency and intensity of headaches. ^{61,64,66}
	Sleep disturbance	Sleep disturbances are frequently documented by residents near odour-producing facilities. ^{34,49,129,134} Its association is noted with exposure to low levels of a range of odorous gases. ³⁶ The relationship is primarily mediated by odour annoyance rather than direct physiological effects. ⁶⁴ Sleep disruption is likely to be a stress response, which in turn affects overall health. ^{45,61}
	Fatigue	Reviews report that fatigue is one of the most common associations with regular odour exposure. ^{34,42,64,134} While it is most likely to result from a regular disruption to the sleep cycle, it is also associated with reports of negative mood and mental health. ^{51,134} Because of its relationship to impacted sleep, fatigue is associated with exposure to low levels of a range of odorous gases, ³⁶ and the relationship is primarily mediated by odour annoyance rather than direct physiological effects and it is likely a stress-related reaction. ^{39,64,66}
	Mental health, including: <ul style="list-style-type: none"> • anxiety • depression • mood 	<p>An association has been documented between proximity to odorous waste facilities and mental health conditions.^{34,74,129,134} It is associated with odour annoyance, the unpredictability of the odour and the inability to defend oneself from it.³⁶ The resulting psychological distress can include anxiety and depression symptoms.</p> <p>One report noted that environmental stressors affect wellbeing when they exceed human adaptive capabilities.⁸⁴ It found an association between the number of physical symptoms and anxiety and mood disorders.⁸⁴</p> <p>The impact on mental health appears mediated by odour annoyance and risk perception rather than biological mechanisms, with reviews finding that exposure was associated with negative mental health outcomes.^{64,92}</p>

Domain	Condition	Overview of evidence
Allergy	Asthma (allergic) and airway	While the condition was covered in several reviews, there is limited evidence of causation. ⁴⁸ One review suggested an association between airway inflammation and bioaerosols but there is limited evidence of causation. ⁴² Another found mixed evidence for asthma exacerbation in residents. ⁴⁵ A further review noted some connections to respiratory effects, but evidence of increase asthma risk was not found. ³⁴ Elsewhere, it was noted that there are some suggestive associations with asthma, but the evidence is sparse. ⁶⁴
	Eye	Eye irritation often features as a self-reported symptom in malodorous environments. ^{34-36,45,49,61,64,68,84,94,129} In environments where bioaerosols and irritant gases are below threshold levels, it appears the mechanism for this symptom is likely to be mediated by odour annoyance, ^{64,84} however the possibility of an allergic reaction low levels of odorous compounds may be plausible. ¹³⁵
	Skin, including: <ul style="list-style-type: none"> dermatitis psoriasis eczema 	Several reviews note the potential for skin irritation given associations with various compounds produced from waste management. ^{39,40,64,132} However, there is limited information to associate skin conditions arising from odour exposure below threshold levels from landfill and composting facilities. ¹³⁶ In these circumstances, there are suggestions this issue may arise through stress and annoyance, or be associated with attribution bias. ¹³³ One review noted this was an area where further research is required. ⁴⁰ Other reviews did not specifically address this health issue.
Gastrointestinal	Nausea, including vomiting	Gastrointestinal symptoms represent another common category of complaints associated with odour exposure and intensity, although these may be primarily mediated through stress responses and autonomic arousal rather than direct effects. ^{35,61,137} An association exists between nausea and proximity to composting and landfill facilities. ^{34,51,52,132} Research has acknowledged links with the level of odour exposure and nausea symptoms, with a strong association with odour annoyance and stress. ^{39,49,51,64,66} Unpleasant odours are also able to modulate autonomic system responses, such as vagal nerve inducing nausea or vomiting. ^{62,64,137}

Domain	Condition	Overview of evidence
Public concern	Cancer	<p>There are numerous methodological issues in studies that describe potential cancer risk.¹²⁵ Caution must be exercised when interpreting such literature, especially given their limited relevance where odorous compounds do not exceed toxic thresholds.</p> <p>In a thorough systematic review of risks across a range of solid waste management types, no evidence was found to suggest an increased cancer risk.³⁴ No causal link is evident between residents living near waste management facilities and increased cancer risk.^{34,48} It is noteworthy that studies investigating different cancer types (including kidney cancer) found there was no evidence of association between cancer and odours from landfill and composting sites, and that more plausible associations with cancer could be attributed to smoking patterns and other lifestyle factors.¹³⁸⁻¹⁴⁰</p>

Part B—Response to the odour



Site visit to the industrial areas, January 2025

Part B of the report addresses the challenges experienced within the industrial areas, the response from key stakeholders and an overview of the regulatory framework.

6 Stakeholder response

This chapter provides a summary of measures taken by DETSI, the community, the Public Health Unit, ICC and industry to respond to odour issues and health concerns from the industrial areas.

6.1 DETSI

The information in this section has been drawn from the DETSI submission to the Inquiry⁸.

6.1.1 Overview of historical actions related to odour

Odour issues have been experienced by residents surrounding the industrial areas for some time and since 2013, there have been increases in the number of reported odours during certain months of the year. DETSI has undertaken various actions and activities to address increasing odour concerns.

The scope of the Inquiry was to consider any evidence from 2016. The Inquiry understands that prior to 2018, DETSI managed complaints regarding odour at a local level.

Community survey

As part of a process to provide an opportunity for the community to express their concerns regarding odour experienced in the area, DETSI commissioned a community survey for three weeks from 16 April 2018 in the suburbs surrounding the industrial areas.

The objectives of this survey included the following:

- better understand community opinions
- gain further insight into the odour residents were being exposed to
- seek opinion on how the odour issues could be managed
- to determine environmental aspects of the greatest interest to the community.

The survey results were used to inform improvements in DETSI's targeted monitoring program, support actions to manage odour generating commercial activities, increase public awareness of the work being undertaken to manage nuisance and waste issues and improve communication and engagement with the community.

At the close of the survey period, around 800 community members had provided responses to the telephone survey and over 500 residents had responded to the online survey. The results of the online survey were released on 19 July 2018, the same day DETSI's Odour Abatement Taskforce (**the Taskforce**) was launched.

In summary, half of the respondents (52 per cent) had noticed an odour nuisance in the local area and about six in ten (57 per cent) were concerned about local air quality.

One year later, a follow up survey was released to the community including questions from the original survey as well as questions specific to the objectives of the Taskforce. The survey was open for 16 days and generated 1359 responses from the community.

The follow up survey found three in five respondents were aware of the Taskforce and that sensitivity about odour remained elevated within the community with one in three respondents still noting odour as an environmental concern.

Odour Abatement Taskforce

Upon its launch in July 2018, the Taskforce initially comprised of a team of specialist compliance, technical, community engagement and intelligence officers, with a remit to engage directly with the community, to identify and develop community and regulatory responses to industrial sources of odour nuisance and other environmental issues. The Taskforce was responsible for:

- intensively examining and reviewing current industry regulation and practice
- reviewing EA conditions against contemporary standards
- proactively engaging with industry stakeholders and encouraging environmental stewardship
- providing an additional on-ground presence and proactive engagement with local communities
- introducing new technologies to monitor air, noise and water quality.

This Taskforce substantially increased DETSI's presence and visibility in the community, through daily odour surveys, letterbox drops, community drop-in sessions, branded vehicles and a shopfront in Redbank Plains. Within three years, DETSI collected over 10,200 community odour reports, conducted over 3000 community interactions and issued over \$130,000 in fines to non-compliant operators.

Within a few weeks of commencement of the Taskforce, DETSI identified the industry types believed to be the main odour sources in the industrial areas and composting operators became a focus for compliance activities.

Review of composting operations

In 2019, DETSI engaged an external consultant to undertake a review and prepare two reports on The Critical Evaluation of Composting Operations and Feedstock Suitability, Phase 1 (https://environment.desi.qld.gov.au/__data/assets/pdf_file/0024/226293/phase-1-composting-study-report.pdf)²⁵ and Phase 2 (https://environment.desi.qld.gov.au/__data/assets/pdf_file/0022/226291/phase-2-composting-study-report.pdf)¹⁴¹ (**critical evaluation reports**). The Phase 2 report was also independently reviewed by a third party.

In May 2020, the reports were accepted by the Director-General of the then Department of Environment and Science as recognised entity reports (Phase 1 and Phase 2). Acceptance of a report as a recognised entity report provided DETSI with a statutory power to commence a licence amendment process under section 215 of the EP Act.

The recognised entity reports were also used to:

- Develop DETSI's Best Practice Environmental Management Environmentally relevant activity 53(a) Organic material processing by composting guideline (https://www.des.qld.gov.au/policies?a=272936%3Apolicy_registry/era-gl-bpem-composting.pdf)²⁹. This best practice guideline replaced previous guidance (Guideline Open windrow composting under ERA 53(a) Organic material processing by composting).
- Update DETSI's Model operating conditions for ERA 53(a) Organic material processing by composting. The model operating conditions provide a framework of conditions for an EA to carry out ERA 53(a). However, they are not mandatory conditions.
- During 2020 and 2021, DETSI continued to invest resources and effort towards understanding the source of odour within the industrial areas. Actions included:
 - Introducing new technology, from a third-party provider, Envirosuite, to improve prediction of odour events and monitor weather conditions enabling officers to respond to issues in real time.
 - Commencing a 12-month trial using 'e-noses', an odour detection system designed to alert officers to the possibility of an odour event occurring to facilitate timely inspections.
 - Introducing drones to undertake aerial inspections at facilities to measure the volume of stockpiles and to check compliance of site activities with approvals.
 - Trialling thermal imaging drones to undertake aerial inspections at facilities and to measure odour generation and movement within the Ipswich area.

In March 2021, the consultant engaged to develop the critical evaluation reports was commissioned to develop an Organic Odour Feedstock Rating Report (https://environment.desi.qld.gov.au/__data/assets/pdf_file/0023/340727/organicfeedstockodourrating.pdf)¹⁴² for DETSI. This report complemented the previous critical evaluation reports by outlining an approach for the assessment of odour potential for:

- Feedstock which is not listed in the critical evaluation reports.
- Feedstock that has been mixed at the point of generation (comprising of two or more feedstocks listed in the critical evaluation report, such as food organics garden organics, or FOGO).

In July 2021, DETSI updated the model operating conditions in the revised composting guideline to reflect the updated best practice guidance, with subsequent minor updates being made after the Organic Feedstock Odour Rating Assessment Report was published in June 2023.

Following the major updates to the model operating conditions in 2021, a dedicated team was established to modernise composting licence conditions across the State. This EA amendment process is subject to a notice of proposed amendment and subsequent review processes and therefore attempts to amend EAs through this process were resource intensive and protracted. Operators were initially encouraged to adopt contemporary conditions voluntarily and amend their EAs by agreement and while there was some success in various parts of the State, operators in and around the industrial areas generally did not agree to the amendments being made to their EAs.

Significant rainfall event

In 2022, following the February intensive rainfall event in South East Queensland, there was a significant spike in odour reports, which was attributed to the Cleanaway Solid Waste Pty Ltd's (**Cleanaway**) New Chum landfill. DETSI identified Cleanaway as the major source of the odour due to large volumes of water ponding in a landfill cell and mixing with leachate.

The water became contaminated with wastes from the site and this mixture became anaerobic through fermentation, releasing hydrogen sulphide.

DETSI issued notices to Cleanaway imposing requirements to treat and remove odorous water, undertake onsite air monitoring, investigate fugitive emissions and develop and implement a gas management plan. DETSI also undertook inspections seven days a week for an extended period of time to monitor compliance and gather evidence to take further enforcement action if required to address the odour issue.

By October 2022, the affected cell was empty of water, community complaints about odour issues had significantly reduced and air monitoring results were generally below nuisance levels.

In March 2023, DETSI charged Cleanaway with a number of offences in relation to its New Chum facility, including wilfully causing an environmental nuisance relating to odour in 2022. The specific charges were:

- One offence contrary to section 440(1) of the EP Act for wilfully and unlawfully causing an environmental nuisance.
- One offence contrary to section 430(2) of the EP Act for wilfully contravening a condition of an environmental authority (EA).
- Ten offences contrary to section 430(3) of the EP Act for contravening a condition of an EA¹⁴³.

Response to odour issues

DETSI's response to odour issues in the industrial areas has evolved as more information has been obtained about the odour and the key odour generating sites have been identified.

In response to increasing community reports in early-mid 2023, DETSI bolstered its compliance teams, its compliance activities in and around the industrial areas, and further coordinated internal teams to deliver a five-point action plan focused on:

- increased targeted compliance inspections, including multi-agency operations, and strong enforcement action against non-compliant operators
- enhanced community engagement through actively meeting with a community reference group, increasing community presence through regular drop-in sessions and publishing regular community newsletters
- expanding the long-term air monitoring capability by employing new technology and equipment
- legislative changes to improve and clarify compliance and response powers based on recommendations from an independent review including odour nuisance issues offences
- modernising licence requirements for composting facilities.

In executing the five-point plan, DETSI undertook a 42 per cent increase in the number of inspections conducted each year.

Enforcement action

In addition to community engagement and the use of technology and enhanced regulatory presence in the industrial areas, DETSI has taken enforcement action against operators for non-compliance at different times over the past decade. Not all enforcement action taken by DETSI may be disclosed to the public as DETSI is, for example, bound by legislation governing this information and its role as a model litigant.

Most recently, DETSI has had outcomes through the Courts including:

- In September 2024, DETSI's application for a restraint order was granted by the Planning and Environment Court, against NuGrow Ipswich Pty Ltd in relation to odour. This involved an investigation by DETSI and the contribution of over 70 firsthand accounts from community members who detailed their experiences about being impacted by odour.
- Cleanaway advised the Inquiry they received a penalty of more than \$600,000 in November 2024 after pleading guilty to seven offences relating to odour nuisance that impacted surrounding residents in 2022. This also included a public benefit order of \$212,000 directly funding community projects.

A summary of actions taken by DETSI to address odour issues since 2018 is included in Appendix J.

6.2 Community engagement, reporting and advocacy

6.2.1 Community engagement

DETSI has worked with ICC and Queensland Health to identify solutions to the odour issues and keep the local community informed.

DETSI has undertaken a range of community awareness campaigns since the commencement of its response to odour issues in the industrial areas in 2019. In 2023, community engagement was enhanced to provide a more regular and consistent approach. Engagement activities included:

- establishing a community reference group (CRG) including monthly meetings with a Swanbank CRG since 2023 to enable DETSI to engage with key community representatives on odour issues affecting Ipswich residents
- publishing community newsletters updating on current events within the area (at least monthly since September 2023)
- hosting scheduled community ‘drop-in’ engagement sessions with residents to discuss their concerns (including monthly during 2024)
- establishing a ‘shopfront’ and hosting ‘pop-ups’ at shopping centres and other venues to provide the community with more direct access to departmental staff
- ensuring air monitoring data is publicly available online.

There are currently over 2000 subscribers for the online newsletter. Targeted social media campaigns are run regularly to promote community reporting, drop-in sessions and inform on significant updates.

Queensland Health and other relevant agencies are invited to participate in drop-in sessions, CRG meetings and contribute to newsletter content. While this has resulted in the community being well-informed and having an open line of communication to DETSI, it has also drawn increasing attention to the odour problems within the industrial areas.

While DETSI provides regular updates to the Swanbank CRG and community through newsletters and drop-in sessions, DETSI is limited in what information can be published or made publicly available. For example, not all enforcement action taken by DETSI may be disclosed to the public. This is typically information the community has a high interest in and may add to the community perception that DETSI is inactive, causing frustration and a lack of trust in within the community.

6.2.2 Community reporting of odour

Industrial and commercial activities can create odours, but not all odours are unlawful. DETSI’s role is to investigate concerns about odour released by operators to determine if they have breached their licence or the EP Act.

DETSI has actively engaged with community groups and individuals within and surrounding the industrial areas for nearly 10 years by encouraging residents to communicate their concerns, particularly through promoting the use of the Queensland Government’s Pollution Hotline to report environmental nuisance relating to odour. Where possible, DETSI has been transparent with actions taken to address odour concerns.

DETSI does not conduct field inspections in response to every individual odour report. However, a field inspection may be conducted in response to multiple reports that indicate a

potentially significant pollution or nuisance event. Where there is evidence of operators not complying with their environmental obligations, DETSI will take the necessary enforcement action with the aim of ensuring ongoing issues are addressed.

The Queensland Government Community Reports webpage (<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/community-reports>) includes a dashboard showing the reports received by DETSI across Queensland. Data is updated weekly, can be filtered by a date range and is presented by:

- the nature of the concern
- description of the nature of concern
- description of the odour (if applicable).

During 2024, the majority of community notifications about odour originated from Redbank Plains, followed by Ripley, together representing approximately 60 per cent of community notifications received from the industrial areas.

Separate to the industrial areas, notifications relating to odour are also received from northern Ipswich suburbs (including Karalee, Barellan Point, Tivoli and North Tivoli), averaging 17 per month during the last 12 months (since April 2024). There are multiple potential odour sources in these areas that are regulated by DETSI including composting facilities, sewage treatment plants and an abattoir.

The impact of odour and subsequent community reports can be influenced by weather conditions. For instance, odour may be more noticeable during warmer months due to higher humidity, increased rainfall and rising temperatures. In cooler months, reduced air movement and temperature inversions can trap odours close to the ground, further intensifying their presence.

DETSI has noticed shifts in suburbs being impacted by odour over time. For example, most odour reports received in 2022 related to odour generated in the northern portion of the industrial areas around New Chum, while odour reports in 2023 and 2024 were concentrated to the south around Swanbank.

Since July 2018, more than 30,000 odour reports have been received statewide by DETSI with over 27,000 surrounding the Swanbank and New Chum industrial areas. During 2023, DETSI received more than 7000 odour reports relating to the industrial areas. In contrast, during 2024, the number of odour reports decreased significantly to approximately 2500. This was largely due to the resolution of odour issues at the Cleanaway site in New Chum. Figure 18 gives an indication of the number of odour related community reports received surrounding Swanbank and New Chum from 2016 to 2024.

Community members submit reports when they are experiencing odour impacts, which can result in affected households reporting multiple times during a reporting period. During the past six months, about 20 per cent of all community reports have been submitted from three individual households. Figure 19 presents an indicative comparison between the number of



households reporting and the total number of notifications received each month from September 2023 to December 2024.

It is possible the high proportion of reports being received from areas surrounding the industrial areas may be influenced by DETSI’s extensive community engagement programs to ensure all residents are aware of how to submit odour complaints.

DETSI regularly shares de-identified information provided in community reports that reference potential health impacts with Queensland Health. This includes commentary, including for example, residents feeling sick, coughing, having allergic reactions and breathing difficulties and getting headaches. In the six-month period from October 2024–March 2025, approximately 30 per cent of all community reports received mentioned health impacts.

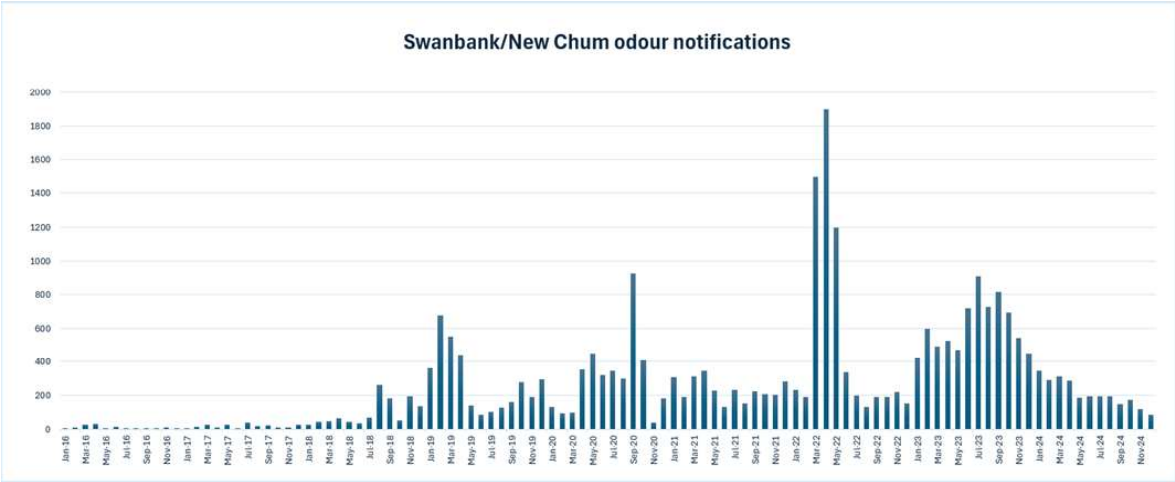


Figure 18. Swanbank and New Chum odour notifications from 2016 to 2024

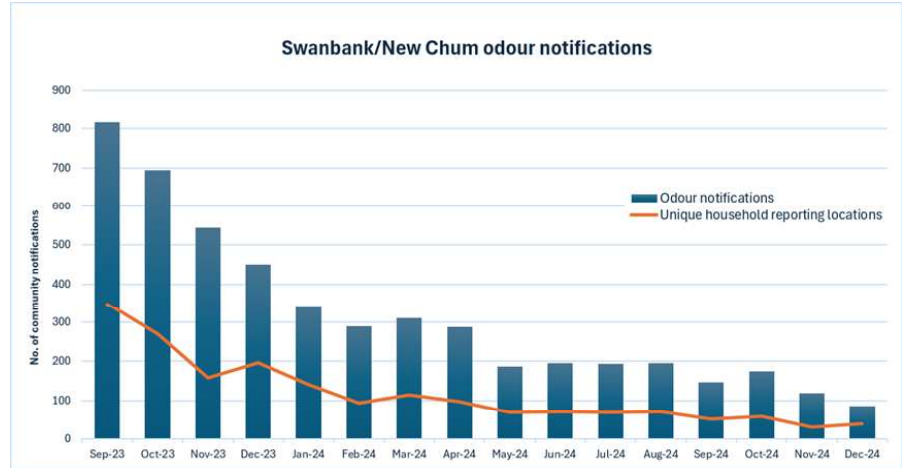


Figure 19. Swanbank and New Chum odour notifications from September 2023 to December 2024

6.2.3 Community advocacy

There are a number of community groups based in Ipswich who have been advocating on behalf of Ipswich residents regarding issues related to odour. Some members of these groups are also represented on the CRG.

The Inquiry is aware of the following:

Ipswich Residents Against Toxic Environments (IRATE)¹⁴⁴

IRATE is an apolitical, not-for-profit community action group originally formed to represent people from Ipswich suburbs including Dinmore, Riverview, Collingwood Park, Bundamba, Blackstone, Ebbw Vale, Redbank Plains, Booval, Ripley and Flinders View to take a united approach to a healthy environment for Ipswich residents.

IRATE submitted a comprehensive submission to the Inquiry.

Stop the Stink¹⁴⁵

Stop the Stink is a local Facebook page representing residents of Ipswich suburbs who are affected by odours from waste companies.

The page was created to allow residents affected by air pollution, particularly (but not exclusively) odours caused as a result of waste industry processes, to be able to share their experiences and to collaborate in taking action to 'stop the stink.'

Time to stop the stink of the waste industry in Ipswich – parliamentary E-petition

In September 2023, a parliamentary E-petition was launched calling on the Queensland Government to take action to combat the noxious air pollution impacting residents throughout the Ipswich region. The petition closed in February 2024 and received a total of 2242 signatures.

The E-petition was tabled in Queensland Parliament in February 2024 and was responded to by Hon Leanne Linard MP, then Minister for the Environment and the Great Barrier Reef and Minister for Science and Innovation (refer to Appendix K).

6.3 West Moreton Public Health Unit

WMPHUs written submission provided a detailed account of their involvement in odour issues from the industrial areas since 2016¹⁴⁶. A summary of key actions taken is detailed below.

WMPHU has:

- Provided public health advice to the regulator, community and general practitioners about the odour. Copies of the GP Health Alerts are available in Appendix L. This has included working in partnership with Queensland Health's Health Protection and Regulation Branch to provide advice on air quality monitoring, air quality sampling data and public information on health-related concerns.

- Participated in regular (and one-off) community forums to answer questions on health concerns from community members and provide health-related information.
- Developed public health fact sheets for community members and issued 'Health Alerts' to GPs in West Moreton, Metro North and Metro South Health. The Health Alerts aimed to inform GPs of the ongoing odour issues, with advice to report incidents to the WMPHU.
- Undertaken enhanced epidemiological analysis of most commonly notified cancers to determine if there is an increased incidence in the affected areas. This was done in response to concerns raised by the community about data published in the Australian Cancer Atlas. The analysis did not find an increased incidence, which was communicated to stakeholders and the community.
- Undertaken an epidemiological review of the notifiable condition data to determine if there was an increased incidence of selected notifiable conditions in the Swanbank area. The review compared six-years of notifiable condition data (2011–2016) on *Escheria coli* (Shiga-like toxin producing *E.coli*—STEC and Verotoxigenic *E.coli*—VTEC), Legionellosis, Q Fever and Salmonellosis in the Swanbank area of interest with the remainder of the West Moreton Hospital and Health Service catchment. The analysis found no increased risk for residents in the Swanbank area.

WMPHU has advised that although hydrogen sulphide levels at all monitoring sites are well below the health guideline values, some people could experience both physical and psychological symptoms. WMPHU believes odour can have profound physical and psychological effect on some members of the public.

WMPHU has not received any complaints from members of the public or referrals from local GPs for more than a year. Residents with symptoms are encouraged to visit their GP. Residents were also encouraged to call 13 HEALTH (13 43 25 84) for confidential health advice. GPs are encouraged to contact the WMPHU and speak to a public health physician for advice on health-related matters.

The Queensland Government published an update on their website on odour issues in the industrial areas in 2024 (<https://www.qld.gov.au/health/staying-healthy/environmental/pollution-air-quality/swanbank-odour-issue>)¹⁴⁷.

6.4 Department of State Development, Infrastructure and Planning

The Department of State Development, Infrastructure and Planning advised the Inquiry that Temporary Local Planning Instruments (TLPI) have been in place since 2018 covering the areas of Swanbank, New Chum, Ebenezer, Willowbank and Jeerbropilly. These TLPIs have provided increased protection to residential areas from the adverse impacts of the development of new or expanded landfills, as well as greater clarity to waste management operators¹⁴⁸.

On 14 February 2025, ICC received approval to adopt its new planning scheme from the Honourable Jarrod Bleijie MP, Deputy Premier, Minister for State Development, Infrastructure

and Planning and Minister for Industrial Relations. The new planning scheme embeds the existing provisions from the TLPI into the planning scheme, ensuring continued protections for the surrounding residential areas. The current TLPI will cease to have affect once new planning scheme is adopted by ICC¹⁴⁸. There is more information on the Ipswich Planning Scheme in section 8.6.4.

6.5 Ipswich City Council

ICC undertakes regular inspections, monitoring and compliance actions within the industrial areas¹¹. These activities are directly linked to ICC exercising its roles and responsibilities under the Planning Act and the EP Act. Importantly, ICC does not have responsibility for the compliance and enforcement of ERAs that are not devolved to Local Government. Odour specific issues from these activities are referred to DETSI as required.

However, ICC has taken steps to advocate on behalf of their community to resolve the odour issues. This includes strongly advocating for health-related concerns to be investigated by the Queensland Government, calling for stronger regulation and participating in regional forums on managing South East Queensland's waste.

ICC has received reports from residents who experience a range of health issues such as respiratory issues, migraines, sore eyes and sore throats. Residents believe these health issues are related to the chemicals in the air, primarily from waste operators 'who are not doing the right thing.'

ICC has published some frequently asked questions and a fact sheet on their website addressing odours from the industrial areas (<https://www.shapeyouripswich.com.au/waste-odours-ipswich>)¹⁴⁹.

6.6 Industry

Letters were sent to all odour-producing companies with ERAs operating in the industrial areas. This correspondence overviewed the scope of the Inquiry and invited a formal submission on their operations and activities, especially as they relate to the mitigation of odours from their premises. The Inquiry requested the formal submission address the issues below:

- When the company commenced operations at the Swanbank and/or New Chum industrial areas.
- The company's activities from 2016 to present and document any significant change or increase to activities over that time.
- Any documentation assessing odour from the company's premises and outlining the specific steps taken by the company to reduce odour.
- The contact details of consultants and/or contractors engaged by the company to advise and assist with the containment and mitigation of odour.

- The number and nature of complaints received by the company regarding odour from the premises since 2016.
- Details of any engagement with the community in relation to odour from their premises.
- Details of the health impact of odours on staff including the number of staff affected, occurrences, types of illness attributed to odours, and time off work.
- Any other general information the company deems relevant to the Inquiry.

A submission was received from 13 of the 24 companies. A submission was also received from WRIQ.

All companies who responded provided information on when their operations commenced and any significant changes to operations since 2016.

With the exception of Cleanaway, NuGrow, Remondis and WMI, companies reported no need, or regulator request, to respond to odour issues. Cleanaway, NuGrow, Remondis and WMI all reported having odour management plans and mitigation measures in place designed to assess and address odour emissions.

Cleanaway, NuGrow and WMI reported they were aware of complaints regarding odour from their premises. The other responses indicated there had been no complaints related to odour from their premises since 2016.

Cleanaway and Remondis reported they actively undertake community engagement to keep the community informed and undertake waste education sessions and guided facility tours.

The submission from WRIQ proposed a suite of possible solutions to resolve odour issues. These included:

- Creating a system that encourages and fast-tracks new technology innovations.
- Re-investing a greater proportion of the waste disposal levy into Queensland's waste recycling industry to ensure contemporary waste management technology and practices can be implemented.
- Improving Temporary Emissions Licence (TEL) processes and allowing for the release of clean treated water from the industrial areas.
- Developing a precinct strategy to guide long-term land use, precinct planning and infrastructure delivery including updated flood mapping, groundwater management, permanent pathway for stormwater, shared responsibilities for rehabilitation of historical contamination issues, odour monitoring and industry transformation timelines.
- Developing a comprehensive waste recycling and infrastructure planning strategy for South East Queensland.
- Ensuring a stable policy and regulation environment for waste management.
- Supporting energy from waste solutions.
- Implementing industry transformation package for composting.

- Implementing laws to assist industry in the downstream management of odorous waste. Downstream waste encompasses everything that happens to a product after the consumer uses it¹⁵⁰.

All odour-producing companies **undertaking** ERAs were afforded procedural fairness by way of written invitation to provide feedback on the relevant draft findings and possible recommendations. The Inquiry appreciates the time taken by industry to respond to this request.

6.6.1 Composting operators

DETSI advised the Inquiry composting facilities have been a primary focus for reducing odour impacts to the community considering the open windrow nature of operations being more conducive to generating and releasing odour, predominantly contributing to odour impacts from the industrial areas⁸.

While improvements to operator practices have been made, further works to build infrastructure are required.

There are four composting operations within close proximity to each other and nearby residential areas. Three of the four operations are based in the industrial areas. The other operation is outside, but close by.

There are plans for these companies to manage the receipt of odorous waste as described in Table 24.

Table 24. Composting industry response to managing odorous waste

Company	Current status (May 2025)	Future plans	Timeline
NuGrow*	Cease receiving high and very high odorous waste by 18 September 2026, unless additional infrastructure to manage odour is built.	<p>Stage 1—implement a suite of interim measures to minimise odour produced through its operations. These include routine dosing of the liquid waste tank with ferric chloride and hydrated lime to help to neutralise odour and aerating (Mobile Aerated Floor system) and monitoring windrows to better control the composting conditions.</p> <p>NuGrow must have applied to ICC for all necessary approvals to construct permanent in-vessel (Stage 2) and enclosed (Stage 3) systems by 18 March 2025 to contain odours.</p> <p>Stage 2—permanent In-vessel tunnels for composting odorous waste.</p> <p>Stage 3—permanent enclosed structure for receiving and mixing waste, composting odorous waste, all of which must be built and fully operational within 21 months of the application for an enclosed system being approved by ICC, and no later than 18 September 2028.</p> <p>If NuGrow fails to meet the timeframes, it will forfeit its ability to receive and process odorous waste until permanent structures are</p>	<p>Completed.</p> <p>Applications lodged to ICC.</p> <p>Construction to be completed by 18 September 2026.</p> <p>Construction to be completed within 21 months of obtaining ICC approval but no later than 18 September 2028.</p>

Company	Current status (May 2025)	Future plans	Timeline
		constructed and operational.	
Remondis	Currently accepting green waste.	Are licensed to use open windrow compost methods. Have approvals for fully enclosed composting facility and will only compost once constructed.	Unknown
WMI	Cease receiving high and very high odorous waste by 30 September 2026.	Have approvals and plans to construct fully enclosed systems.	Unknown
Candy Soil NB: located in Tivoli, not within the industrial areas	Cease receiving high and very high odorous waste by 30 September 2026 (in lieu of building an enclosed facility).	To build an enclosed facility at Ebenezer (approvals granted). Continue to compost less odorous waste at Tivoli.	Unknown

* DETSI has advised the original restraint order granted by the Court on 18 September 2024 required NuGrow to undertake a three-stage process where the second stage involved utilisation of an engineered membrane by September 2026 at the latest, prior to the commissioning of permanent in-vessel/enclosed infrastructure by September 2028. On 2 May 2025, an Amended Final Order was issued by the Court which accelerated timeframes for new infrastructure by replacing Stage 2 of the order (requiring an engineered membrane system), with shorter timeframes for part of Stage 3 (in-vessel tunnels). The future plans listed in this table reflect the requirements of the Amended Final Order issued in May 2025.

7 Air Quality Monitoring

This chapter provides an overview of the air quality monitoring programs undertaken by DETSI and university researchers and presents results of air quality monitoring commissioned by the Inquiry.

7.1 Swanbank air monitoring program

DETSI has been undertaking air monitoring activities for over a decade in response to odour issues in suburbs surrounding the industrial areas. Initially, this was in the form of periodic odour survey campaigns undertaken by scientific staff and authorised compliance officers.

In 2018, DETSI introduced an intensive program of daily odour surveys in direct response to community reports, with a team of officers based in Redbank Plains responding immediately to odour complaints in order to map occurrence and trends in odour events.

While DETSI continues to undertake odour surveys from time-to-time, DETSI's air monitoring program has evolved to include both:

- a network of air monitoring stations
- portable air quality canisters that can be used at community locations.

7.1.1 Real-time air monitoring network

In late 2018, DETSI engaged Envirosuite to establish an air quality monitoring program for Swanbank. Initially, six air quality monitoring stations were established. At these stations new technology was installed to improve prediction of odour events and monitor weather conditions. This enabled departmental compliance officers to respond in real-time. The technology also assisted in ruling out other potential sources of odour in the area, and provided trajectory modelling capability, to predict the direction of travel of an odour plume and back-cast modelling to identify the path likely travelled by a plume.

Following the peak in community reports in April 2022, DETSI engaged a consultant to develop a more comprehensive and expanded air monitoring plan for the industrial areas. The plan was provided to DETSI in late June 2023. The accompanying technical review concluded that key air quality issues for the industrial areas are odour and dust, with no other pollutants identified as a concern warranting ambient monitoring. DETSI worked with Queensland Health during the development of the air monitoring plan and has shared the air monitoring results with Queensland Health to consider from a health impact perspective.

Considering the experts' recommendations, the monitoring network subsequently expanded in 2024 with more weather stations and commissioning of close to real-time air quality monitors supplied by the existing contractor, Envirosuite.

The current air monitoring network is comprised of the following:

- nine wind/weather stations, which provide real-time monitoring of wind and weather conditions
- five Kunak air quality monitoring units, which provide real-time monitoring of total VOCs, hydrogen sulphide and ammonia
- eight Acrulog units, which provide real-time monitoring of hydrogen sulphide.

Monitoring for total VOCs and ammonia, in addition to hydrogen sulphide, recognises differences in activities contributing to odour. Refer to Section 2.5 regarding the types of odour associated with activities undertaken in the industrial areas.

This air monitoring program is a scalable weather and air quality monitoring network that can be adapted as needed. The equipment operates 24/7, providing a constant stream of close to real-time monitoring data which can be analysed in conjunction with community reports about odour being experienced. This allows for a more efficient and targeted compliance response for those industrial operations that are regulated by DETSI.

In February 2025, DETSI launched an online interactive platform (<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/air-monitoring>) that provides a centralised location to view current and historical weather and air quality data. This platform is maintained and updated as expansions to the network occur.

The data collected also informs other agencies including local government and Queensland Health to enable a coordinated response.

7.1.2 Canister program

In addition to the air monitoring network, DETSI coordinates an air sampling program using portable canisters. Air quality monitoring by way of canisters has been undertaken by:

- individual community members
- education and childcare facilities
- DETSI.

The community canister sampling program commenced in response to the 2022 extreme weather event. The program collected 30-second samples at times of peak odour. The canisters were operated by community members who were affected by odour from the industrial areas.

The community canister program was further promoted following an increase in community notifications received in 2023, where residents who were concerned about their health due to odour impacts could request a canister, collect a sample, and have this tested.

The canister sampling program concluded in December 2024; however, canisters are still available from DETSI upon request.

Canisters provide a point in time grab sample specific to the individual household. The samples collected can be highly influenced by the immediate surrounding environment for example, emissions from fuel storages/containers, lawnmowers, or home composting/waste bins and household compounds such as cleaners, solvents and perfumes.

Samples collected in air canisters are analysed by a Queensland Health National Association of Testing Authorities (**NATA**) accredited laboratory that uses US EPA Method TO-15, testing for 74 compounds. The results are compared with national and international air quality guidelines. None of the samples collected had results that exceeded health-based guidelines.

Departmental officers provide copies of laboratory air canister analysis results to community members and discuss what the results mean for them when received.

7.1.3 Education and childcare facility canister sampling

On 17 September 2023, during a community meeting in Redbank Plains, several community members raised concerns about their children's wellbeing and potential exposure to odours while at school.

In response, the air sampling program was extended to potentially affected schools and early childcare centres, addressing concerns raised at the community meeting. The institutions invited to participate were determined considering the proximity to potential odour sources, odour notifications and recommendations provided from Queensland Health.

Ten institutions were invited to participate including four early childhood education centres in Redbank Plains, Ripley and Springfield Central, and six schools in Redbank Plains, Augustine Heights and South Ripley. If an institution agreed to participate, canisters and instructions were delivered within three business days or on an alternative requested date.

Coordination with the Department of Education ensured approval for participation by State schools. Nine institutions agreed to participate and were provided with a canister and information to support sample collection.

All canisters were collected by December 2023.

In early 2024, additional canisters were offered to institutions that remained interested. Participants who submitted a sample could request another canister for further testing. Some institutions collected multiple samples.

The two-year program concluded in December 2024 with a total of 17 canisters provided and 6 samples being collected and analysed. None of the samples collected had results that exceeded health-based guidelines.

The results were conveyed verbally and in writing with participating institutions. Results were also provided to Queensland Health. In some circumstances monitoring results detected compounds not comparable to the standard suite of guidelines. In these cases, results were provided to WMPHU for their analysis. No concerns or follow up was required of these cases.

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All results are available to the public and accessible online (<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/air-monitoring>).

7.1.4 Community air monitoring program

In 2022, additions to DETSI's air monitoring program included the installation of hydrogen sulphide air monitors at locations around the Cleanaway site and publication of real-time results on DETSI's website.

Residents were also invited to participate in monitoring air quality at their premises. This was done via on-site hydrogen sulphide monitors installed at residents' properties and via air quality canisters which were provided to residents on request monitor up to 74 different VOCs.

The air monitoring program recorded the highest levels of hydrogen sulphide towards the end of May 2022. Hydrogen sulphide concentrations monitored trended downwards from May 2022. There were fewer community reports of odour received by DETSI after this date.

The air monitoring program conducted between April and November 2022 found that none of the VOCs measured from the community air monitoring results exceeded health-based guidelines. Hydrogen sulphide levels remained below the Air EPP health and wellbeing objectives. However, the Air EPP nuisance objective for hydrogen sulphide was exceeded.

Figures 20 and 21 show the change in distribution of community reports received in 2022 compared to 2023 with the source of odour and complaints being localised in 2022 near New Chum, while the 2023 results reflect a more diverse community reporting source profile.

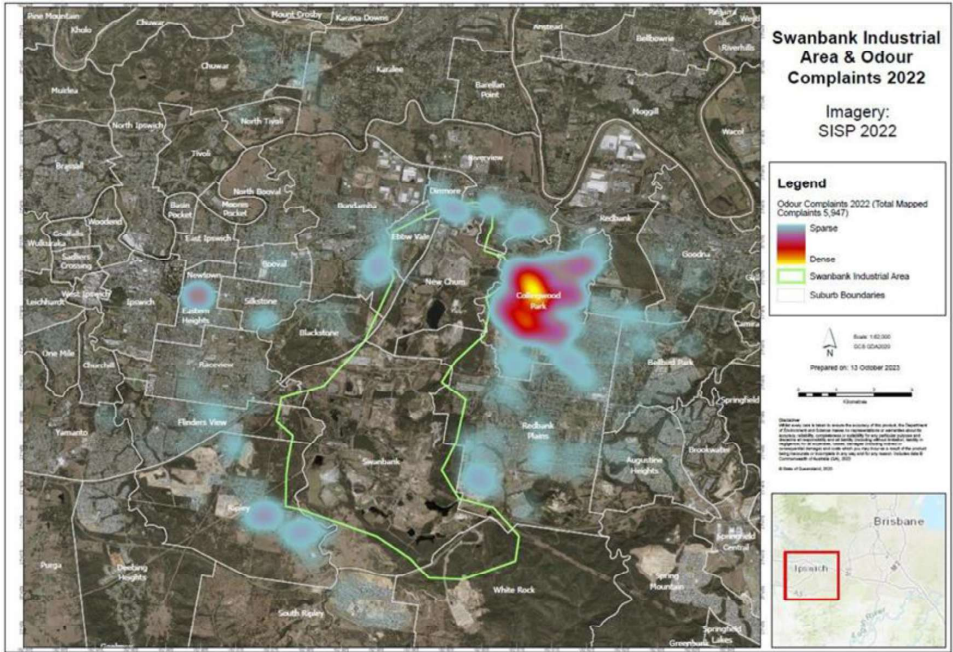


Figure 20. Swanbank industrial area and odour complaints 2022

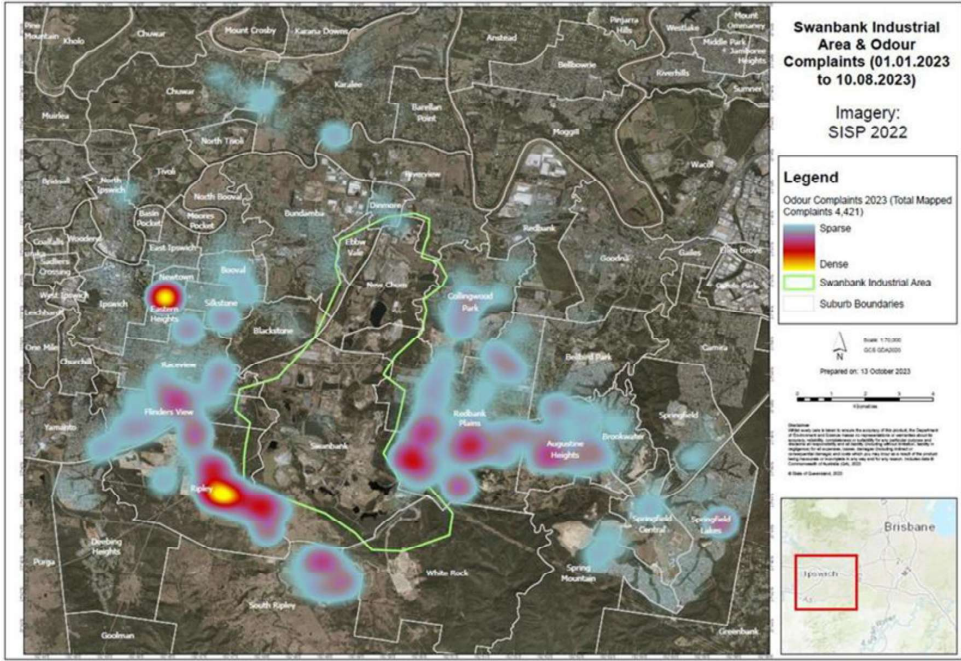


Figure 21. Swanbank industrial area and odour complaints 2023

7.2 Assessment of monitoring results

The current air quality monitoring program is collecting real-time data for three indicator pollutants—hydrogen sulphide, ammonia and total VOCs.

The data collected are compared with air quality guidelines which are used by DETSI as threshold indicators to inform whether further action is required.

Table 23 shows the air quality guidelines that have been used to help assess the results of the air monitoring data collected by the Envirosuite system. These guidelines are used by DETSI as indicator thresholds for health and nuisance to assist DETSI with investigations into the impact of odour on the community. Exceeding one of the concentrations listed in the table indicates there is a potential for the community to be experiencing impacts.

The guideline for hydrogen sulphide is sourced from the Air EPP. The guideline for total VOCs was derived by DETSI. The ammonia guideline has been adopted from the EPA Victoria Guidelines for assessing and minimising air pollution in Victoria¹⁵¹ which have been drawn from the California Environmental Protection Agency Office Environmental Health Hazard Assessment¹⁵² and the US Agency for Toxic Substances and Disease Registry¹⁵³.

DETSI advised the Inquiry these values are not used to determine whether impacts are occurring; rather, they serve as indicative thresholds to guide further investigations. These values represent only one element of a broader response and if levels are below thresholds, this does not mean DETSI will not take action.

Table 23. Air quality guidelines (threshold indicators) to inform further investigations

Parameter	Nuisance level (parts per billion (ppb))	Health level
Ammonia (NH ₃)	5000 ppb (10 minutes)	4600 ppb (1 hour) 1700 ppb (24 hours)
Hydrogen sulphide (H ₂ S)	5 ppb (30 minutes)	108 ppb (24 hours)
Total VOCs	68.6 ppb (10 minutes)	365.4 ppb (1 hour)

Exceedances of 'nuisance' indicator thresholds for hydrogen sulphide are often observed close to odour producing facilities such as landfills in Swanbank. However, exceedances of the adopted 'health' level have not been detected in the community.

Even though monitoring and test results do not demonstrate concentrations that exceed toxicity thresholds, such odour levels can still have health effects.

The Inquiry found the use of the legal term 'nuisance' has been confusing to people without a legal background. It has the potential to be interpreted in a way that understates the impact of odour on the community. Odorous chemicals that cause a nuisance, particularly over a

prolonged period, may result in physical symptoms, possibly through a stress response (as discussed in Chapter 4).

7.2.1 Challenges with quantifying and assessing health impacts

Quantifying and assessing health impacts related to odour exposure presents significant challenges due to the subjective nature of odour perception and individual variability in sensitivity. Unlike other air pollutants with established exposure-response relationships, odours are complex mixtures of compounds that can trigger different physiological and psychological responses.

The health effects of odour can be related to either:

- the toxicity of the individual chemicals in the odour
- the impact of odour from the pollutant mix that can contain thousands of odorous substances—many that cannot be monitored.

The air monitoring conducted by DETSI has focussed on monitoring pollutants that can be analysed and have health-based air quality guidelines. These guidelines consider the toxicity thresholds of individual pollutants. The monitoring has shown that the concentrations measured are below the health-based guidelines, which refers to the toxicity criteria. The monitoring that has been undertaken does not address the health effects associated with general odour which have been identified in the Inquiry.

For those pollutants that also have a defined odour threshold—the concentration at which people can smell it—the monitored concentrations have been compared with those known thresholds. General odour, which includes all the odorous substances that cannot be analysed for, have been assessed using odour surveys. These do not identify whether a pollutant is at a toxic level, but whether the pollutant mix can be smelled and whether the odour is offensive and causes nuisance.

7.2.2 Publication of results

The results of all air monitoring that has been undertaken is available on the DETSI website. The results of the community canister sampling conducted in 2022 as well as the historical DETSI air monitoring data is available online at <https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/results>.

This provides the community with access to:

- information on the results of the sampling
- information on past enforcement actions taken and links to DETSI's media releases.

The real-time data that is currently being undertaken for hydrogen sulphide, ammonia and total VOCs is provided live at:

<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/air-monitoring>. This includes the results of canister sampling undertaken by the community, DETSI and educational institutions. Although the real-time data may not be easy to interpret, it has been made available to the community.

In addition to the sites with air monitoring data, DETSI provides regular odour updates on their dedicated webpage for Swanbank and New Chum

<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/updates>.

Community members can subscribe to receive odour updates as they are published. The updates are from 2023 to the present and summarise current issues in the industrial areas as well as investigation and enforcement actions being taken. All media releases related to the industrial areas are available at this webpage.

Information on the Swanbank air monitoring program is published online

(<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/air-monitoring>). This includes locations of stations, parameters tested, air canister laboratory analysis results and other relevant information regarding air testing, including a factsheet (https://www.qld.gov.au/__data/assets/pdf_file/0037/429778/about-community-air-sampling-canisters-factsheet.pdf) that is provided to canister sampling program participants.

7.3 Bioaerosol monitoring⁴⁴

A study was undertaken to monitor bioaerosols from the composting operations at Swanbank as part of a Master of Science Degree at Queensland University of Technology (QUT)⁴⁴. The thesis was published in 2015. A monitoring program was implemented to assess suitability of potential microbial bioaerosol indicators. This study included impacts of season, meteorological conditions and degree of, and operational activity on composting operational activity and bioaerosol dispersal from two industrial green waste composting facilities in Swanbank—Nugrow and WMI.

Samples of measurements of potential compost associated bioaerosol indicators *Thermoactinomyces* and *Aspergillus fumigatus* (including the presence/absence of aflatoxin-producing *Aspergillus* spp.) and the more general total fungi, bacteria and coliform bioaerosol indicators were collected using the direct agar impaction technique for 12 months at each site. The impacts of meteorological conditions, seasonal-related factors and composting operational activities on these bioaerosols were also studied.

Bioaerosol concentrations were up to 100-fold higher within composting facility boundaries (≤ 0.5 kilometres from compost) compared to background levels. An inverse relationship between bioaerosol concentration and increasing distance from control (< 10 metres downwind of area of high operational activity) was evident for all indicators except total fungi. Concentrations above respective upwind sites, and similar to control levels, were detected at distances between 0.25–1 kilometres for *A.fumigatus* and *Thermoactinomyces*, and were related to

fluctuations in meteorological conditions and emissions from other proximal composting facilities operations.

Aflatoxin producing *Aspergillus* spp. were detected in compost-associated bioaerosols at each composting facility, but rarely at distances > 0.5 kilometres from control. *Thermoactinomyces* and *A. fumigatus* were assessed as presenting the best potential as compost-associated bioaerosol microbiological indicators for monitoring at industrial green waste composting facilities. This was based on respective dispersal patterns, sensitivity of organisms as compost-associated indicators and practicability of associated analytical logistics. Bioaerosol concentrations exceeded the study's threshold limits at the majority of the sampling locations. It is possible that this may pose elevated health risks to staff from these facilities and to residents nearest to the composting sites. As the existing monitoring is limited, further monitoring is required within the community to assess potential exposure to bioaerosols.

The QUT study found there is evidence compost-associated bioaerosol indicators can travel beyond the compost facilities boundaries at concentrations above background levels and may cause potential health risks in surrounding residential populations. The following is a summary⁴⁴ of dispersal profiles for each bioaerosol indicator before returning to near to/or below background concentrations:

- *A.fumigatus*—50% of all seasonal sampling events observed concentrations decreased with increasing distance, decreasing to below background concentrations within 0.9–2.75 kilometres from NuGrow (summer/autumn), and 0.5–1 kilometres from WMI (autumn/winter).
- *Thermoactinomyces*—concentrations decreased to below/near background values for > 75% of seasonal sampling events within 0.25–3 kilometres at NuGrow (autumn/winter/spring) and 0.25–2 kilometres at WMI (all seasons).
- Total bacteria—> 75% of seasonal sampling events observed concentrations decreased with increasing distance, decreasing to below background values within 0.5–3 kilometres at NuGrow (spring/autumn/winter) and 0.25–1 kilometres at WMI (all seasons).
- Total coliforms—all seasonal sampling events but one (WMI in summer) showed a decrease in total coliform bioaerosol levels to below background concentrations within 0.25–3 kilometres at NuGrow and > 1 kilometres at WMI.

Given there has been limited bioaerosol monitoring conducted in the community, the Inquiry recommends additional bioaerosol monitoring be undertaken in industrial and nearby residential areas to identify any potential impact from bioaerosols in the community. The Fewkes study has shown bioaerosols are present at distances from the composting sites⁴⁴.

7.4 Air Quality Monitoring March to April 2025

During the course of the Inquiry, the results of the existing VOC monitoring conducted by DETSI were reviewed. This monitoring, discussed earlier in this chapter, was based on 30-second grab samples when the community noticed the odour being present. While these data are useful to give a snapshot in time of what people might be exposed to when the odour is present, it may not give an accurate picture of what people are exposed to over time. As the odour is a frequent event in residential areas close to the industrial areas, the Inquiry initiated additional monitoring over 24-hour periods at six DETSI monitoring stations. This included three sites within the community (Redbank Plains, Riverview and South Ripley) and three industry sites in Swanbank.

Given the timing of the Inquiry only five samples were able to be collected on a one-in-six-day cycle. The canisters were operated by DETSI and sent to ALS Laboratories (a NATA Accredited Laboratory) for analysis. The canister samples were analysed for the US EPA TO-15 suite of VOCs. In total 64 VOCs were analysed, refer to Table 24.

Table 24. VOCs analysed in Air Quality Monitoring, March to April 2025

VOCs analysed				
<ul style="list-style-type: none"> • Freon 12 • Chloromethane • Freon 114 • Vinyl chloride • Bromomethane • Chloroethane • Freon 11 • 1,1-Dichloroethene • Dichloromethane • Freon 113 • 1,1-Dichloroethane • cis-1,2-Dichloroethene • Chloroform 	<ul style="list-style-type: none"> • 1,2-Dichloroethane • 1,1,1-Trichloroethane • Benzene • Carbon Tetrachloride • 1,2-Dichloropropane • Trichloroethene • cis-1,3-Dichloropropylene • trans-1,3-Dichloropropene • 1,1,2-Trichloroethane • Toluene • 1,2-Dibromoethane (EDB) • Tetrachloroethene • Chlorobenzene 	<ul style="list-style-type: none"> • Ethylbenzene • meta- & para-Xylene • Styrene • 1,1,2,2-Tetrachloroethane • ortho-Xylene • 4-Ethyltoluene • 1,3,5-Trimethylbenzene • 1,2,4-Trimethylbenzene • 1,3-Dichlorobenzene • Benzylchloride • 1,4-Dichlorobenzene • 1,2-Dichlorobenzene 	<ul style="list-style-type: none"> • 1,2,4-Trichlorobenzene • Hexachlorobutadiene • Acetone • Bromodichloromethane • 1,3-Butadiene • Carbon disulfide • 1-Chloro-2-propene (Allyl chloride) • Cyclohexane • Dibromochloromethane • 1,4-Dioxane • Ethyl acetate • trans-1,2-Dichloroethene • Heptane 	<ul style="list-style-type: none"> • Hexane • Isooctane • Isopropyl Alcohol • 2-Butanone (MEK) • Methyl iso-Butyl ketone • 2-Hexanone (MBK) • Propene • Methyl tert-Butyl Ether (MTBE) • Tetrahydrofuran • Bromoform • Vinyl Acetate • Vinyl bromide • Naphthalene

The results of the analysis for the VOCs above detectable limits are shown in Table 25 for the community sites and Table 26 for the industry sites. The results were compared with the 24-hour ambient air quality guidelines from the Ontario Ministry of the Environment. These values were chosen as they are 24-hour guidelines which is a consistent averaging period with the sampling time and are based on health endpoints.

The results in Tables 25 and 26 show the levels of VOCs detected in the samples are below the health-based guidelines. This means the concentration of VOCs detected were at levels below those that can cause adverse effects due to the toxicity of the individual pollutants. This is consistent with the monitoring undertaken during DETSI's air monitoring program. The types of VOCs detected are similar to those detected by DETSI however the DETSI monitoring identified a larger number of VOCs.

On the days the sampling was done, DETSI received a number of odour complaints. The results of the analysis in Tables 25 and 26 show that although people were being impacted by odour, the concentrations of the individual VOCs were below toxicity thresholds. Therefore, any health effects experienced during this period attributable to odour would not be due to the individual VOCs but to the effect of the odour mix as a whole. This is consistent with the other findings of the Inquiry.

Table 25. Results of canister sampling at community sites, March to April 2025

POLLUTANT	AIR QUALITY GUIDELINES	RIVERVIEW					REDBANK PLAINS					SOUTH RIPLEY				
		31/03/ 2025	7/04/ 2025	9/04/ 2025	15/04/ 2025	21/0 4/20 25	31/03/ 2025	7/04/ 2025	9/04/ 2025	15/04/ 2025	21/04/ 2025	31/03/ 2025	7/04/ 2025	9/04/ 2025	15/04/ 2025	21/04/ 2025
	24-hour average µg/m3															
Chloromethane	320	1.4	1.8	1.6	1.4	2.1	1.6	2.3	2.1	1.4	2.1	1.6	2.3	2.3	1.6	2.3
Benzene	2.3	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	2000 (odour); 830 (health—eye irritation)	ND	2.6	ND	ND	2.6	2.6	3.0	ND	ND	2.2	ND	ND	ND	ND	ND
Acetone	11,880	15.2	7.8	5.4	5.4	11.6	6.9	12.6	5.4	6.2	7.1	6.4	5.9	5.0	6.4	6.9
Cyclohexane	6100	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropyl Alcohol	7300	2.0	ND	2.4	ND	ND	ND	1.2	ND	ND	3.4	ND	ND	1.2	ND	1.5
Naphthalene	22.5	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND: Not detected

Table 26. Results of canister sampling at industry sites, March to April 2025

POLLUTANT	AIR QUALITY GUIDELINES	SWANBANK 1 AIR QUALITY STATION					SWANBANK 4 AIR QUALITY STATION (WMI)					SWANBANK WEATHER STATION (POWER STATION)				
		31/03/ 2025	7/04/ 2025	9/04/ 2025	15/04/ 2025	21/04/ 2025	31/03/ 2025	7/04/ 2025	9/04/ 2025	15/04/ 2025	21/04/ 2025	31/03/ 2025	7/04/ 2025	9/04/ 2025	15/04/ 2025	21/04/ 2025
	24-hour average															
Chloromet hane	320	1.6	1.8	2.1	1.4	2.3	1.4	1.8	1.8	1.4	2.1	1.4	2.1	1.8	1.4	2.3
Toluene	2000 (odour); 830 (health- eye irritation)	ND	ND	ND	ND	ND	20.0	ND	ND	ND	ND	ND	ND	6.0	ND	ND
ortho- Xylene	730	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	11,880	5.7	10.7	5.2	5.0	6.2	19.5	6.6	10.7	5.2	6.4	5.2	10.0	8.8	9.5	10.7
Cyclohexan e	6100	ND	ND	ND	ND	ND	90.1	ND	ND	ND	ND	ND	ND	15.5	ND	ND
Ethylacetat e	19,000 (odour)	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptane	11,000	ND	ND	ND	ND	ND	50.0	ND	ND	ND	ND	ND	ND	4.5	ND	ND
Hexane	2500	ND	ND	ND	ND	ND	10.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropyl Alcohol	7300	ND	ND	ND	ND	ND	16.2	ND	1.5	ND	ND	ND	1.7	4.2	ND	ND
2- Butanone (MEK)	1000	ND	ND	ND	ND	ND	2.4	ND	2.1	ND	ND	ND	ND	2.1	ND	ND
Naphthale ne	22.5	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND: not detected

8 The regulatory framework

The chapter explores Queensland's regulatory framework to manage the industrial areas and details other jurisdictional approaches to environmental regulation.

There are several pieces of legislation and statutory instruments that set the framework for the regulation and management of the industrial areas, including:

- *Environmental Protection Act*¹⁵⁴
- *Environmental Protection Regulation 2019*¹⁵⁵
- *Public Health Act*¹⁵⁶
- *Planning Act 2016*
- *Ipswich Planning Scheme*¹⁵⁷
- *State Planning Policy*¹⁵⁸

There are several pieces of subordinate legislation and guidelines that sit under these documents, including for example, Environmental Protection Policies (EPPs).

8.1 Environmental obligations under the *Environmental Protection Act 1994*

The information in this section has been drawn in part from the DETSI submission to the Inquiry⁸. DETSI is responsible for administering the EP Act.

Section 3 of the EP Act sets out the objectives of the Act:

The object of this Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development).

Section 4 of the EP Act sets out how the objectives are to be met.

The primary goal of the EP Act is to safeguard Queensland's environment. This protection should be balanced with allowing for development that enhances the overall quality of life, both now and in the future. The EP Act aims to achieve this through ecologically sustainable development, which includes maintaining the ecological processes on which life depends. This sets the foundation for the EP Act's approach to environmental protection and development, promoting a balance between economic progress and environmental stewardship.

Under the EP Act there are obligations and duties to prevent environmental harm, including environmental nuisance or contamination. Three primary duties that apply to everyone in Queensland are:

- General environmental duty (**GED**)—not to carry out an activity that may cause, or is likely to cause, environmental harm without taking measures to prevent or minimise the harm (section 319 of the EP Act).
- Duty to notify of environmental harm—to inform the relevant authority and landowners when environmental harm has occurred or might occur.
- Duty to restore the environment—where an incident has resulted in unlawful environmental harm, to take measures to rehabilitate or restore the environment to its condition before the harm.

Environmental harm is an adverse effect or potential adverse effect on an environmental value. This includes environmental nuisance, for example, odour, some types of noise etc. The impact can be either temporary or permanent, may occur on a small to significant scale and may differ significantly in the duration or frequency of impact.

An activity can cause environmental harm, whether the harm happens directly or indirectly and whether it's caused by that activity alone or together with other factors.

Section 14 of the EP Act provides the definition of environmental harm. Section 15 of the EP Act provides the definition of environmental nuisance. Sections 16 and 17 of the EP Act provide definitions of material and serious environmental harm respectively, which include monetary value thresholds.

Examples of activities that may cause environmental harm include management of waste products, or activities that may generate noise, odour or dust.

For air quality, environmental values are set out in the Air EPP. The environmental values to be enhanced or protected under this policy are the following—

- the qualities of the air environment that are conducive to protecting the health and biodiversity of ecosystems
- the qualities of the air environment that are conducive to human health and wellbeing
- the qualities of the air environment that are conducive to protecting the aesthetics of the environment, including the appearance of buildings, structures and other property
- the qualities of the air environment that are conducive to protecting agricultural use of the environment.

The focus of the EP Act and the Air EPP is on the protection of the environment. The environmental value relevant to human health is focussed on enhancing or protecting the qualities of the air environment that are conducive to human health and wellbeing but not directly to the protection of human health.

The Air EPP does not include odour and there is no separate policy that addresses the management of odour. This means that there is no specific environmental value that needs to be protected in regard to odour. This presents a gap in the regulatory framework for the management of odour from the industrial areas.

The only guidance for the assessment of odour is the Guideline—Odour impact assessment for developments¹⁵⁹. While this Guideline applies to the assessment of odour from new

developments it does not provide any guidance for the management and assessment of odour from existing industries.

To strengthen the regulatory framework for the assessment and management of odour consideration should be given to the development of an EPP for odour that defines environmental values with respect to odour and provides a framework for managing the impacts of existing industry to meet the requirements of GED.

8.1.1 Independent review and recent legislative and regulatory amendments (2022 to 2024)

In addition to significant investigations and enforcement actions undertaken by DETSI, in 2022 the previous Queensland Government initiated an independent review of the EP Act that focused on the powers and penalties available, in part due to the significant odour nuisance issues in the industrial areas, but it also had relevance across Queensland.

The review was undertaken by retired Planning and Environment Court judge Mr Richard Jones and Barrister Ms Susan Hedge. The review aimed to identify whether the tools available under the EP Act, particularly in relation to nuisance, were sufficiently contemporary to deal with the challenges of the future and make any recommendations for improvement of the EP Act for the regulation of Queensland's environment.

The final report, including recommendations, was published in May 2023. The review made 18 recommendations, all of which were supported or supported in principle by the Government at the time. Some of the recommendations were addressed through the Environmental Protection and Other Legislation Amendment Act 2023 (<https://www.legislation.qld.gov.au/view/pdf/asmade/act-2023-006/lh>).

A consultation paper on the remaining recommendations was released in September 2023. Following consultation, the Government prepared the *Environmental Protection (Powers and Penalties) and Other Legislation Amendment (EPOLA P&P) Bill 2024*, which was passed in June 2024.

The Environmental Protection (Powers and Penalties) and Other Legislation Amendment Act 2024 (EPOLA (P&P) Act) (<https://www.legislation.qld.gov.au/view/whole/pdf/asmade/act-2024-030>) amended definitions of 'environment' and 'environmental value' in sections 8 and 9 of the EP Act to include the concepts of human health, safety and wellbeing. These amendments reinforce the aspects of the environment conducive to human health, wellbeing and safety that were already prescribed as environmental values through environmental protection policies (including the Air EPP), while also limiting that human health is only protected by the EP Act to the extent it is affected by the environment.

The EPOLA (P&P) Act also amended definitions for 'serious environmental harm' and 'material environmental harm' to clarify that, despite a matter having prescribed characteristics of environmental nuisance (for example, unreasonable interference from release of aerosols, fumes, light, noise, odour, particles or smoke), it may constitute serious or material environmental harm. This amendment opened a greater range of enforcement tools for these matters, as well as stronger penalties that are more proportionate to the impact on the community. DETSI in their submission to the Inquiry acknowledged these legislative amendments may not address the odour issues from the industrial areas

immediately, but they will give a greater range of tools to the regulator to take action and are applicable at other locations across the State for the future⁸.

Further amendments were made to the Environmental Protection Regulation 2019 (EP Regulation)¹⁵⁵ in late 2024 to strengthen regulations to help reduce odour impacts from composting facilities on nearby communities. While the amendments apply across Queensland, the issues were brought to the forefront by the odour concerns of residents near the industrial areas. The amendments:

- Require DETSI to consider mandating new or expanding composting facilities within four kilometres of residential zones that propose to receive odorous feedstock to use in-vessel or enclosed processing.
- Add grounds for DETSI to require existing composting facilities that are accepting odorous feedstocks within four kilometres of residential areas to move to either an enclosed system or an in-vessel system.
- Ensure transporters of odorous feedstock do not take waste to sites that do not meet these requirements.

Odorous feedstock is defined in Schedule 18A of the EP Regulation¹⁵⁵.

Following these legislative amendments, DETSI has updated composting licences within the industrial areas. Further details are provided in section 8.1.2 of this report.

8.1.2 Amendments to environmental authorities for composting facilities

Through work conducted in 2023, DETSI identified composting facilities in the industrial areas, that is, WMI and NuGrow as the primary sources of odour in the community. In late 2024, DETSI secured transitional arrangements for those operators to move from open windrow composting operations to enclosed or in-vessel facilities, and the environmental authorities were amended accordingly to incorporate transition requirements.

This followed the legislative updates made to the Environmental Protection Regulation in 2024 to strengthen regulations for composting facilities which helped set the expectations of DETSI for this industry when operating in close proximity to residential areas. DETSI taking restraint action against a local operator also assisted in reinforcing this expectation for industry.

Changes made to the conditions of EAs ultimately require composting operators to either cease receiving highly odorous waste or construct purpose-built infrastructure to capture and treat odour from the most odorous phases of the composting process (predominantly waste receipt and pasteurisation). The timeframes provided for this transition were determined considering the timeframe needed to obtain all relevant approvals (including those from local government), secure any funding, engage contractors and undertake construction.

Recognising the impact odour is having on local communities, several improved practices were also imposed on composting operators within the industrial areas in the short term to assist mitigating odour during this transition period that relate to:

- limitations on the activity's geographical footprint

- incoming waste receipt and mixing requirements (including timeframes for mixing and placement)
- incoming liquid waste treatment and management (dosing)
- improved initial composting processes (for example, utilising forced aeration methods)
- weather station installation
- development and implementation of several additional plans including:
 - feedstock management plan
 - compost process plan
 - odour management plan
 - biocover placement on windrows
 - windrow size limits
 - leachate collection and maintenance.

The relevant environmental authorities facilitating these requirements (available on DETSI's Public Register Portal) are:

- EPPR00816413—Open windrow composting under which WMI is currently operating which includes interim measures for transitioning to an enclosed facility.
- P-EA-100119834—Not yet operational enclosed facility, to which WMI's operations are transitioning.
- EPPR00696713—incorporates the transition from open windrow to enclosed composting at NuGrow.

8.1.3 Legacy environmental authorities

Development approvals (DAs) for waste facilities are typically submitted to and managed by ICC and are referred to State Assessment and Referral Agency (**SARA**) for assessment concurrently with EA assessments conducted by DETSI. Within the DA assessment process, the land use and location of the activity is considered and approved. The EA assessment process is limited to assessing and conditioning from an environmental harm perspective and is required to be consistent with the DA.

While it is not the role of the EA assessment process to assess changes to land use and urban encroachment, DETSI can require enhanced odour modelling to impose prescriptive conditions to require more stringent controls. However, this conditioning cannot cater for all future development and potential encroachment.

Operators can change aspects of their operation over time without requiring further consideration by DETSI, provided it is within the bounds of their approval. The prescriptiveness of conditions relating to odour are dependent on the risk of impacts to sensitive areas (including residential dwellings) that considers both the likelihood of impacts occurring and consequences, based on circumstances existing at the time of approval.

The EP Act does not prescribe an expiry or regular renewal or review for licences and, once approved, licences can only be amended either with the consent from the operator, when an operator applies for an amendment (to which the decision must be limited only to that

which is relevant to the application) or when a specific trigger in the legislation is met. Operators should continue to upgrade their systems and operations to meet environmental best management practice. However, the inability for DETSI to update conditions presents challenges for maintaining the currency of licence requirements consistent with evolving industry standards and changing environmental risks.

Recent legislative changes, as described in section 8.4.1, have improved DETSI's ability to consider imposing conditions for composting facilities located within 4 kilometres of a residential zone. These requirements are not retrospective and therefore only apply to new composting activities and major expansions going forward. While an additional provision was included in legislation to enable DETSI to initiate updating the licences of existing composting facilities on a site-by-site basis, it should be noted that any imposed change to licence conditions is subject to internal review and appeal provisions.

Coordinating regulatory responses across multiple facilities also demands a collaborative approach, often requiring negotiations with different operators who may have varying levels of compliance. These factors can hinder timely and effective mitigation, prolonging community exposure to odour nuisances. Monitoring and compliance efforts require advanced odour tracking technologies, such as air dispersion modelling and real-time sensors, which can be resource intensive.

8.2 Regulated activities

DETSI is responsible for regulating ERAs through a range of assessment, compliance, investigation and enforcement activities, in accordance with the EP Act.

Schedule 2 of the Environmental Protection Regulation 2019

(<https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2019-0155>) lists which activities are considered ERAs (regulated activities) and require an EA. These activities are regulated because they have a higher risk of causing environmental harm or impact on the environment and community. These include, but are not limited to, composting facilities (ERA 53 Organic material processing) and landfill operations (ERA 60 Waste disposal).

An EA regulates potential impacts on environmental values, such as air (including odour), water, land, and biodiversity and are approved for the life of the activity. They may include requirements for pollution control measures, waste management practices, monitoring and reporting obligations, and compliance with relevant environmental standards.

To prevent or minimise environmental harm, a person carrying out an activity must take all reasonable and practicable steps to ensure that best practices in environmental management are used.

Conditions on a licence relating to odour may include:

- limits on emissions of air pollutants
- requirements to monitor emissions or ambient air quality
- requirements to comply with an end outcome (for example, not cause a nuisance at a sensitive place).

The Air EPP establishes environmental values to be protected and enhanced for air and include air quality conducive to human health and wellbeing. To help achieve this, long-term

air quality objectives have been established for multiple compounds such as sulphur dioxide, nitrogen dioxide, ozone, carbon monoxide, particles, lead and a number of air toxics. DETSI considers these objectives when making decisions on whether to approve or refuse an application, and when imposing licence conditions on regulated activities. The Air EPP does not include objectives for odour.

When assessing an application for a new or amended licence, DETSI must consider the environmental and community impacts of the proposed activity and imposes conditions to prevent or minimise those impacts. In doing so, DETSI must give consideration to a core set of criteria called the 'standard criteria', which is defined in Schedule 4 (Dictionary) of the EP Act.

DETSI in their submission to the Inquiry noted that considering the standard criteria requires fine balance⁸. An application that is inconsistent with one or more criteria may not be automatically refused. It must be determined whether the inconsistency is outweighed by the environmental, social and economic benefits that may come from approving the application.

To support operators to comply with EP Act obligations and licence conditions, a variety of guidance material has been developed by DETSI. For example, for the composting industry, DETSI released model operating conditions and best practice environmental management guidance, which includes information about managing air quality (including odour), surface and ground water contamination, noise, fire risks, pests, litter and contamination.

DETSI is responsible for managing compliance with the EP Act and for regulated activities, the licence conditions, and responds to breaches of the legislation with consistent and proportionate enforcement action in accordance with its Enforcement Guidelines (<https://environment.desi.qld.gov.au/management/compliance-enforcement/guidelines>).

If an operator causes or is believed to have caused environmental harm, the EP Act steps out the actions DETSI (as the administering authority) can take to make sure laws are complied with. If it can be demonstrated that, when the environmental harm occurred, an operator was meeting the GED (as defined in the EP Act), this can be used as a defence. Actions DETSI can take to attempt to secure an operator's compliance with the law before resorting to prosecution include:

- issuing an environmental enforcement order
- requiring an environmental investigation to determine the extent of the impact, which may then inform further enforcement action taken by the administering authority
- issuing penalty infringement notices (PINs, also known as fines).

In serious cases, operators can be prosecuted under the EP Act and/or DETSI may commence civil proceedings to remedy or restrain an offence against the EP Act.

8.3 Interaction with other legislation

Queensland's planning framework is established in the *Planning Act 2016* (**Planning Act**), which consists of three parts:

- plan-making
- development assessment
- dispute resolution.

State and local governments share responsibility for the delivery and operation of these systems. The development assessment system sets out if, and how, developments may occur. Generally, each local government carries out development assessment through their own local planning scheme, however sometimes additional assessment is required. When this occurs, the State becomes involved as the assessment manager or as a referral agency through the SARA.

Typically, composting and landfilling activities will require an assessment through the SARA in order to obtain a DA, along with an EA under the EP Act.

A DA authorises assessable development and must be obtained prior to commencing certain development or building work. DAs are in place indefinitely unless the landowner seeks to cancel it, or there are specific conditions requiring the land use to cease. DAs include a range of conditions such as hours of operation, layout of the site, the standard of construction of internal and external infrastructure and some site operational matters.

As each piece of legislation has a different purpose, proponents for waste management facilities such as composting and landfill operations must navigate both legislative frameworks, due to the potential impacts to the environment and surrounding land uses and the fact that they are classified as ERAs under the EP Act.

8.4 The policy framework

Under the *Waste Reduction and Recycling Act 2011*, the State has an obligation to establish a Waste Strategy.

The Waste Management and Resource Recovery Strategy (**Waste Strategy**) (https://www.qld.gov.au/_data/assets/pdf_file/0028/103798/qld-waste-management-resource-recovery-strategy.pdf) is supported by Queensland's waste disposal levy (<https://www.qld.gov.au/environment/circular-economy-waste-reduction/disposal-levy>). The Waste Strategy provides the strategic framework for Queensland to become a zero-waste society, where waste is avoided, reused and recycled to the greatest possible extent, with targets set to reduce the waste generated, diverted from landfill and recycled in Queensland.

On 1 May 2025, the Crisafulli Government launched consultation on a new strategy Queensland Waste Strategy 2025–2030—Less Landfill, More Recycling (<https://www.qld.gov.au/environment/circular-economy-waste-reduction/strategy-plans/draft-waste-strategy>) to reduce rubbish and boost recycling, to deliver a better environment for Queensland.

Additionally, the Queensland Organics Action Plan 2022–2032 (<https://www.qld.gov.au/environment/circular-economy-waste-reduction/strategy-plans/organics-strategy#action-plan>) provides guidance to create less organic waste, create economic opportunities through the reuse of organic materials, and minimise impacts on nature and communities. The Growing the Recovery of Organic Waste via Food Organic Garden Organic Fund (**GROW FOGO**) (<https://www.qld.gov.au/environment/circular-economy-waste-reduction/funding-grants/grow-fogo>) provides support to assist Queensland councils to implement or expand kerbside FOGO collection services that form part of a core waste service.

8.5 Public Health Act 2005

As part of the Inquiry, advice was sought as to whether the Public Health Act might have a role in addressing the odour issues.

The overview of the Act below was provided by legal firm Barry Nilsson, engaged by the Inquiry for legal support.

Purpose

The Public Health Act received Royal Assent on 2 November 2005. At the time, the introduction of the Public Health Act was a significant step taken to modernise the approach to traditional public health concerns.

The Public Health Act introduced a new category of harm, that being a ‘public health risk.’ The Explanatory Note accompanying the Public Health Bill 2005 (**the Bill**) describes the reason for the reform as follows:

Preventing, controlling and reducing risks to public health.

The Bill introduces a new term, ‘public health risk’, to deal with particular types of environmental health risks such as breeding grounds for mosquitos, vermin infestations, and hazardous water or waste. State and local governments will work together to reduce, control or prevent these risks to public health.

The powers in the Bill provide authority to issue public health orders to require the recipient of the order to take action to reduce, control or prevent a public health risk. The Bill also provides complementary powers to enable authorised persons to inspect and take appropriate action to enforce compliance with public health orders.

The Bill provides for the establishment of a register for an environmental health event to monitor and analyse any health affects resulting from the event, and to help in the prevention, minimisation or treatment of the health effects.

The Explanatory Note reveals that the basis for the introduction of ‘public health risks’ into the Public Health Act was to introduce designated statutory public health risks, such as

hazardous waste, which might be reduced, controlled or prevented by local and state governments working together to protect public health.

The Public Health Act also introduced Public Health Orders as an instrument to use in reducing, controlling or preventing public health risks. The scope of the orders which may be sought under a Public Health Order is wide, tempered by a requirement that the Public Health Order must be proportionate to the risk to public health that it seeks to address.

The Public Health Act has two stated objectives (Section 6):

1. To protect the health of the Queensland public.
2. To promote the health of the Queensland public.

The Act sets out how these objectives may be achieved which includes:

- Preventing, controlling and reducing the risks to public health (Section 7(a)).
- Inquiring into serious public health matters.

The ToR required the Panel of Inquiry to:

- investigate the extent of the health effects of the odours emanating from the Swanbank and New Chum industrial areas on the surrounding community
- and
- recommend actions that might be taken to mitigate the health-related impacts on the local community.

Public health risks

Section 11 of the Public Health Act 2005 provides an exclusive definition of ‘public health risk’—

11(1) *Public health risk means – ...*

(a)

(b) *any of the following that is, or is likely to be, hazardous to human health, or that contributes to, or is likely to contribute to, disease in humans or the transmission of an infectious condition to humans –*

(i)

.....

(v) *Waste.*

Waste is defined in section 11(3)—

11(3) *In this section:*

...

waste *includes an accumulation or deposit of a substance or a thing.*

Waste located at the composting and landfill sites in the Swanbank and New Chum industrial areas would fall within this definition.

Is the odour emanating from waste operations at the Swanbank and New Chum industrial areas a public health risk?

The Panel of Inquiry has found (refer to Chapter 9):

- Odour from the Swanbank and New Chum industrial areas are having a tangible and negative affect on the health and well-being of many Ipswich residents.
- Composting generates offensive odour that may be reduced, but not eliminated, through the construction of enclosed systems.
- Landfill waste sites are another potential source of offensive odour (particularly the tipping face and leachate ponds).
- The most common symptoms attributed to odour are respiratory, ear-nose-throat, neurological, gastrointestinal, skin and mental health. These symptoms were generally not mild nor transient.
- The symptoms experienced by the community are credible and are consistent in their detail and with the published medical literature.
- Odorous chemicals in the air do not need to be at toxic levels for them to impact human health.

The threshold question then is whether the odours emanating from the waste deposits and accumulations are, or are likely to be, a risk to public health. Based on the findings made by the Panel, the answer to this question is 'yes.'

On this basis the odours emanating from waste operations at the Swanbank and New Chum industrial areas are therefore a public health risk.

What steps might be taken under the Public Health Act to prevent, control or reduce the public health risk?

Is it a state or local council issue?

Under the Public Health Act a public health risk needs to be categorised as either a:

(a) State public health risk

or

(b) local government public health risk (Sections 12, 13, 14).

In Queensland, waste management is a shared responsibility between the State and local councils. The State sets the overarching regulatory framework, and local councils typically manage waste collection and disposal services however private companies may also undertake these services. Waste activities conducted in the industrial areas are undertaken by private operators.

On this basis, the public health risk created by odour emissions from waste operations in the Swanbank and New Chum industrial areas is, on balance, a State public health risk.

Steps may be taken by the State under the Public Health Act 'to protect the health of the Queensland public.' One such response to the public health risk is the delivery of a Public Health Order to the offending persons.

Public Health Orders

The Public Health Act provides that:

(a) If an 'authorised person' believes that a person is responsible for a public health risk at a particular place, then the authorised person may give a Public Health Order to that person.

(b) The Chief Executive (Queensland Health) may appoint any of the following persons as an authorised person—

- (i) a public service officer or public service employee
- or
- (ii) a health service employee.

Under section 23 of the Public Health Act the authorised person must believe that the person is responsible for the public health risk, and his or her belief must be reasonably based on all available evidence.

A Public Health Order may require a person to do something at a place that is—

(a) reasonably necessary to remove or reduce the risk to public health from a public health risk, or to prevent a risk to public health from recurring

and

(b) appropriate in the circumstances having regard to the nature and seriousness of the risk to public health at the time the Order is made (Section 21).

The Public Health Act provides examples of what a Public Health Order may require a person to do which includes (Section 21(2)(g))—

stop using the place, or part of the place, for a stated purpose, within a stated period or until stated steps are taken

remove stated material or items from the place to another place stated in the order in the way stated in the order

The terms of the Order are not limited by the Public Health Act, save for the Order:

(a) having to be reasonable and proportionate to the risk to public health that it seeks to address

and

(b) not requiring something to be done that is unlawful.

A Public Health Order must be in writing and state a period within which the person to whom it is given must comply with the Order. The period allowed for must be reasonable having regard to the risk to public health from the public health risk (Section 21 (3)(4)).

A Public Health Order is a very flexible statutory instrument to use for the purpose of removing, mitigating or controlling a public health risk. Ideally, its use ought to be coordinated with steps being taken by other agencies (for example, DETSI) or authorities (for example, ICC) as part of a coordinated approach to dealing with the problem. The Public Health Act was drafted on the basis there would be co-operation between the State and

local authorities, and by implication that there would be a level of co-operation between relevant State agencies and departments.

Based on the findings made by the Inquiry, Queensland Health may consider, through an authorised person, delivering a Public Health Order to waste operators requiring them to take certain steps, or to refrain from doing certain things, for the purpose of mitigating the health impact of odours emanating from these sites on the local community.

Breach of a Public Health Order is punishable by a penalty of up to 200 penalty units. A breach of a Public Health Order also triggers other remedial and enforcement measures which include:

- (a) The authorised person has a right to enter the place to check whether the Public Health Order has been complied with.
- (b) Where the Public Health Order requires the person to take steps at the place to remove or reduce the risk created by the public health risk, or to prevent the risk to the public health from recurring, the issuing authority by its employees or agents may, at reasonable times, enter the place to take the steps stated in the Order (Sections 388, 393).

Enforcement of a Public Health Order

A recipient must comply with a Public Health Order, unless it has a reasonable excuse (Section 23 (4)).

If the recipient contravenes a Public Health Order, the issuing authority may apply to a Magistrate to enforce the order (Section 24). The Magistrate may issue an order enforcing compliance with the Public Health Order (or part of it) where the Magistrate is satisfied that:

- (a) A Public Health Order was given to the person.
 - (b) The Public Health Order was appropriate in the circumstances having regard to the nature and seriousness of the risk to public health from the public health risk at the time the Order was given.
- and
- (c) The person has contravened the Public Health Order.

The Magistrate may make an enforcement order in the same terms as the Public Health Order, or in other terms the Magistrate considers appropriate.

8.6 Jurisdictional approaches

8.6.1 General environmental duty

As discussed in Section 8.1, all persons in Queensland must fulfill their GED which states that a person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonably practicable measures to prevent or minimise the harm¹⁶⁰. The GED imposes a legal obligation to proactively prevent and minimise the risk of environmental harm¹⁶⁰. The GED supports the environmental protection principle that prevention of harm to the environment is preferred to remedial or mitigation measures. It also reinforces the 'polluter pays' principle; that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement.

As discussed in Section 8.1, in Queensland, environmental harm is defined as any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value. It can range from environmental nuisance right through to serious environmental harm.

It is clear from the descriptions above the focus of the GED is protection of the environment and is not explicit about its role in protecting human health. By comparison, the GED in Victoria explicitly states the goal is both the protection of human health and the environment¹⁶¹.

A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable¹⁶¹.

In Victoria the definition of harm is also explicit in regard to human health.

What is harm?

(1) In this Act, harm, in relation to human health or the environment, means an adverse effect on human health or the environment (of whatever degree or duration) and includes—

(a) an adverse effect on the amenity of a place or premises that unreasonably interferes with or is likely to unreasonably interfere with enjoyment of the place or premises

or

(b) a change to the condition of the environment so as to make it offensive to the senses of human beings

or

(c) anything prescribed to be harm for the purposes of this Act or the regulations.

(2) For the purposes of subsection (1), harm may arise as a result of the cumulative effect of harm arising from an activity combined with harm arising from other activities or factors.

What is material harm?

(1) In this Act, material harm, in relation to human health or the environment means harm that is caused by pollution or waste that—

(a) involves an actual adverse effect on human health or the environment that is not negligible

or

(b) involves an actual adverse effect on an area of high conservation value or of special significance

or

(c) results in, or is likely to result in, costs in excess of the threshold amount being incurred in order to take appropriate action to prevent or minimise the harm or to rehabilitate or restore the environment to the state it was in before the harm.

(2) For the purposes of subsection (1), harm may become material harm regardless of the period of time in which the harm occurs and as a result of—

*(a) a single occurrence of harm arising from an activity
or*

*(b) multiple occurrences of harm arising from the same activity
or*

(c) the cumulative effect of harm arising from an activity combined with harm arising from other activities or factors¹⁶¹.

Queensland's Environmental Protection Regulation¹⁶² is focused on meeting environmental quality objectives. As there is no environmental quality objective for odour in the Air EPP, there are no specific requirements in the Regulations to address odour. By comparison, in Victoria, the Environment Reference Standard¹⁶³ establishes an environmental reference standard (**ERS**) for odour which sets the benchmark that odour emitting operations must meet. The ERS for odour is 'an air environment that is free from offensive odours from commercial, industrial, trade and domestic activities.'

The ERS:

- identifies environmental values that the Victorian community want to achieve and maintain
- provides a way to assess those environmental values in locations across Victoria.

The ERS is part of the Victorian *Environment Protection Act 2017* (**Environment Protection Act**)¹⁶¹. An environmental value is an aspect of the environment that is important to Victorians. It is an outcome Victorians want for human health and the environment. Odour is a key environmental issue set out in the Environment Protection Act. Odour is also clearly defined as a form of pollution and offensive odour constitutes a harm in accordance with the Environment Protection Act. Under the Environment Protection Act, the risk of harm from odour that is offensive to the senses of human beings must be reduced as far as reasonably practicable, with the overall objective of an air environment that is free from offensive odours.

In addition to the ERS, the Environment Protection Authority Victoria has published a guideline for the assessment of odour risk from new and existing sources—Guidance for assessing odour – publication 1883¹⁶⁴. This publication sets out a process for assessing the risk of offensive odour on a variety of land uses including sensitive uses such as residential areas. If the risk assessment process establishes there is a high risk of offensive odour then additional assessment is required which could include a human health risk assessment.

The Victorian regulatory system is an example of how consideration of human health is explicitly included in the regulation of the environment. As there is an intrinsic link between human health and exposure to environmental pollution integrating protection of human health into the environmental legislation keeps health—both human and environmental—as a focus in the management of the environment as a whole.

In light of the findings of this Inquiry, consideration should be given to strengthening the Queensland legislation to make specific reference to the protection of human health as one of the objectives of environmental protection. In addition, an EPP for odour should be considered which establishes an environmental value specific to odour. This is currently a gap in odour management in Queensland and if rectified could provide a framework for the assessment of odour emissions from industry. The development of guidelines to assess the potential risk of offensive odour from industry which would also support industry specific guidance such as composting and landfill guidelines should also be considered.

In addition to strengthening the legislation to make specific reference to the protection of human health, a clear definition of 'health' should be considered for inclusion in the EP Act and any EPP that is subsequently developed. For example, in Victoria, the definition of health in the EP Act was amended in 2019 to include psychological health. Given the findings of the Inquiry that the health effects being experienced by the Ipswich community are affecting both physical and mental health, consideration should be given to including psychological health in any definition of health adopted by the Queensland Government.

8.6.2 Approaches to licencing and management of odorous industries

The information provided in this section has been adapted from the DETSI submission to the Inquiry⁸ which provides a comparison of several environmental regulatory matters for Queensland, New South Wales, Victoria, South Australia and Western Australia. These matters focus on keeping licences current and the regulation of industries (including composting and landfills). Refer to Appendix M.

A summary of the jurisdictional review is provided in Table 26.

Key outcomes of this review indicate Queensland differs from other jurisdictions regarding processes to keep environmental licences contemporary including completing regular statutory reviews of licence conditions. However, Queensland is the only jurisdiction that has statutory powers to require specific composting processes when using odorous feedstocks due to recent legislative amendments.

Both Queensland and NSW issue licenses that do not expire, although NSW has a formal review trigger. Other jurisdictions issue licenses for a set term and have an expiry date. These terms commonly range from one to twenty years (depending on the jurisdiction and the activity) and there are processes in place to support licence renewals.

Other Australian jurisdictions, with the exception of Queensland, have the ability to undertake statutory and/or regular reviews of issued licences. The drivers and scope of

these reviews vary between jurisdictions but generally relate to keeping the licence conditions contemporary and ensuring that harm to the environment is minimised or avoided. The inability to do this in Queensland has led to the situation where some operations do not have to meet current environmental standards which results in higher levels of pollution being emitted from those sites.

A clear example of this is for PM₁₀. Some industries are required to meet an air quality standard for PM₁₀ of 150 µg/m³ which was the standard in 1996 while others are required to meet the current PM₁₀ standard of 50 µg/m³. This means that there is no consistency in how the industries are regulated with some industries allowed to emit higher levels of pollution than others, and some industries not operating to current environmental standards.

Table 26. Jurisdictional review within Australia for several regulatory matters

Regulatory Matter	Queensland	NSW	Victoria	SA	WA
Do environmental approvals issued within the jurisdiction expire?	No	No	Yes	Yes	Yes
Do environmental approvals issued within the jurisdiction undergo a review after a certain timeframe?	No	Yes	Yes	Yes	Yes
Can the administering authority initiate an amendment to an environmental approval?	Limited	Yes	Yes	Yes	Yes
Can the jurisdiction require a specific composting process based on the feedstock?	Yes	Non statutory guidance	Non statutory guidance	No	Non statutory guidance
Does the jurisdiction identify high-risk feedstocks/wastes and require different handling/treatment prior to composting?	Yes	Non statutory guidance	Non statutory guidance	Non statutory guidance	Non statutory guidance
Does the jurisdiction prescribe/recommend buffer distances for composting activities?	No*	No	Non statutory guidance	Non statutory guidance	Non statutory guidance
Does the jurisdiction prescribe/recommend buffer distances for landfill activities?	Non statutory guidance	Non statutory guidance	Non statutory guidance	Non statutory guidance	Non statutory guidance
Does the jurisdiction prescribe/recommend buffer distances for other potentially odorous activities?	Non statutory guidance	No	Non statutory guidance	Non statutory guidance	Non statutory guidance

* Regulation requires enclosed or in vessel treatment if within 4 kilometres of the boundary of a residential zone.

Consideration should be given to amending the EP Act to enable DETSI to undertake regular reviews of the EAs within the industrial areas. This could be a regular review, for example every five years, or if there are changes to environmental standards that apply to those industries. This would ensure that the industrial areas were being managed in accordance with contemporary environmental regulations and standards.

All Australian jurisdictions can initiate an amendment to a licence. However, the circumstances in which licences can be amended in Queensland differ in comparison to other jurisdictions. In Queensland, DETSI can only initiate an amendment of an EA if the amendment is triggered by certain criteria as outlined in section 215 of the EP Act.

Due to the odorous nature of compost and landfill activities, most Australian jurisdictions recommend some form of minimum buffer distance between sites undertaking these activities and the closest sensitive receptors. The buffer distance is the minimum distance between the composting facility and any nearby sensitive land uses such as residences, schools or health facilities. In Victoria, if a recommended buffer distance can't be met then a risk assessment must be undertaken to support the reduction in buffer. This applies to the agent of change whether that be industry or through reverse amenity impacts (residential encroachment). The results of the risk assessment must show there is low risk of offensive odour at any sensitive location.

Due to recent legislative amendments, Queensland is the only jurisdiction that has statutory requirements to consider imposing conditions for managing composting processes when using odorous feedstocks. While these regulatory amendments were largely in response to odour impacts from the industrial areas, they apply statewide to ensure composting operators near residential areas are processing odorous waste in enclosed or in-vessel systems. This ensures problems that have been identified in one area (like the industrial areas) do not move to another area of the state.

8.6.3 Strengths of Queensland's regulatory framework in comparison to other jurisdictions

While Queensland does not specifically recommend buffer distances for composting activities, recent legislative amendments provide DETSI with the power to impose odour controls on composting operators in this jurisdiction. Under the amendments, DETSI must consider imposing conditions for new and expanding composting facilities located within four kilometres of a residential zone that require one of the following:

- the activity to be undertaken without using odorous feedstock (as defined in Schedule 18A of the EP Regulation)
- the adoption of in-vessel or enclosed processing if odorous feedstock is to be used.

These requirements may also be imposed on existing operators through a site-by-site EA amendment process.

While these regulatory amendments were largely in response to odour impacts from the industrial areas, they apply statewide to ensure composting operators near residential areas are processing odorous waste in enclosed or in-vessel systems. This is intended to help prevent the problems that have been identified in the industrial areas from occurring in another area of the state.

Further, the four kilometre distance prescribed by Queensland as a trigger for more stringent odour controls is significantly greater than the buffer distances recommended by other jurisdictions which range from 150 to 1000 metres depending on composting process and feedstock.

8.6.4 Ipswich Planning Scheme

ICC is responsible for the development and implementation of the Ipswich Planning Scheme (**Planning Scheme**)¹⁵⁷. The Planning Scheme currently in place was adopted in 2006.

A new Planning Scheme has been approved by the Queensland Government and is expected to be implemented from 1 July 2025. The Inquiry has reviewed the draft Planning Scheme¹⁹ and TLPIs as well as the new Planning Scheme.

While the below commentary cites elements of the current Planning Scheme and TLPI, the issues discussed in this section should be considered for the current and new Planning Schemes.

It is recognised the DA assessment process for many of the activities relevant to the Inquiry are for a combination of a material change of use assessed against the relevant Planning Scheme and TLPI and assessment for an EA under the EP Act.

ICC is responsible for assessing and issuing DAs for any new buildings, structures etc within the industrial areas. DETSI is responsible for assessing any ERA and issuing an EA under the EP Act. Assessment of proposals that require a DA and involve a concurrence ERA are coordinated through the development assessment process where typically ICC is the assessment manager and the State is involved as a referral agency through SARA.

The Inquiry understands if the activity is an ERA and applies for a DA for a material change of use of the premises under the Planning Act then this application is considered an application for an EA under the EP Act. DA amendments do not necessarily lead to EA amendments.

It should be noted that:

- Before a development can be constructed, all necessary regulatory approvals must first be obtained.
- In the event that the benchmarks for assessment can be satisfied, agencies can approve (including in part) any proposal, including the imposition of conditions as provided for in the relevant legislation.
- In the event that the benchmarks for assessment cannot be satisfied, including satisfied through the imposition of conditions, that ICC or State Government can refuse all or aspects of a development.

and

- If the State Government refuses an application, ICC must refuse the development.

Composting and landfilling activities are designated as ERAs and require both local government assessment and referral to SARA in order to obtain a DA, and an EA. All relevant approvals must be obtained prior to commencing the operation.

Part 3 of the Planning Scheme establishes the desired environmental outcomes and the performance indicators for Ipswich LGA. The key desired environmental outcome relevant to

the odour issues arising from the industrial areas is *'the health and safety of people, and the amenity they enjoy, are maximised, particularly in the urban and township areas where different types of uses are located close together'¹⁵⁷*.

The most relevant key performance indicator identified in the Planning Scheme is—*'where development has occurred, has it been designed and located to minimise impacts on adjoining residential uses.'* This needs to be considered when assessing and issuing DAs.

Part 6 of the Planning Scheme establishes the Regionally Significant Enterprise and Business Areas¹⁵⁷ and the provisions to be met for industries in these zones, which includes the industrial areas. Of particular relevance are the following:

Amenity

6.6 (c) There is a high standard of amenity in regionally significant business and industry areas and uses in these areas are generally compatible.

6.6 (d) A land use pattern is created for each area where there is a transition from lower impact uses on the edge to higher impact activities towards the centre, with buffer areas on the periphery to separate incompatible or sensitive uses.

Environmental Management and Greenspace

6.6 (h) Uses and works are located and designed to minimise risks and nuisance to people and property.

6.6 (i) Buffers are created between incompatible uses to ensure that there are no discernible amenity or environmental impacts which affect adjacent sensitive land uses.

Part 6.7 of the Planning Scheme is specific to the Swanbank and New Chum industrial areas. One of the key provisions relevant to the industrial areas is:

6.7c (6) Waste recycling or treatment activities are discouraged unless it can be demonstrated with a high degree of certainty that such activities will not adversely affect any nearby residential areas (either existing or proposed).

Other relevant clauses in the Planning Scheme relating relation to the impacts of odour include:

- *Achieve a high standard of amenity with particular regard to minimising environmental and amenity impacts on existing and proposed residential areas and promoting overall visual attractiveness.*
- *Uses or works which have significant environmental impacts—including air, water, noise, odour, dust and vibration emissions outside of the designated Business and Industry areas, are avoided.*
- *VOIDS may be used for the disposal or recycling of waste products and the generation of soil conditioners and commercial gases provided it can be demonstrated with a high degree of certainty that such activities will not cause adverse environmental*

impacts or significantly affect the amenity of nearby residential areas, either existing or proposed.

Temporary Local Planning Instrument

In November 2023, ICC adopted TLPI No. 1 of 2023 (Resource Recovery and Waste Activity Regulation). The purpose of the TLPI is to regulate resource recovery and waste activity uses within the industrial areas of Swanbank/New Chum and Ebenezer/Willowbank/Jeebropilly Regulation Areas (as mapped in the instrument). The TLPI took effect from 11 December 2023¹⁶⁵.

In 2018 the first of a series of TLPs addressing emerging and urgent waste issues in Ipswich commenced. These earlier TLPs refined the regulatory framework to address the prevalence of waste uses and provide a contemporary policy approach to their regulation. Subsequent TLPs commenced in 2020 to ensure ongoing contemporary regulation of waste activities. The 2020 TLPs coincided with the commencement of work on a new planning scheme for Ipswich. The 2020 TLPs were repealed immediately prior to the commencement of the 2021 TLPI which continued the regulation of waste activities in Ipswich¹⁶⁵.

The purpose of the TLPI is to manage new or expanded waste activities within the TLPI boundary to:

- ensure the regionally significant economic areas are developed appropriately to provide economic benefits to the city and local area
- facilitate and manage the restoration of areas affected by past mining operations
- ensure sensitive receiving uses are protected from adverse impacts associated with waste activities

and

- safeguard the immediate and long-term protection and improvement of the natural environment.

To achieve this purpose, the TLPI¹⁶⁵—

1. *suspends parts of the Ipswich Planning Scheme set out in Part 7*
2. *includes the following additional Strategic Outcomes (called 'Desired Environmental Outcomes' in the Planning Scheme) for the LGA:*
 - i. *a Waste Activity protects existing and future residential amenity through onsite management of off-site impacts*

and

- ii. *ultimate site use considers and responds to the safety, geotechnical stability*

and

- iii. *releases to the environment including the visual impact that the final landform of the site might have on a natural setting*

and

- iv. *voids and end-of-life sites are restored to a natural or pre-mining landform through a range of appropriate options which respond to the existing infrastructure, topographical, environmental and social opportunities and constraints of the site*

and

- v. *Energy from Waste Facilities are separated from existing or planned areas for sensitive Receiving Uses to avoid all adverse impacts.*

Overall, there should be adequate buffers between uses as described, as well as good decision making on where these uses should and should not be located. In addition, where uses are currently impacting the community, there should be adequate controls to protect the community. If such controls are not effective or are not possible, consideration should be given to the relocation of uses to more appropriate locations.

Buffers between industrial areas and residential areas are a critical element of the land use planning system. Planning instruments should consider prohibition of uses that may be absolutely incompatible.

There are planned buffer areas designated in the Swanbank New Chum Land Use Concept Master Plan as shown on Figure 6-7-1 of the Planning Scheme¹⁵⁷. There are also regulation areas contained within Figure 2 Swanbank New Chum Regulation Area TLPI 1/2023¹⁶⁵. It is evident these buffer areas are not protecting the communities from the impacts of these uses. One must conclude that either the buffer or regulation area is inadequate, the uses are not capable of containing their impacts to the buffer, or both. This may have contributed to the public health issues being experienced by the local communities.

The Inquiry understands there are a number of existing tools within the State and Local Planning schemes that could be used to help resolve the issues contributing to the health impacts being experienced in the local communities. Furthermore, consideration should be given to a range of policy measures including applying a planning overlay to designate the area as a high-risk industrial area. The overlay should lock the remaining buffers so further residential encroachment is not possible.

If additional regulatory and policy tools are applied, DETSI, ICC and Queensland Health should work together to identify the best tools available under each piece of legislation to address the issues at the industrial areas. This could include tighter legislation for industries within the overlay.

It appears from Section 6 of the Planning Scheme¹⁵⁷ that it was not the intent to have highly odorous industries within the industrial areas and if they were present they should have been developed to control its impacts, or located further away from sensitive uses such as residential areas.

Two key issues arose in discussions with ICC:

1. The current penalty and enforcement regime is not sufficient to deter some operators from non-compliance with the conditions of the DAs and EAs. Consideration should be given to a review of the current penalty and enforcement regime to ensure they are a deterrent for non-compliance and that action can be taken, with a united and collaborative approach between local and state government.
2. In circumstances where changes to site operations are sought, including changes to an EA, these do not always trigger a change to the application assessed against the Planning Scheme, and vice versa. This should be corrected such that a coordinated process for changing planning applications, ERAs and EAs is considered.

8.7 Roles and responsibilities in managing public health risks from odour

As discussed in Section 8.1, the focus of the EP Act and the Air EPP is on the protection of the environment. The environmental value relevant to human health is focussed on enhancing or protecting the qualities of the air environment that are conducive to human health and wellbeing but not directly to the protection of human health. As the Air EPP does not include odour there is no environmental value specific to odour. The explanatory notes for the EPOLA (P&P) Act note DETSI's role is limited to the protection of human health to the extent it is affected by the environment.

While DETSI has responsibility under the EP Act for the management of environmental issues, there is a need to establish clear roles and responsibilities for the assessment and management of public health risks with respect to odour.

There may be a number of options to address this which involve both DETSI and Queensland Health. DETSI has advised they do not currently have expertise within their department to address public health issues caused by environmental impacts.

To date, Queensland Health has had a role in providing advice to DETSI on air quality guidelines and the interpretation of air quality monitoring results. However, there are no public health guidelines on how to respond to general odour (below toxic levels) impacting the population.

DETSI and Queensland Health should identify and agree on the most effective approach to managing public health risks associated with general odour. It is recommended that the following options be considered:

- Establishing an environmental health function within DETSI, similar to what has been done in Victoria.
- Queensland Health developing a statewide guideline for Queensland's network of public health units to respond to general odour which falls below toxic levels.
- Queensland Health playing a more active role, in partnership with DETSI, in managing the health impacts of odour. This could include providing alerts when odour is likely to be present, possibly using predictive weather modelling, so residents can plan to reduce their potential exposure to odour.

Part C—Findings and recommendations



The Inquiry team on-site at the industrial areas, March 2025

Part C of the report documents the Inquiry's findings and recommendations.

9 Findings

Ipswich City is one of Australia's fastest growing cities¹⁰ and is expected to grow faster than any other LGA in Queensland¹¹. By 2046, the population is predicted to double from 260,000 to 533,000¹². About half (132,000 people) of Ipswich City's current population reside in suburban areas (**SA2s**) that share a boundary with the industrial areas.

Large scale waste disposal, recycling, resource recovery and composting operations are carried out within the industrial areas.

The industrial areas are exceptional due to:

- the scale and diversity of odour-producing operations at the industrial areas
- the proximity of the operations to each other
- the proximity of residences to the industrial areas
- the large volume of waste received at the industrial areas.

This Chapter presents the Inquiry's findings.

The findings are based on the evidence gathered through personal interviews, telephone surveys, written submissions, epidemiological analysis, site visits and an extensive review of the published literature.

The findings presented in this chapter conclude that odour from the Swanbank and New Chum industrial areas (the **industrial areas**) are impacting the community's health. The symptoms reported by the community are credible. They are consistent in their detail:

1. No matter how they were assessed be it personal interviews, telephone survey interviews, shopping centre pop-ups or written submissions.
2. Regardless of whether subjects volunteered to provide information or were selected unprepared at random.
3. With reports of health-related impacts made by the community to the Pollution Hotline.
4. With the published medical literature and odour-affected communities overseas.

Finding 1: Thousands of Ipswich residents experience symptoms they attribute to odour from the industrial areas

- To quantify the prevalence and nature of health effects attributed to the odour, the Inquiry conducted a random survey of 400 residents living in suburbs surrounding the industrial areas.
- Eleven per cent (95% CI: 8–14%) of the 400 surveyed directly attributed health affects to the odours. A further 11 per cent (95% CI: 8–14%) were 'unsure' whether their health issues were attributable to the odour.
- When extrapolated to the total nearby population of 132,000, these results indicate more than 14,000 individuals (95% CI: 10,800–18,900) directly attribute adverse health effects to the odours.
- The number of people whose health is potentially impacted increases to more than 28,000 people (95% CI: 20,700–36,700), when results from the 'unsure' attribution are included.

Finding 2: The most common symptoms include respiratory, ear-nose-throat, neurological, gastrointestinal, skin and mental health

- The Inquiry found people are experiencing a wide range of symptoms across multiple body systems. The health effects attributed to the odour were generally not mild or transient.
- This finding is made following a random survey of 400 residents living in suburbs surrounding the industrial areas as well as analysis of information obtained from 61 interviews and personal written submissions.
- From the survey:
 - The most commonly reported health effects were respiratory symptoms (56 per cent), headaches/migraines/dizziness (33 per cent), and gastrointestinal issues (29 per cent).
 - Seventy-eight per cent of effected individuals reported moderate to severe symptoms and 71 per cent experienced symptoms for three or more years.
 - The majority (60 per cent) of people who experienced symptoms sought medical attention by consulting a general practitioner, a specialist doctor or presenting to emergency.
 - Almost all (93 per cent) of those who sought medical attention received some form of treatment or medication for their symptoms.
- From interviews and personal written submissions:
 - The commonly reported symptoms were:
 - coughing/wheezing, congested/blocked nose, irritated/sore throat, asthma-new or worsened, shortness of breath, chest tightness
 - watery/irritated eyes, sinus congestion/issues, nose bleeds, ear congestion/pain, reduced sense of smell, sore throat
 - headaches/migraines, dizziness, visual disturbance, metallic taste

- nausea, vomiting, abdominal pain
 - rashes, itchy skin, dryness/flaking and skin conditions
 - depression/anxiety, increased stress/worry, difficult sleeping, irritability/behaviour changes overall mental health.
- A consistent theme across many interviewees was that they had noted that their symptoms worsened during or immediately after exposure to odours, improved when away from the area, were more severe during certain weather conditions (wind direction, humidity) and had developed or worsened since moving to the area.
- The information obtained from an additional 20 random interviews at shopping centre pop-ups is also consistent with the symptoms documented through the survey, interviews and submissions.
- This finding indicates that people can experience health symptoms even when the concentrations of odorous chemicals in the air lie below toxic level. Refer to finding 6.

Finding 3: The symptoms experienced are consistent with those described in the medical literature

- The Inquiry completed a comprehensive literature review of more than 80 scientific papers on the health risks associated with odour, with a particular focus on odour exposure for residents living near landfill, composting and other relevant waste management facilities.
- The literature review found respiratory, neuro-psychological and gastrointestinal symptoms were the commonly reported health conditions associated with odour.
- The health conditions published in the literature align with the health conditions experienced by residents near the industrial areas.
- The literature review also found that:
 - Closer proximity and higher odour frequency and intensity may increase risks.
 - Odours are linked to physiological and psychological mechanisms.
 - Interventions that reduce the concentration of pollutants, but do not eliminate odour, may not prevent reports of associated symptoms in the community.
- The literature review also found very limited evidence to support a link to cancer.
- The full literature review is detailed in Chapter 4.

Finding 4: The odour is highly offensive and is impacting the wellbeing of residents

- The Inquiry met with many individuals who lamented the impact of odour on their quality of life. Many were clearly distressed by the odours.
- A random survey of 400 residents living in suburbs surrounding the industrial areas found:
 - Nearly two thirds (65 per cent) detected the odours at some point, with many experiencing it on a frequent basis. Of those who had detected the odour, 40 per cent of respondents detected the odour in the last month.

- Almost half (48 per cent) of those who had detected odours described them as ‘very’ or ‘extremely’ offensive. When extrapolated to the total nearby population of 132,000, this result indicates more than 41,000 people living near the industrial areas find the odours very or extremely offensive.
- The wellbeing impacts include:
 - avoiding outdoor exercise and play
 - avoiding outdoor socialising
 - living behind closed doors and windows
 - living in air conditioned environments.
- Community members compared the odours to ‘rot, rubbish and sewage.’ The most used words to describe the odours were ‘annoying, disgusting, rotten and foul.’
- Some respondents reported they had relocated out of the area due to the odour. Some respondents indicated they were planning to relocate.

Finding 5: There is no evidence of an increased risk of cancer in the exposed population

- Due to specific concerns raised by the community, the Inquiry undertook an epidemiological assessment of cancer in the suburbs adjoining the industrial areas (affected areas).
- The epidemiological analysis was undertaken for the select cancers of lung, liver and kidney—as well as all cancers—for a five-year period (2018 to 2022).
- The epidemiological assessment found the age standardised rates of the selected cancers were similar to other local unaffected areas and other comparable socio-economic areas in Queensland.
- For one cancer type (kidney) in one affected area, the observed rate was slightly higher than other areas. However, this finding was not statistically significant and is no cause for concern.
- Further information on the epidemiological assessment can be found in Chapter 5.

Finding 6: Odorous chemicals in the air do not need to be at toxic levels for them to impact human health

- The Inquiry reviewed more than 80 published scientific papers on the effects of odour on human health.
- The impact of toxic concentrations of chemicals in the air on human health has long been understood.
- What is now established in the literature is that odorous chemicals below toxic concentrations can also affect human health.
- Research has found a clear link between exposure to odour and symptoms like nausea, headache, dizziness, difficulty concentrating, unnatural fatigue and stress.
- This evidence is not limited to studies involving humans. There is evidence of similar health impacts arising when animals are exposed to non-toxic levels of volatile organic compounds (VOCs).

- These human and animal studies show close links between the olfactory system, odour, stress responses and a range of physiological and behavioural impacts.
- For people living in an odorous environment, the regular presence of an offensive smell, its variability in strength, and the sense that one cannot escape from it, even when at home, creates stress, tension and anxiety from those affected.
- This finding is consistent with the evidence gathered by the Inquiry indicating odorous chemicals below toxic concentrations have an impact on people's health.

Finding 7: There are certain types of waste which are highly odorous and play a significant role in causing the health effects being experienced by those living in close proximity to the industrial areas

The type of waste used to feed the compost (known as feedstock) is a major contributor to highly offensive odours. The most odorous feedstock products include:

- abattoir waste
- animal waste and animal processing waste
- biosolids that are not stabilised biosolids (human waste)
- fish processing waste
- food processing effluent (wastewater) and solids (including sludges) from protein based food
- grease trap waste—liquid and solid
- poultry processing waste.

Finding 8: Composting generates offensive odours

The Inquiry found:

- Many activities undertaken at the industrial areas have the potential to produce odour. However, it is apparent composting stands out as a major source of highly offensive odours.
- The early stages of composting are the most odorous stage of the composting process.
- As per finding 7, feedstock is a major contributor to highly offensive odours.
- There are currently four businesses in close proximity to each other and the Ipswich community permitted to undertake composting. Three of these businesses are within the industrial areas and one is just outside.
- Best practice composting requires the receipt of composting waste and the early stages of compost formation to occur in enclosed systems in order to reduce odour.
- Plans are in place for the construction of enclosed systems. The total cost would be substantial (possibly greater than \$100 million collectively).
- Enclosed composting systems substantially reduce odour from the early phase of the process if operated and maintained correctly. However, enclosed composting systems may not eliminate all odour.

Finding 9: There are other potential sources of offensive odour in the industrial areas

- In addition to composting, there are other commercial activities and sources in the industrial areas that have the potential to produce odour. These other activities include:
 - landfill (particularly the tipping face and leachate ponds)
 - fertiliser production sites
 - recycling/resource recovery sites
 - asphalt plants.
- Uncovered leachate ponds across the industrial areas are also a source for offensive odours. Leachate is a fluid that has been in contact with waste or other contaminants. It is typically liquid that has passed through, or emerged from, landfill or other waste operations²⁹. Leachate is characteristically very odorous due to the presence of VOCs, particularly sulphur-containing compounds like hydrogen sulphide—a pungent gas that smells like rotten egg.
- Large bodies of standing stormwater following heavy rain events also represents an odour risk, particularly if the water turns anaerobic (as occurred on a landfill site in 2022). Stagnant water high in organic matter represents a major odour risk.

Finding 10: The Inquiry could not determine whether current odour management practices meet best industry practice

- Given the many odour-producing activities undertaken at the industrial areas, the Inquiry was unable to determine whether current odour mitigation practices at every site meet best industry practices.
- Whether a gap (or not) exists should be determined by independently qualified industrial auditors.
- The audit is needed to provide a comprehensive assessment of whether odour management practices meet best industry practices, and if there are gaps, provide recommendations to remediate.

Finding 11: The approach to air quality monitoring undertaken by the community may not adequately reflect the range of pollutants they might be exposed to

- For a two-year period, air sampling canisters were made available to residents, education facilities and childcare centres within the community of Ipswich as part of a sampling program.
- The program concluded in December 2024; however, air sampling canisters are still available upon request.
- The monitoring was based on a point in time (30-second) grab sample taken by the community when they smell the odour.
- Although the samples are meant to be taken at the peak of an odour event it may have been difficult for the community to gauge when that occurs; samples may be taken when the odour is experienced but before the peak is reached.

- The samples are analysed for a range of volatile organic compounds (VOCs) only.
- There has been limited assessment of general odours. This has mainly been done through surveys conducted by DETSI staff.
- To gain a better understanding of what the community is exposed to, monitoring over a longer period of time is recommended. The Inquiry conducted sampling over 24-hour periods, but this provided limited data due to time constraints.
- A study found bioaerosols from composting were detected beyond the boundary of the industrial areas. No monitoring of bioaerosols has been conducted in the residential areas.

Finding 12: The existing legislative framework may not support effective assessment and management of odour

- Although included in the Environment Protection Act (1994) there are no regulatory instruments that address the assessment and management of odour. The Environment Protection Policy for Air (Air EPP) does not include odour.
- There is DETSI guidance on how to assess odour from new developments but nothing for existing industries. This document is guidance and does not have any statutory basis therefore it cannot be enforced.
- There is no reference to odour in the *Public Health Act 2005*.
- The ICC Planning Scheme includes discussion on odour and how offensive odours in residential areas should be avoided however there are no measures to manage odours from industries within the Swanbank/New Chum industrial area.
- The Inquiry found that the lack of a regulatory framework for managing odour, including performance targets, is contributing to the issues in the industrial areas.

Finding 13: The existing legislative instruments may not enable rapid enforcement to mitigate odour

- Existing legislation does not provide the primary regulator (DETSI) the power to retrospectively review conditions in Environmental Authorities to ensure sites are operated consistent with best practice, standards, guidelines, policies and legislation. This results in an inability to rapidly enforce change to mitigate odour.
- Current penalties for non-compliance may not be an adequate driver for complying with the conditions of Development Approvals.
- There are additional town planning levers to better manage odorous industries in the industrial areas. The State Planning Policy outlines specific planning overlays that could potentially enable tighter regulation of highly odorous industries.
- There may be an opportunity to invoke the *Public Health Act 2005* when a public health risk is identified.

10 Recommendations

The Inquiry concluded the odour from the industrial areas are affecting the health of thousands of nearby residents. The planned residential growth near the industrial areas will further exacerbate the problem in the coming years.

Addressing the odour will not be simple. The industrial areas are very large and contain many contiguous odorous sources on sites operated by multiple companies, government agencies and individuals. The industrial areas are currently important to managing South East Queensland's waste.

The recommendations in this chapter are underpinned by the fundamental public health principle of creating a supportive environment⁸⁸ which promotes health, provides a safe community, and opportunities to enhance health and wellbeing.

Action must be taken to address the odours as they are making the people of Ipswich feel sick and affecting their wellbeing.

The recommendations detailed in this chapter provide an approach to addressing the odour issues.

Recommendation 1: Provide some immediate relief from the most offensive odours from composters

It is recommended the Queensland Government work with composters to cease the acceptance of highly odorous waste sooner than the established timeframe of September 2026. This should provide some immediate relief and reduce the public health risk confronting Ipswich residents that is attributable to highly odorous waste.

The Consent Orders relating to the management of odorous waste made by the Planning and Environment Court on 18 September 2024 in the case of one composting operator, and the agreements entered into between DETSI and other composting operators, reflected in the terms of various EAs, were made and entered into without explicitly recognising the urgent need to mitigate and control the public health risk attributable to highly odorous waste.

The Queensland Government should explore possible options to bring forward the September 2026 timeframe for composting operators accepting highly odorous waste.

- Highly odorous waste includes:
 - abattoir waste
 - animal waste and animal processing waste
 - biosolids that are not stabilised biosolids (human waste)
 - fish processing waste
 - food processing effluent (wastewater) and solids (including sludges) from protein based food
 - grease trap waste—liquid and solid
 - poultry processing waste.

Action should be taken against composting operators who do not comply with a revised timeframe.

Recommendation 2: Consider two options to provide long-term relief from highly offensive odour from composting

There are two options for the Queensland Government to consider to manage the public health risk associated with odour from composting operations in the industrial areas:

- **Option 1: Support industry to find a new location to compost.** The Queensland Government support industry to identify an alternative location in South East Queensland for commercial composting and relocate composting operations in the industrial areas to this new location. The new location must be well away from residential areas and protected by an appropriate quarantined buffer. Composting should be undertaken in enclosed systems at the new location. This option eliminates the public health risk associated with composting odour from the industrial areas. Legislative change may be required to implement this option.
- **Option 2: Support industry to ensure construction of permanent enclosed facilities.** The Queensland Government support industry to ensure the established timelines to address odour are met. This will result in the construction of permanent enclosed facilities. The actions and timelines have been ordered by the Queensland Courts¹⁶⁶ or

negotiated with DETSI. (Refer to Part B). This should start to provide the Ipswich community with significant odour relief by September 2026. If operated and maintained correctly, this will mitigate the public health impact but may not eliminate all odour.

Recommendation 3: Apply recommendations 1 and 2 to the other commercial composting site operating in Ipswich

The Inquiry also heard from people impacted by one other open-air commercial composting operation just outside of the industrial areas, close to residents. This operation is also a source of highly offensive odours. The Queensland Government should consider applying recommendation 1 and 2 to address this odour source.

Recommendation 4: Audit all remaining odour-producing companies in the industrial areas and develop an overarching odour management plan

There are other companies producing some odours of different severity and type within the industrial areas. To address these other potential odour sources, it is recommended the Queensland Government:

- Engage independent certified Industrial Facilities Auditors to audit every individual odour-producing business in the industrial areas to review current practices and make recommendations with implementation timeframes to meet best practice by 31 December 2025.
- Based on the audit findings an overarching odour management plan for the entire industrial area be developed, in partnership with industry peak bodies, by 31 December 2026. The plan should include strategies for managing stagnant stormwater and protecting human health.
- The Public Health Act could be invoked to enforce this recommendation.

Recommendation 5: Consider undertaking an expanded air monitoring program in the industrial and nearby residential areas

Consider an expanded air monitoring program in the industrial and nearby residential areas to better understand the impact on human health by 30 September 2025. The air monitoring program should:

- Include canister monitoring for VOCs that are collected over a 24-hour period and analysed for the USEPA TO-15 suite of VOCs.
- Be undertaken at the existing DETSI monitoring locations.
- Monitor on a one-in-six-day-day cycle for 12 months across all seasons.
- Include bioaerosol monitoring for 12 months across all seasons.
- Be reviewed (both air quality and bioaerosol monitoring programs) after 12 months from commencement to determine ongoing requirements.

Recommendation 6: Protect industrial buffer zones from development

It is recommended the regulations around industry buffer zones are clarified and enforced to ensure no further encroachment of residential areas with the aim of reducing the risk to public health.

Recommendation 7: Leverage existing laws and consider improvements to legislation to better manage odour

The Inquiry understands there are existing planning instruments that can be applied to assist with the management of odour. These could potentially enable tighter regulation of highly odorous industries, for example, by using specific planning overlays through state and/or local planning policies. There are powers under the *Public Health Act 2005* that might also be used. Every opportunity should be explored to fully leverage existing tools to manage potential odorous industries to protect human health.

The Inquiry also learned environmental legislation from other jurisdictions takes a performance-based approach to managing odour. Consideration should be given to amending the Queensland Government's Environmental Protection Policy for Air (Air EPP) to include performance measures for managing odour or alternatively a specific EPP for Odour could be developed as a standalone instrument.

Other regulatory improvements that could be considered include:

- Making it more explicit that the *Environmental Protection Act 1994* has a role in the protection of human health.
- Requiring operators to maintain a 'state of knowledge' to understand the risk operations pose to human health and the environment and operate at current best practice.
- Increase the penalties for non-compliance with council development approvals.
- Require management plans to be performance-based and contain measurable targets.
- The ability to review and amend EA and DA approval conditions on a routine basis (for example, every five years) to keep up with best practice and current legislation. Consideration should be given to establishing a dedicated team within both DETSI and ICC to conduct these initial reviews.
- Temporarily cease a company's operations if odour is not managed and creates a public health risk or if an odour management plan is not approved.
- More timely approval of DAs related to enforcement actions from the regulator (for example, within six weeks of receipt of all required documentation).
- The Queensland Government should review, and if necessary, develop legislation to ultimately achieve two outcomes to protect the health of the Ipswich community:
 - Existing odour-producing businesses must demonstrate they can manage their odour in accordance with industry best practice or move to a new location.
 - New odour-producing businesses will not be approved to operate unless they demonstrate they can effectively manage their odour emissions in accordance with industry best practice.

Recommendation 8: Establish an inter-departmental steering committee responsible for implementing these recommendations

It is recommended the Queensland Government establish an inter-departmental Steering Committee to ensure the odour issues in the industrial areas are addressed in accordance with the Inquiry's recommendations.

The Steering Committee is to provide expert guidance and advice to the Minister for Health and Ambulance Services and the Minister for the Environment, Tourism, Science and Innovation on the implementation of the Inquiry's recommendations.

The Committee should have an independent chair and include representatives from Queensland Health and DETSI, with opportunities for input from the Department of State Development, Infrastructure and Planning, local government, the Ipswich community and industry.

An inter-departmental steering committee is required for two reasons:

1. There are multiple government agencies involved with the operations of the industrial areas. A steering committee will ensure there is a single body accountable for implementing the recommendations.
2. Many in the community have lost faith in all arms of government to stop the odours—given it has been a long-standing issue for the people of Ipswich. A steering committee with community involvement will restore confidence in addressing the odours.

Through this steering committee, DETSI and Queensland Health should work together to clarify roles and responsibilities around assessing and managing public health risks associated with odour. The community will expect Queensland Health to play a greater role. This could include issuing joint alerts in response to an odour event so residents can modify their activities to reduce their potential exposure.

11 List of acronyms

AAQC	Ambient Air Quality Criteria
ABS	Australian Bureau of Statistics
Air EPP	Environmental Protection (Air) Policy 2019
ASGS	Australian Statistical Geography Standard (ASGS Edition 3)
CRG	community reference group
DA	Development Approval
DETSI	Department of the Environment, Tourism, Science and Innovation
EA	Environmental Authority
EP Act	Environmental Protection Act 1994
EPOLA	Environmental Protection (Powers and Penalties) and Other Legislation Amendment Act 2024
EPP	Environmental Protection Policy
ERA	environmentally relevant activities
ERS	environmental reference standard
FIDOL	Frequency, Intensity, Duration, Offensiveness, Location
FOGO	food organics garden organics
GED	general environmental duty
GO	garden organics
ICC	Ipswich City Council
IRATE	Ipswich Residents Against Toxic Emissions
LGA	Local Government Area
NATA	National Association of Testing Authorities
NTM	Nontuberculous Mycobacterium
QUT	Queensland University of Technology
SA2	Statistical Area Level 2
SARA	State Assessment and Referral Agency
SAL	suburbs and localities
SEQ	South East Queensland
TCEQ	Texas Commission on Environmental Quality
TLPI	temporary local planning instrument
ToR	Terms of Reference
VOCs	volatile organic compounds



WHO	World Health Organization
WMI	Wood Mulching Industries Pty Ltd
WMPHU	West Moreton Public Health Unit
WRIQ	Waste and Recycling Industry Association of Queensland

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13 Appendices

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Appendix A. Terms of Reference—Public Health Inquiry into odour issues at Swanbank Industrial Estate

1. Purpose

A Public Health Inquiry into Odour Issues at Swanbank Industrial Estate (the Inquiry) has been being commissioned under s 294 of the Public Health Act 2005 (PH Act) by the Honourable Tim Nicholls MP, Minister for Health and Ambulance Services and Member for Clayfield (the Minister).

The purpose of the Inquiry is to inquire into and report on the circumstances and possible causes of odour-related health concerns of the community living in the vicinity of the Swanbank Industrial Estate and recommend actions to mitigate the impacts.

2. Background

The Swanbank Industrial Area has been in place for many years. There are several landfill and composting sites within the Swanbank and New Chum industrial areas which are known sources of odour.

A significant number of residential developments, combined with infill from areas such as Redbank, have led to increased urban encroachment around the Swanbank Industrial Estate.

The Department of the Environment, Tourism, Science and Innovation (DETSI) regulates environmentally relevant activities within the Swanbank Industrial Estate under the Environmental Protection Act 1994. DETSI has been investigating and responding to concerns raised by the community about odours, dust, and other environmental nuisance in and around these areas for several years. A range of actions have been taken, including significant regulatory and compliance actions. A summary is available online at: <https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/updates>.

Queensland Health's role has been to provide health advice and related support to the other lead agencies undertaking investigations.

To support the community, DETSI and Queensland Health have worked collaboratively to engage with the community, including establishing referral pathways for community members to access clinical services.

3. Scope of the Inquiry

The Inquiry will consider any relevant health-related evidence from 2016 to present day. This timeframe accounts for early complaints from the community about odour impacts, up until now.

The Inquiry will:

- investigate the extent of the health effects of the odours from the Swanbank Industrial Estate; and
- recommend actions that may be taken to mitigate any health-related impacts on local communities.

As part of this Inquiry, a number of public consultation events will be held with residents living in the vicinity of the Swanbank Industrial Estate to understand their experiences and the impact of odour on their everyday lives.

The term of the Inquiry is up to six (6) months.

The Inquiry will not consider any regulatory or compliance matters led by either the State of Queensland or Local Government, except to the extent that it provides context for any health impacts experienced by the community.

4. Appointment

The Minister has appointed Dr John Gerrard as the chairperson of the Panel of Inquiry (the Panel).

5. Role of the Panel

The key role of the Panel will be to undertake the Inquiry and prepare a Report for the Minister.

In undertaking the Inquiry, the Panel will be responsible for making decisions regarding commissioning any project briefs, evaluating impacts, and formulating recommendations, as part of the Report to the Minister. The Panel of Inquiry will specifically seek to:

- describe industrial activities occurring over time in the Swanbank Industrial Estate and summarise available data on odour and air quality in surrounding communities over the same period;
- determine whether the odour issues from the Swanbank Industrial Estate contributed to an increase in health impacts, having regard to any relevant evidence for the period 2016 to present day;
- document measures taken by relevant regulatory agencies to address odour-related complaints and health concerns and whether they have had any impact to date from a health perspective;
- identify measures taken (including by relevant regulatory agencies) to address odour-related complaints and health concerns of the community in the vicinity of the Swanbank Industrial Estate and whether they have had any impact on addressing health impacts; and
- draw on relevant domestic and international policy experiences, standards and best practices, where appropriate, in the conduct of the inquiry.

6. Conduct of the Inquiry

In conducting the Inquiry, the Panel will comply with the relevant provisions of Chapter 7 of the PH Act. This includes observing natural justice and acting as quickly, and with as little formality and technicality, as is consistent with a fair and proper consideration of the issues.

7. Report to the Minister

The Panel will provide a draft report to the Minister on 30 May 2025, with a final report to be provided by Friday 30 June 2025, or other date as agreed by the Minister.

The report will detail the Panel's findings, including any recommendations the Panel considers appropriate and other relevant matters.


As required under the PH Act, the Minister will table a copy of the final report in Parliament within fourteen (14) sitting days of receipt.

8. Media

Enquiries from media representatives should be referred to the Media Unit, Integrated Communications, Queensland Health, news@health.qld.gov.au

Appendix B. Gazette notice

[233]



Queensland Government Gazette
GENERAL

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Public Health Act 2005

**ESTABLISHMENT OF PANEL OF INQUIRY –
INQUIRY INTO SERIOUS PUBLIC HEALTH MATTER**

A Public Health Inquiry into the health impacts of odours from the Swanbank and New Chum Industrial Estates upon local communities living near to these Estates has been being commissioned under s 294 of the *Public Health Act 2005* by the Honourable Tim Nicholls MP, Minister for Health and Ambulance Services and Member for Clayfield (the Minister).

The Minister has appointed a Panel of Inquiry to inquire into and report on the extent of the health effects of the odours from the Swanbank and New Chum Industrial Estates on local communities, and to recommend actions that may be taken to mitigate any health-related impacts on these local communities.

The Panel is comprised of:

- Dr John Gerrard, Former Queensland Chief Health Officer, Chairperson [appointed 6 January 2025]
- Dr Lyn Denison, Director LD Environmental [appointed 28 January 2025].

The Panel will provide the Minister with a Report containing the Panel's findings, including any recommendations the Panel considers appropriate and other relevant matters.

The Report is to be provided to the Minister by 30 June 2025, or other date as agreed by the Minister.

Appendix C. Panel member biographies

Dr John Gerrard, panel Chair

Dr John Gerrard is a specialist physician and former Chief Health Officer of Queensland.

Dr Gerrard trained in Internal Medicine and the subspecialty of Infectious Diseases in Sydney and London before moving to Queensland in 1994. There he took on the roles of Director of Infectious Diseases and Director of Medicine at the Gold Coast University Hospital.

Between 2021 and 2024 he became Chief Health Officer of Queensland during the peak of the COVID-19 pandemic before returning to clinical practice in 2025.

His primary research interest is in emerging infectious disease. Among other work, he identified the earliest case of AIDS in Australia and even has a human pathogen named after him (*Heterorhabditis gerrardi*).

He has been actively involved in the international response to emerging infectious threats including Ebola in West Africa in 1994 and the early stages of COVID-19 in Japan and the Dutch Antilles.

Dr Gerrard regards his most important and fulfilling role as a clinician caring for individual patients.

Dr Lyn Denison, panel member

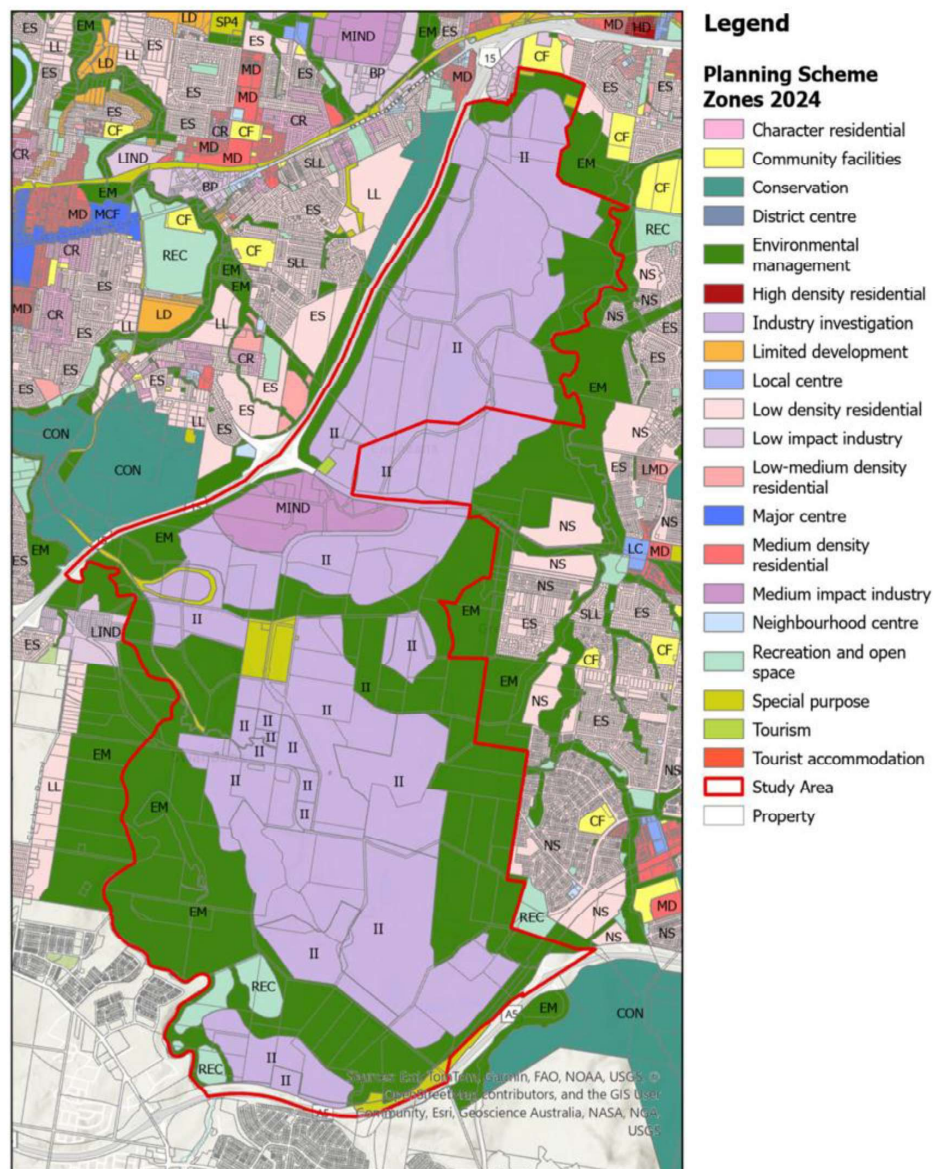
Dr Lyn Denison is an expert in assessing environmental pollutants and their impact on health, with particular expertise in human health risk assessment.

Dr Denison is the Director and Principal Consultant with LD Environmental. She has more than 30 years' experience in air quality and human health risk assessment in both government and consulting. Her work has focused on the assessment of environmental pollutants and their impact on human health.

Dr Denison has extensive experience in human health risk assessment including the application to environmental standard setting, health impacts from transport and industrial emissions, air pollution, noise, accidental chemical releases and fires and contaminated land. Her work has focused on the assessment of environmental pollutants, including air pollution and odour and their impact on human health.

She has been involved in the development of national and state policy including the development of air quality standards aimed at the protection of human health.

Appendix D. Ipswich City Council Planning Scheme Zones 2024



Notes: The draft new planning scheme (Ipswich Plan) and draft LGIP is now in the adoption stage of the plan making process having received State Government approval to proceed to adoption, with conditions, on 14 February 2025.

Zone changes have largely reverted back to Industry Investigation Zone, with a new overlay (OV5 - Growth Management) applied to underpin future development in the area. These changes have been made in order to reflect Council's policy direction in the waste management space. It should be noted the draft scheme also includes a new development code, the Resource Recovery and Waste Activity Code to direct future development of this type.

Appendix E. Site profiles

Chip Tyre Pty Ltd

Site name	Chip Tyre Pty Ltd (Chip Tyre) waste recycling facility
Environmental Authority	<p><u>EPPR04313816</u> https://storage.solutiondocsprod.blob.core.windows.net/register-documents-ea/EPPR04313816.pdf</p> <ul style="list-style-type: none">• ERA 7(5)(c) Chemical manufacturing• ERA 7(6)(c) Chemical manufacturing• ERA 54(3)(c) Mechanical waste reprocessing• ERA 61(3)(b) Thermal waste reprocessing and treatment• ERA 62(2) Resource recovery and transfer facility operation• ERA 57 Regulated waste transport <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none">• Address: 62 Austin Street, New Chum Qld 4303 and 191 Whitwood Road, New Chum 4303• Lot 2 RP147482, Lot 251 S3185, Lot 4 RP22539, A RP843905
Site overview	<ul style="list-style-type: none">• The site receives tyres and other rubber products for recycling and reprocessing whilst the incineration or thermal treatment remains under construction and is not operational.• Condition 2A-1 of the environmental authority requires 'Other than as permitted within this environmental authority, odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place'.
Odour potential	<ul style="list-style-type: none">• Chip Tyre accepts tyres and other rubber products for recycling, reprocessing, and incineration or treatment. These activities may contribute to odour.• The activity is within proximity of residential land-uses.
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php.</p> <p>No enforcement notices have been issued for odour.</p>



Figure 1. Chip Tyre site from Queensland Globe

Cleanaway Solid Waste Pty Ltd

Site name	Cleanaway New Chum landfill
Environmental Authority	<p>EPPR00445713</p> <p>https://apps.des.qld.gov.au/public-register/pages/ea.php?id=100847</p> <ul style="list-style-type: none"> • ERA 60 - Waste disposal 2: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b) (h) more than 200,000t • ERA 54 - Mechanical waste reprocessing 2: Operating a facility for receiving and mechanically reprocessing, in a year, the following quantity of general waste- (c) more than 10,000t • ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (b) general waste <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none"> • Address: 20 Rhondda Road, New Chum QLD (Lot 227 on SP103913) and Chum Street New Chum QLD (Lot 268 on SP103913) • Lot 268 and 277 on SP103913, approximately 170.3 hectares including landfill cells, Cell 1, Cell 2, 2B, Cell 3A, 3B, Cell 4A, 4B, Cell 5, 5A, 5A1, 5B.
Site overview	<ul style="list-style-type: none"> • Waste authorised to be received at the landfill includes inert construction and demolition waste and limited regulated waste, including asbestos, shredded tyres and treatment tank sludge. • Since February 2022, due to an extreme weather event impacting the site, Cleanaway New Chum has been closed and has not accepted waste, with the exception of soil for capping and site maintenance. • Cleanaway are planning to reopen and commence landfilling in 2025 to fill Cell 3B. Once Cell 3B is full and capped, the activity will transition to a closed landfill. • The location of activities undertaken on the site are conducted in the areas in Figure 2.
Odour potential	<ul style="list-style-type: none"> • As stated in DETSI's <i>Landfill Siting, Design, Operation and Rehabilitation Guideline</i>, 'the environmental hazards and potential risks posed by a landfill site will vary due to the types of wastes accepted and the location of the site.' The guideline identifies odour from landfill has the potential to cause nuisance and identifies some potential on site sources of odour and mitigation measures. • The activity is within proximity of residential land-uses.
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php.</p> <p>The following enforcement actions have been taken by DETSI in</p>

	<p>relation to odour at the site.</p> <p>Direction Notice (STAT-E-100230380)</p> <ul style="list-style-type: none">• In March 2022, a Direction Notice was issued alleging that environmental nuisance was being caused. <p>Direction Notice (STAT-E-100230420)</p> <ul style="list-style-type: none">• In April 2022, a Direction Notice was issued alleging that environmental nuisance was being caused. <p>Environmental Protection Order (EPO) (STAT-E-100235131)</p> <ul style="list-style-type: none">• In April 2022, an EPO was issued alleging that Cleanaway was failing to comply with the conditions of its EA and failing to uphold its general environmental duty. <p>Environmental Protection Order (STAT-E-100256441)</p> <ul style="list-style-type: none">• In June 2022, an EPO was issued alleging that Cleanaway was failing to comply with the conditions of its EA and failing to uphold its general environmental duty. <p>Environmental Protection Order (STAT-E-100330457)</p> <ul style="list-style-type: none">• In November 2022, another EPO was issued alleging that Cleanaway was failing to comply with the conditions of its EA and failing to uphold its general environmental duty. <p>Since July 2024 and as an outcome of an environmental evaluation issued to Cleanaway in 2019, Cleanaway constructed a water treatment plant (WTP) used to treat collected water prior to discharging offsite, providing an avenue to decrease on-site contaminated water storage.</p>
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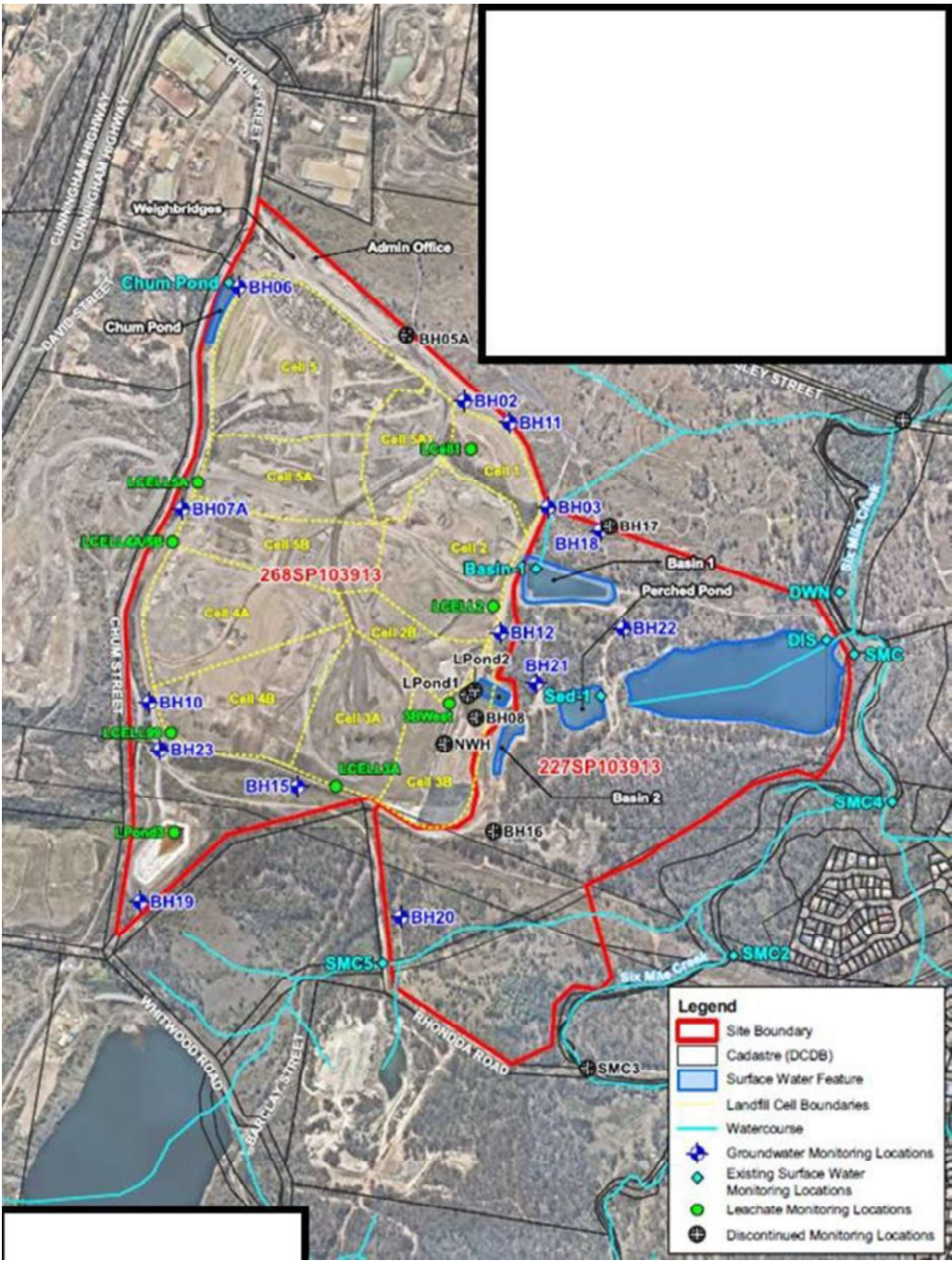


Figure 2. Cell and site boundary

Lantrak Waste and Recycling Pty Ltd

Site name	Lantrak landfill
Environmental Authority	<p>EPPR00703413</p> <p>https://apps.des.qld.gov.au/public-register/pages/ea.php?id=111250</p> <ul style="list-style-type: none"> • ERA 60(1)(a)(d) Waste disposal • ERA 62(1)(a) Resource recovery and transfer facility operation • ERA 54(1) Mechanical waste reprocessing • ERA 16 (3)(a) Extraction and Screening <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none"> • Address: Memorial Drive, Swanbank Qld 4305 • Lot 5 SP225229
Site overview	<ul style="list-style-type: none"> • The site consists of the current operation cell that is near end of life where it will cease to receive waste, and the final landform will be finalised. • Condition P1-A1 of the environmental authority requires 'Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any sensitive place or commercial place.'
Odour potential	<ul style="list-style-type: none"> • As stated in DETSI's <i>Landfill Siting, Design, Operation and Rehabilitation Guideline</i>, 'the environmental hazards and potential risks posed by a landfill site will vary due to the types of wastes accepted and the location of the site.' The guideline identifies odour from landfill has the potential to cause nuisance and identifies some potential on site sources of odour and mitigation measures. • Lantrak accepts construction and demolition waste and small amounts of incidental or comingled green waste for recovery, reprocessing, and/or disposal that do not have an odour rating, and that has a low odour rating respectively, in accordance with DETSI's <i>Best Practice Environmental Management Guideline ERA 53(a) Organic material processing by composting</i>.
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php.</p> <p>No enforcement notices have been issued for odour.</p>



Figure 3. Lantrak site from Queensland Globe

NuGrow Ipswich Pty Ltd

Site name	NuGrow Ipswich (NuGrow) composting facility
Environmental Authority	<p>EPPR00696713</p> <p>https://apps.des.qld.gov.au/public-register/pages/ea.php?id=105366</p> <ul style="list-style-type: none"> • ERA 33—Crushing, milling, grinding or screening • Crushing, grinding, milling or screening more than 5000t of material in a year • ERA 53—Organic material processing • Processing more than 200t of organic material in a year by composting the organic material • ERA 54—Mechanical waste reprocessing • 1—Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only • ERA 55—Other waste reprocessing or treatment • 3(c)—Operating a facility for receiving and either reprocessing or treating, in a year, the following quantity of category 1 regulated waste - more than 10,000t • ERA 55—Other waste reprocessing or treatment • 2(c)—Operating a facility for receiving and either reprocessing or treating, in a year, the following quantity of category 2 regulated waste - more than 10,000t • ERA 55—Other waste reprocessing or treatment • 1(c)—Operating a facility for receiving and either reprocessing or treating, in a year, the following quantity of general waste - more than 10,000t • ERA 57—Regulated Waste Transport • Transporting regulated waste • ERA 61—Thermal waste reprocessing and treatment • 1(a)—Thermally reprocessing or treating, in a year, the following quantity of general waste—not more than 5000t <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none"> • Address: Swanbank Road, Swanbank Qld 4306 • Lot 3 on Plan SP289972
Site overview	<ul style="list-style-type: none"> • NuGrow operates one of the largest composting facilities in Queensland, serving a large number of Queensland waste generators

	<p>and waste transporters and providing compost and soil conditioners to the landscape, infrastructure and agricultural industries.</p> <ul style="list-style-type: none"> Condition 1–A1 of the Environmental Authority requires: ‘<i>Odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place.</i>’ Activities undertaken on the site must be conducted within the designated areas for each activity, as outlined by the prescribed areas in Figure 4 below, pursuant to EA condition 1–G1-1(a). NuGrow is in the process of transitioning from an open windrow composting facility to an in-vessel/enclosed composting facility by September 2028. The site is being developed in accordance with the conditions of EPPR00696713. Areas for future approved activities are as prescribed in Figure 5.
Odour potential	<ul style="list-style-type: none"> NuGrow operates an open-air composting activity that accepts odorous waste as categorised by DETSI’s <i>Best Practice Management Guideline</i> – ERA 53(a) Organic Material processing by composting. The guideline is accessible at: https://www.des.qld.gov.au/policies?a=272936:policy_registry/era-gl-bpem-composting.pdf. The activity is within proximity of residential land uses.
Odour mitigation	<ul style="list-style-type: none"> NuGrow’s environmental authority requires it to upgrade its waste processing infrastructure and processes for the purpose of reducing odour emissions. These upgrades are reflected in the EA, and specifically at condition 1-G1.
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php.</p> <p>The following enforcement actions have been taken by DETSI in relation to odour at the site.</p> <p>Direction Notice (STAT1182)</p> <ul style="list-style-type: none"> In 2017, DETSI issued a Direction Notice to NuGrow Metro Pty Ltd who was the holder of the EA which alleged breaches of conditions of its EA with authorised officers determining that an odour emanated from a burning stockpile of ‘finished’ compost located at the site. <p>Environmental Evaluation (EE) (STAT1365)</p> <ul style="list-style-type: none"> In April 2019, NuGrow was issued a Notice to conduct or commission an Environmental Evaluation as DETSI believed on reasonable grounds that the activity being carried out on the premises was causing or was likely to cause environmental harm (environmental nuisance – odour) at a nuisance sensitive place. <p>Transitional Environmental Program (TEP) (MAN-E-100025166)</p> <ul style="list-style-type: none"> In 2019, following the EE, NuGrow submitted a TEP. Court ordered amendments in September 2020 identified that the TEP outlined actions, performance indicators, monitoring and reporting to be undertaken over the following three years to reduce odour emissions from the site to prevent nuisance at surrounding sensitive receptors. <p>Environmental Protection Order (STAT-E-100084662)</p> <ul style="list-style-type: none"> In May 2021, DETSI issued an Environmental Protection Order (EPO) in respect of leachate and contaminated stormwater management. Court ordered amendments to the requirements of



	<p>the EPO in August 2022 stated that the EPO would end when certain requirements had been met, including an impervious barrier established over the areas identified in a condition of the EA.</p> <p><u>Other</u></p> <p>Restraint order (No.3527 of 2023)</p> <p>In September 2024, the court issued a restraint order against NuGrow, including to minimise any adverse effect, or potential adverse effect, of the activity on odour. Amendments to its EA followed.</p>
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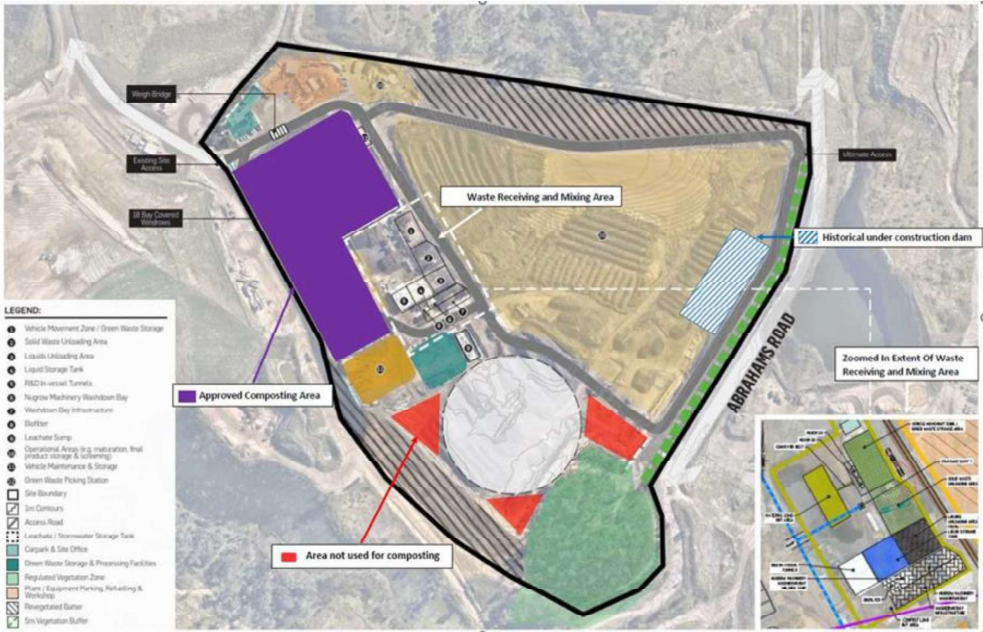


Figure 4. As per EPPR00696713

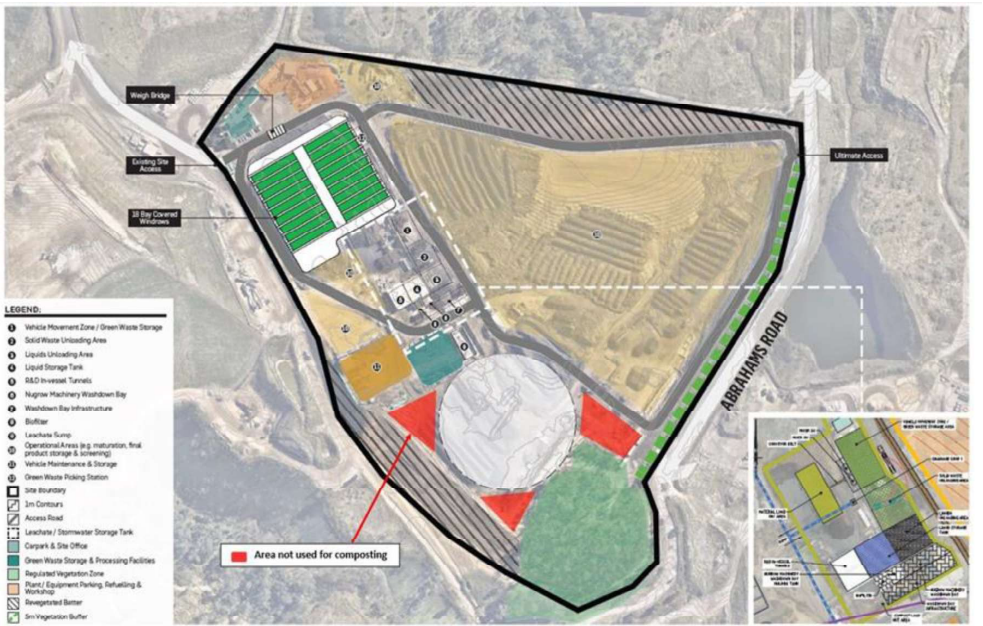


Figure 5. As per EPPR00696713

Re-Direct Recycling Pty Ltd

Site name	Re-Direct Recycling Pty Ltd (Re-Direct)—Re-Direct landfill
Environmental Authority	<p><u>EPPR00706313</u></p> <p>https://apps.des.qld.gov.au/public-register/pages/ea.php?id=104530</p> <ul style="list-style-type: none"> • ERA 54(1) Mechanical waste reprocessing • ERA 60(2)(g) Waste disposal • ERA 62(1)(a) Resource recovery and transfer facility operation <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none"> • Address: 30 Memorial Drive, Swanbank Qld 4306 • Lot 1 SP225229, Lot 4 SP225229
Site overview	<ul style="list-style-type: none"> • The site comprises two physically separated lots with Lot 1 to the north having an operational landfill in the northern part of Lot 1 and construction of a cell in the southern part of Lot 1 has commenced whilst Lot 4 to the south is a historical landfill cell.
Odour potential	<ul style="list-style-type: none"> • As stated in DETSI's <i>Landfill Siting, Design, Operation and Rehabilitation Guideline</i>, 'the environmental hazards and potential risks posed by a landfill site will vary due to the types of wastes accepted and the location of the site.' This guideline identifies odour from landfill has potential to cause nuisance and identifies some potential sources and measures to help manage odours. • Re-Direct accepts construction and demolition waste and green waste for recovery, reprocessing, and/or disposal. • Condition B1 of the environmental authority requires 'Notwithstanding any other condition of this approval no release of contaminants from the approved place is to cause noxious or offensive odour beyond the boundaries of the approved place'. • The activity is within proximity of residential land-uses.
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php.</p> <p>No enforcement notices have been issued for odour.</p>



Figure 6. Re-Direct site from Queensland Globe

Remondis Australia Pty Ltd

Site name	REMONDIS Swanbank landfill
Environmental Authority	<p><u>EPPR00823413</u></p> <p>https://apps.des.qld.gov.au/public-register/pages/ea.php?id=102021</p> <ul style="list-style-type: none"> • ERA 33 Crushing, milling, grinding or screening. • ERA 53(a) Organic material processing. • ERA 54(2)(c) Mechanical waste reprocessing. • ERA 54(3)(c) Mechanical waste reprocessing. • ERA 54(4)(c) Mechanical waste reprocessing. • ERA 55(1)(c) Other waste reprocessing or treatment. • ERA 55(2)(c) Other waste reprocessing or treatment. • ERA 55(3)(c) Other waste reprocessing or treatment. • ERA 60(1)(d) Waste disposal. • ERA 62(1)(b) Resource recovery and transfer facility operation. • ERA 62(1)(c) Resource recovery and transfer facility operation. • ERA 62(1)(d) Resource recovery and transfer facility operation. <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none"> • Address: Swanbank Road, Swanbank Qld 4306 • Lot 103 SP189609, Lot 104 RP839073, Lot 101 RP839072, Lot 102 RP839072, Lot 3 RP214256
Site overview	<ul style="list-style-type: none"> • The site is one of the largest commercial landfills (no public access) and waste management operations in the region, with staged landfilling approved to occur. • This site has stages of development. Stage 1 comprises historical cells and the current operational cell whilst Stage 2 comprises the historical hardfill cell (hardfill), construction of a new cell and construction of a new enclosed composting facility has also commenced.
Odour potential	<ul style="list-style-type: none"> • As stated in DETSI's <i>Landfill Siting, Design, Operation and Rehabilitation Guideline</i>, 'the environmental hazards and potential risks posed by a landfill site will vary due to the types of wastes accepted and the location of the site.' This guideline identifies odour from landfill has potential to cause nuisance and identifies some potential sources and measures to help manage odours. • REMONDIS accepts a range of general and regulated wastes for recovery, reprocessing, treatment and/or disposal that have an odour rating ranging from low to very high in accordance with DETSI's <i>Best Practice Environmental Management Guideline ERA 53(a) Organic material processing by composting</i>. • Condition B3-1 of the environmental authority (Stage 1) requires 'Notwithstanding any other conditions of this environmental authority, no release of contaminants from the site is to cause a noxious or offensive odour beyond the boundaries of the site to which this environmental authority applies.'

Item 16.2 / Attachment 3.

	<ul style="list-style-type: none">• Condition 1-B1 of the environmental authority (Stage 2) requires 'odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not cause environmental nuisance to any sensitive place or commercial place.'
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php.</p> <p>No enforcement notices have been issued for odour.</p>



Figure 7. REMONDIS site from Queensland Globe

Wood Mulching Industries Pty Ltd

Site name	Wood Mulching Industries (WMI) composting facility
Environmental Authority	<p><u>EPPR00816413</u></p> <p>https://apps.des.qld.gov.au/public-register/pages/ea.php?id=100176</p> <ul style="list-style-type: none"> • ERA 53—Organic material processing—(a) Processing more than 200t of organic material in a year by composting the organic material • ERA 54—Mechanical waste reprocessing—1—Operating a facility for receiving and mechanically reprocessing, in a year, more than 5000t of inert, non-putrescible waste or green waste only. <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. A copy of this environmental authority can be accessed through the Public Register Portal (https://apps.des.qld.gov.au/public-register/search/ea.php).</p>
Location	<ul style="list-style-type: none"> • Address: Centenary Highway, Swanbank Qld 4306 • Lots 400, 402, 403 and 405 on SP283238 and Lot 404 on SP313797
Site overview	<ul style="list-style-type: none"> • WMI serves waste generators and transporters providing compost and soil conditioners to the landscape, infrastructure and agricultural industries. • Condition A1 of the Environmental Authority requires: ‘<i>Odours or airborne contaminants must not cause environmental nuisance to any sensitive or commercial place.</i>’ • Composting activities undertaken on the site must be conducted within the designated areas for each activity, as outlined by the prescribed areas in Figure 8, pursuant to EA condition G1.1. • WMI are in the process of transitioning from an open windrow composting activity to an in-vessel composting activity that uses anerobic digestion. The new activity is authorised by a separate EA currently in voluntary suspension (P-EA-100119834) Figure 9.
Odour potential	<ul style="list-style-type: none"> • WMI operates an open-air composting activity that accepts odorous waste as categorised by DETSI’s <i>Best Practice Management Guideline – ERA 53(a) Organic Material processing by composting.</i> • The activity is within proximity of residential land-uses.’
Odour mitigation	<ul style="list-style-type: none"> • WMI’s environmental authority requires it to upgrade its waste processing infrastructure and processes for the purpose of reducing odour emissions. These upgrades are reflected in the EA, and specifically at condition G1.1. • WMI must cease receiving certain odorous waste under its current EA by September 2026. • WMI are in the process of transitioning to an in-vessel composting activity that uses anerobic digestion. The new activity is authorised by a separate EA currently in voluntary suspension (P-EA-100119834). • WMI will be able to receive certain odorous waste upon construction of its proposed facility.
Compliance history	<p><u>Enforcement actions</u></p> <p>DETSI maintains a public register of records related to the regulation of environmentally relevant activities. This is provided in accordance with the <i>Environmental Protection Act 1994</i>. Copies of enforcement notices can be accessed through the Public Register Portal at https://apps.des.qld.gov.au/public-register/search/enforcement.php. The following enforcement actions have been taken by DETSI in relation</p>

	<p>to odour at the site.</p> <p>Environmental Evaluation (STAT1367)</p> <ul style="list-style-type: none">• In 2019, DETSI issued WMI an EE notice requiring it to commission an investigation into the source and causes of odour and recommend mitigation measures. WMI appealed this notice and in March 2020, the Planning & Environment (P&E) Court ordered the EE to be set aside. The court required an amended EE, which required WMI to submit a final report in January 2021 which was accepted by DETSI in April 2021. <p>Environmental Protection Order (EPO) (STAT-E-100573195)</p> <ul style="list-style-type: none">• An EPO was issued to WMI on 12 January 2024 and amended on 25 January 2024 requiring it to comply with its general environmental duty.• Following on from the EPO, WMI's EA was amended through a Notice of Proposed Amendment (NOPA) process to include stockpile conditions that aligned with DETSI's guideline. <p><u>Other</u></p> <p>In 2024, after consultation, DETSI issued WMI a NOPA to amend its EA to include stricter odour management conditions to reduce the generation of odour onsite.</p>
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Figure 8. As per EPPR00816413



Figure 9. As per P-EA-100119834

Appendix F. Questionnaire

A survey about your health concerns—Public Health Inquiry, Swanbank and New Chum industrial areas

<p>Terms and Conditions</p> <p>The Queensland Government has initiated a Public Health Inquiry into possible health impacts from odours emanating from the Swanbank Industrial Estate.</p> <p>A Panel of Inquiry, chaired by Queensland's former Chief Health Officer, Dr John Gerrard, has been established to investigate the potential health effects from these odours.</p> <p>Before I begin to ask you questions relating to your exposure to odours and the impact which they may have had upon your health, I am required to:</p> <ol style="list-style-type: none">1. Provide you with information relating to the purpose of the Public Health Inquiry into odour issues at Swanbank Industrial Estate, and its process; and2. Obtain your consent to the collection and use of your personal and sensitive information, including your health information. <p>The Panel of Inquiry is seeking to obtain information from affected community members by online form and by phoning 13HEALTH. Dr Gerrard will meet with community members to document health concerns they have attributed to the odour from the industrial estate. The information that you provide to me today will assist Dr Gerrard in determining priority appointments. Not everyone who registers their interest will be able to meet with Dr Gerrard. It is important to be aware that these meetings will not be medical consultations.</p> <p>If you do not have symptoms, there is a section at the end of this form where you can provide additional information about the odour issues at Swanbank Industrial estate.</p> <p>The information that you provide to me today must be true and accurate to the best of your knowledge. It is unlawful to provide information which is false or misleading.</p> <p>The information will be provided to the Panel of Inquiry for the stated purposes of the Inquiry only. The information will be held by 13 HEALTH and won't be used for any other purpose. The Panel of Inquiry can lawfully collect this information under the <i>Public Health Act 2005</i>.</p> <p>When the Panel has completed these public consultations and its other investigations it will prepare a report for the Health Minister. The Minister is required to table the report in Parliament. Information that you provide may form part of this Report. You will not be identified in the Report. Nor will you be able to be identified by the information that you provide.</p> <p>Queensland Health may contact you further to follow up on your health concerns, contact may be by phone or email.</p>

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The Panel has no authority to award compensation for injuries allegedly suffered as a consequence of odours emanating from the Swanbank and New Chum Industrial Estate. Any claim for compensation that you may have, or wish to inquire about, cannot and will not be dealt with as part of this process.			
Do you consent to your personal and sensitive information, including your health information, being collected and used for the current inquiry into the Swanbank Industrial estate?	[select yes]		Mandatory
By clicking proceed you are confirming that you understand and agree to the above terms and conditions.	<p>[Click proceed]</p> <p><i>If any of the above questions are not ticked pop up "Without your consent we are unable to process your request"</i></p> <p><i>If you are concerned about your symptoms at any time, you should see your GP</i></p> <p><i>For more information or support you can visit www.123.health.qld.gov.au or contact 13HEALTH.</i></p>		Mandatory
New page			
Date	[Auto capture]	Date of call/form access	Hidden
		Time of call/form access	Hidden
Title	Field type	Options/data capture	Visibility
About you	Heading		
First name	[free text]		Mandatory
Last name	[free text]		Mandatory
Date of Birth	[Date: 00/00/0000]		Mandatory
Phone number	[free text]	Allow mobile and landline '0412 345 567' '07 1234 5678'	Mandatory
Additional/alternative phone number	[free text]	Allow mobile and landline '0412 345 567' '07 1234 5678'	Optional

Email	[free text]		Mandatory
Residential address	[free text] – auto finder	<i>Capture:</i> <ul style="list-style-type: none"> House/apartment number Street number Street name Suburb Postcode 	Mandatory
Are you the person experiencing symptoms? 'For each family member with symptoms please fill out a new form'	[Yes/No]	<i>If yes client will continue on to first symptom If no, pop out additional questions below</i>	Mandatory
Provide details of the person experiencing symptoms			
Relationship to you	[Drop down]	<ul style="list-style-type: none"> Child Parent Partner/married/defacto Carer Other, family Other, friend 	Mandatory
Their first name	[free text]		Mandatory
Their last name	[free text]		Mandatory
Date of Birth	[Date: 00/00/0000]		Mandatory
Symptoms have been reported in those who resided in or frequented the suburbs surrounding the Swanbank Industrial estate, Tell us about your experience.	Heading/ wording ahead of next section		
Select the suburb you spent the most time in	[Drop down]	<ul style="list-style-type: none"> Augustine Heights Bellbird Park Blackstone Booval Bundamba Collingwood Park Dinmore Eastern Heights Ebbw Vale 	Mandatory

			<ul style="list-style-type: none"> • Flinders View • New Chum • Newtown • Raceview • Redbank Plains • Ripley • Riverview • Silkstone • South Ripley • White Rock 		
Select the options that apply to you	[multi select]	<ul style="list-style-type: none"> • I currently live in this area • I previously lived in this area • I currently work or study in this area • I previously worked or studied in this area • I spent time conducting other activities in this area 	Mandatory, at least 1 option selected		
How long were you in this area?	[drop down]	<ul style="list-style-type: none"> • Less than 1 year • 1 - 2 years • 2 - 5 years • 5 - 10 years • >10 years 	Mandatory		
How often were you in this area?	[Drop down]	<ul style="list-style-type: none"> • Every day • A few times a week • Once per week • Less than once per week 	Mandatory		
Your Health	Heading				
Do you have a chronic health condition? For example, asthma or other chronic lung conditions, allergies, anxiety, depression	[Yes/No]	<i>If yes, fields pop out/become visible</i> <i>If no, client will continue onto 'tell us about your symptoms'</i>	Mandatory		
Has your chronic health condition worsened or do you think your ability to manage your condition has been impacted?	[Yes/No]		Mandatory		

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Any further details you would like to provide:	[free text, 100 word limit]		Optional
Tell us about your symptoms	Heading		
Do you or have you experienced skin symptoms?	[Yes/No/I don't know]	<i>If yes, Fields pop out/become visible</i> <i>If no, client will continue to next symptom</i>	Mandatory
Please describe your symptoms	[free text, 100 word limit]	+ Tick option to say • <i>I have nothing further to add</i> • <i>I am not sure</i>	Mandatory Text or tick to progress
Are your symptoms:	[drop down]	• Mild • Moderate • Severe	Mandatory
How long have you been experiencing these symptoms?	[drop down]	• Less than 1 year • 1 - 2 years • 2 - 5 years • 5 - 10 years • >10 years	Mandatory
How frequently are you or were you experiencing these symptoms?	[drop down]	• Daily • Weekly • Fortnightly • Monthly • Less than once a month	Mandatory
Have you seen a medical professional for your symptoms?	[drop down]	• General Practitioner (GP) • Emergency Department (ED) • Specialist doctor • Other	Mandatory
Did you receive treatment or prescriptions?	[Yes/No]		Optional
	If yes, pop out What kind of treatment did you receive? [multi select]	• Antibiotics • Ointment/cream • Sun protection • Antihistamines • Medications • Specialist referral • Other	Optional

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Do you or have you experienced any respiratory symptoms?	[Yes/No/I don't know]	If yes, Fields pop out/become visible If no or I don't know, client will continue to next symptom	Mandatory
Congested or blocked nose	[select if yes]		Optional
Irritated or sore throat	[select if yes]		Optional
Coughing or wheezing	[select if yes]		Optional
Please describe your symptoms	[free text, 100 word limit]	+ Tick option to say • I have nothing further to add • I am not sure	Mandatory Text or tick to progress
Are your symptoms:	[drop down]	• Mild • Moderate • Severe	Mandatory
How long have you been experiencing these symptoms?	[drop down]	• Less than 1 year • 1 - 2 years • 2 - 5 years • 5 - 10 years • >10 years	Mandatory
How frequently are you experiencing these symptoms?	[drop down]	• Daily • Weekly • Fortnightly • Monthly • Less than once a month	Mandatory
Have you seen a medical professional for your symptoms?	[drop down]	• General Practitioner (GP) • Emergency Department (ED) • Specialist doctor • Other	Mandatory
Did you receive treatment or prescriptions?	[Yes/No]		Optional
	If yes, pop out What kind of treatment did you receive? [multi select]	• Antibiotics • Inhaler • Nebuliser • Nasal spray or saline wash • Lozenges or throat spray • Antihistamine tablet	Optional

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		<ul style="list-style-type: none"> Medication/tablets Other 		
Do you or have you experienced any eye symptoms?	[Yes/No/I don't know]	If yes, Fields pop out/become visible If no or I don't know, client will continue to next symptom		
Watery or irritated eyes	[select if yes]			Optional
Please describe your symptoms	[free text, 100 word limit]	+ Tick option to say <ul style="list-style-type: none"> I have nothing further to add I am not sure 		Mandatory Text or tick to progress
Are your symptoms:	[drop down]:	<ul style="list-style-type: none"> Mild Moderate Severe 		Mandatory
How long have you been experiencing these symptoms?	[drop down]	<ul style="list-style-type: none"> Less than 1 year 1 - 2 years 2 - 5 years 5 - 10 years >10 years 		Mandatory
How frequently are you experiencing these symptoms?	[drop down]	[drop down]: <ul style="list-style-type: none"> Daily Weekly Fortnightly Monthly Less than once a month 		
Have you seen a medical professional for your symptoms?	[drop down]	[drop down]: <ul style="list-style-type: none"> General Practitioner (GP) Optometrist Emergency Department (ED) Specialist doctor Other 		Mandatory
Did you receive treatment or prescriptions?	[Yes/no]			Optional
	If yes, pop out What kind of treatment did you receive?	<ul style="list-style-type: none"> Antibiotics Eye drops Eye protection 		Optional

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	[multi select]	<ul style="list-style-type: none"> • Antihistamine tablet • Pain relief tablet • Medication/tablets • Specialist referral • Other 	
Do you or have you experienced any other symptoms?	[Yes/No/I don't know]	<i>If yes, Fields pop out/become visible If no or I don't know, client will continue to next symptom</i>	
Nausea and/or vomiting	[select if yes]		Optional
Headaches and/or migraines	[select if yes]		Optional
Please describe your symptoms	[free text, 100 word limit]	+ Tick option to say • I have nothing further to add • I am not sure	Mandatory Text or tick to progress
Are your symptoms:	[drop down]	<ul style="list-style-type: none"> • Mild • Moderate • Severe 	Mandatory
How long have you been experiencing these symptoms?	[drop down]	<ul style="list-style-type: none"> • Less than 1 year • 1 - 2 years • 2 - 5 years • 5 - 10 years • >10 years 	Mandatory
How frequently are you experiencing these symptoms?	[drop down]	<ul style="list-style-type: none"> • Daily • Weekly • Fortnightly • Monthly • Less than once a month 	Mandatory
Have you seen a medical professional for your symptoms?	[drop down]	<ul style="list-style-type: none"> • General Practitioner (GP) • Emergency Department (ED) • Specialist doctor • Other 	Mandatory
Did you receive treatment or prescriptions?	[Yes/No]	If yes, drop down	Optional

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	If yes, pop out What kind of treatment did you receive? [multi select]	<ul style="list-style-type: none"> Antibiotics Antihistamine tablet Nausea tablet Pain relief tablet Specialist referral Other medication/tablets Other 	Optional
Do you or have you experienced mental health symptoms?	[Yes/No/I don't know]	<i>If yes, Fields pop out/become visible If no or I don't know, client will continue to 'Do you have any additional details to provide'</i>	
Irritability or behaviour changes	[select if yes]		Optional
Depression or anxiety	[select if yes]		Optional
Increased stress or worry	[select if yes]		Optional
Difficulty sleeping	[select if yes]		Optional
Please describe your symptoms	[free text, 100 word limit]	+ Tick options to say <ul style="list-style-type: none"> I have nothing further to add I am not sure 	Mandatory Text or tick to progress
Are your symptoms:	[drop down]	<ul style="list-style-type: none"> Mild Moderate Severe 	Mandatory
How long have you been experiencing these symptoms?	[drop down]	<ul style="list-style-type: none"> Less than 1 year 1 - 2 years 2 - 5 years 5 - 10 years >10 years 	Mandatory
How frequently are you experiencing these symptoms?	[drop down]	<ul style="list-style-type: none"> Daily Weekly Fortnightly Monthly Less than once a month 	Mandatory
Have you seen a medical professional for your symptoms?	[drop down]	<ul style="list-style-type: none"> General Practitioner (GP) Emergency Department (ED) Specialist/psychologist Other 	Mandatory

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Did you receive treatment or prescriptions?	[Yes/No]		Optional
	<i>If yes, pop out</i> What kind of treatment did you receive? [multi select]	<ul style="list-style-type: none"> • Counselling or psychology • Specialist referral • Medication/tablets • Other 	Optional
Do you have any additional details you would like to provide?	[free text, 100 word limit]		Optional
Is anyone else in your family/household experiencing symptoms?	[Yes/No/I don't know]	Pop out information 'for each member of your family, please fill out a new form so that we can hear about their experience'	Mandatory
Do you consent for Dr Gerrard contacting your GP/specialist, if needed	[Yes/No]	<i>If no, client will continue 'appointment preference'</i> <i>If yes, Fields pop out/become visible</i>	Mandatory
Do you have a preferred GP?	Drop down	<ul style="list-style-type: none"> • Yes • No • I don't have a GP <i>If yes, pop out 'GP/specialist name'</i> <i>If no or 'I don't have a GP' consumer to continue onto 'Register your interest for a meeting with Dr Gerrard'</i>	Mandatory
GP/Specialist name	[free text]		Mandatory when popped out
Name of GP or Specialist clinic	[free text]		Mandatory when popped out
Address of GP or Specialist clinic	[free text] – Auto finder		Mandatory when popped out
Register your interest for a meeting with Dr Gerrard.	Heading		
Do you want to register your interest to meet with Dr Gerrard to discuss your health concerns further?	[select if yes]	<i>If yes, pop out next section</i> <i>If no, questionnaire ends here</i>	Mandatory
Appointment preference (select those that apply)			

Please note, appointment preferences are not guaranteed and does not mean an appointment has been confirmed.			
Select your preferred date	[drop down]	<ul style="list-style-type: none"> Monday 3 March 2025 Tuesday 4 March 2025 Wednesday 5 March 2025 Thursday 6 March 2025 	Mandatory
Select your preferred time	[drop down]	<ul style="list-style-type: none"> Morning Afternoon After hours 	Mandatory
A Queensland Health staff member will contact you by phone between 24 th February and 28 th February to arrange an appointment, this call will be from a blocked number.			
Communication preferences			
Please let us know if you require additional support			
Interpreter services	[select if yes]	<i>If yes, free text box to enter language</i>	Optional
National Relay Service	[select if yes]		Optional
I would like to receive updates regarding this inquiry or further questionnaires related to my symptoms and the Swanbank Industrial estate.	Yes/No		Mandatory
I confirm that I have answered all questions truthfully and to the best of my knowledge	[select if yes]		Mandatory
Click to submit form			
Date	[Auto capture]	Date of form submission	Hidden
		Time of form submission	Hidden

Appendix G. Call for formal submissions—copies of published notices

The Ipswich Tribune, Wednesday, March 5, 2025 - Page 24

Classifieds

IPSWICH TRIBUNE

EMAIL: ADMIN@BOONAHNEWSPAPERS.COM.AU

5463 1888

Date Claimer	Public Notices	Public Notices
<p>Beaudesert RSL Women's Auxiliary SAVE THE DATE CENT AUCTION Friday 9th May 2025 <i>Mother's Day theme</i></p> <hr/> <p>Funeral Directors</p> <p>Sylvan FUNERALS 22 Howard Road, Ipswich Ph: 3812 4000 <i>Family Owned - Vic & Gaylene Salomon</i> Cremations - Burials - Prepaid Plans</p> <p>Somerville Bros 41 High Street, Ipswich Ph: 5463 1135</p> <hr/> <p><i>When you need us, we'll be there</i></p> <p>Len Russell FUNERAL DIRECTOR <i>Len Russell Funerals Serving the families of Ipswich, Seaside, and its regions since 1979</i> Burials, Cremations, Prepaid Funerals Locally Family Owned Phone 3812 3122 <i>Here to help you 24 hours, 7 days</i></p> <hr/> <p>In Memoriam</p> <p>There are events in our lives which we need to inform family, friends and neighbours about.</p> <p>IPSWICH TRIBUNE <i>is your local newspaper to tell people of this through a classified announcement including Birth Notice, Engagement and Wedding Announcements, Funeral Notices, In Memoriam and Bereavement Thanks adverts.</i> Phone 5463 1888 e: admin@boonahnewspapers.com.au</p> <hr/> <p>Public Notices</p> <p>City of Ipswich PUBLIC NOTICE NOTICE OF PROPOSAL TO APPLY THE STRATEGIC CONTRACTING PROCEDURES</p> <p>Ipswich City Council (council) proposes to apply the Strategic Contracting Procedures under Chapter 6, Part 2 of the Local Government Regulation 2012. The proposed resolution/s for this purpose will be considered at the meeting of Ipswich City Council Finance and Governance Committee on 22 April 2025 at 9:00 am. Subject to the outcome of the Finance and Governance Committee's consideration, the resolution/s will proceed to be adopted at council's Ordinary Meeting on 30 April 2025 at 9:00 am. Additional details, including the wording of the proposed resolutions, can be found at ipswich.qld.gov.au</p> <p>SONIA COOPER, CHIEF EXECUTIVE OFFICER PO BOX 191, IPSWICH QLD 4305</p>	<p>HAVE YOUR SAY 19 McEWAN STREET, RIVERVIEW, QLD, 4303 (Lot 12 on SP231901 noting that it will soon be over Approved Lot 901 as part of boundary realignment - 6848/2024/RAL (Subject Site))</p> <p>PROPOSED SOCIAL HOUSING Riverview Developments is proposing development of a social housing project at the above address. The project includes: • 58 units (comprising 38 x 1 Bed units & 20 x 2 Bed units) • Communal Open Space • 62 on-site car parks It will involve a maximum building height of 7 storeys.</p> <p>This proposal has been submitted as a request for a Ministerial Infrastructure Designation (MID) under the Planning Act 2016.</p>  <p>The MID proposal can be viewed at www.statedevelopment.qld.gov.au/mid-consultations</p> <p>You can make a submission, on or before 04 April 2025, to the Infrastructure Designation team, Department of State Development, Infrastructure and Planning via:</p> <ul style="list-style-type: none"> online: https://www.statedevelopment.qld.gov.au/mid-consultations email: infrastructuredesignation@dstid.qld.gov.au post: PO Box 15009, City East QLD 4002 <p>Questions? Contact the Infrastructure Designation team on 1300 967 433 or at the above email address.</p> <p>The MID proposal M12/215/2025 has been made by Riverview Developments to the Planning Minister under Chapter 2, Part 5 of the Planning Act 2016.</p>	<p>Swanbank and New Chum Public Health Inquiry - call for submissions</p> <p>Submissions to the Swanbank and New Chum Public Health Inquiry are now open to the public.</p> <p>If you have health-related concerns attributable to odours from the Swanbank and New Chum Industrial Estates you can email a written submission to PublicHealthInquiry.Swanbank@health.qld.gov.au by 31 March 2025.</p> <p>Your submission should:</p> <ol style="list-style-type: none"> 1. Name the suburb you spent the most time in since 2016 when you were affected by the odour and how long you lived there, including if you are a current or past resident. 2. Describe your experiences and the impact of the odour on your everyday life since 2016. 3. Describe any health condition/s which you attribute to the odour including symptoms, frequency of symptoms, whether or not you have seen a medical professional, received a diagnosis, received treatment, and/or received a prescription to manage your symptoms. <p>If you have already expressed your interest to meet with Dr Gerard to discuss your health concerns, you do not need to submit a written submission.</p> <p>For more information visit https://www.health.qld.gov.au/research-reports/reports/review-investigation/swanbank-public-health-inquiry</p> <p style="text-align: right;"></p>
<p>Trades and Services</p> <p>DIMMICK'S PLUMBING PJ & JM DIMMICK Lic. Plumber & Drainer CRISA 52707 For all new work and maintenance Mobile 0409 615 309</p> <hr/> <p>SEPTIC PUMP OUT Serving the local and surrounding areas for the last 40 years! 7 DAYS A WEEK! - EFTPOS AVAILABLE G GORDON TRANSPORT Phone Lyn 0418 684 473 or 0418 986 006</p> <hr/> <p>Church Services</p> <p>BOONAH CHURCH OF CHRIST Worship Service Sunday 9.30am All Welcome Live Streaming - YouTube Enquiries Wayne 5463 7305 Keep in touch through our facebook page facebook.com/Boonahcfc</p> <p>FASSIFERN LUTHERAN PARISH Pastor Peter Geyer 5463 2050 Wednesday 5th March - Ash Wednesday NO SERVICE Sunday 9th March - 1st Sunday of Lent Kalbar 9.45am Follow us on facebook Fassifern Lutheran Parish</p> <p style="text-align: center;"></p> <p>Call Chris to place your Church Service on 5463 1888 or email: admin@boonahnewspapers.com.au</p>	<p>Church Services</p> <p>Kalbar Baptist Church Sunday Service 9.30am Morning Tea provided ALL WELCOME John Blake ph: 0439 532 002 Peter Taggart ph: 0413 750 033 Ladies Craft Thursday, 6th March</p> <hr/> <p> Salvation Army Fassifern Corps Worship Sunday 9am 74 George Street, Kalbar Family Store Mon-Sat Boonah Salvos Community Connect Wednesday & Fridays 9am-12 noon at 8 Park Street, Boonah Deerways Community Support line 07 3001 6288 Mon to Fri 9am-4pm Lt Peter Hardy Phone 5463 3700</p> <hr/> <p>Cars For Sale</p> <p>2012 TOYOTA Land Cruiser Sahara 130,000 km, tow vehicle for a 2012, 30-foot caravan, Orion Sorodure 11, with lots of extras! Would like to be able to sell them together as a package. If interested, please call Terry on 0427 761 162 to discuss.</p> <hr/> <p>Farming and Accessories</p> <p>BALER TWINE, Castrol Oils, Case Oils, Tractor parts, bolts, tractor accessories and more. Dover & Sons, 57 High Street, Boonah. Phone 5460 6600.</p> <hr/> <p>IPSWICH TRIBUNE CLASSIFIED ADVERTISING PHONE 5463 1888</p>	



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Trades & Services		General Notices	
<p>DEADLINE</p> <p>Placing your classified advert is so easy...</p> <p>Phone: 1300 666 808 Email: sales@networkclassifieds.com.au (include your name, address and phone number)</p> <p>We accept payment by: VISA/MASTERCARD/EFTPOS/BANK TRANSFER (1.5% credit card processing fee applies. Cheques and money orders can be posted)</p> <p>Deadline for all classifications is 3pm Monday.</p> <p>BATHROOM & KITCHENS</p> <p>Baby Boomer Bathrooms</p> <ul style="list-style-type: none"> Signature bathroom refurbishments to your lifestyle Over 30 years experience Master builder <p>Call Matthew - 0488 701 046 Lic QBCC 1072996</p>	<p>ELECTRICIANS</p> <p>CHRIS MARTIN ELECTRICAL</p> <p>The local electrician you can trust SERVICING DOMESTIC, COMMERCIAL & INDUSTRY</p> <p>0405 741 362 chris.a.martin@hotmail.com</p> <p>TREE SERVICES</p> <p>All Able Yards Family Owned & Operated Only serving the Ipswich area</p> <p>0423 631 351 allableyards@hotmail.com www.allableyards.com.au Fully Insured & Qualified</p> <p>ADVERTISE with us and get better results</p> <p>CALL 1300 666 808</p>	<p>PUBLIC NOTICES AND EVENT</p> <p>Proposed Development</p> <p>Make a submission from 7 March 2025 to 23 April 2025</p> <ul style="list-style-type: none"> Material Change of Use - Variation Application seeking Preliminary Approval that includes Variation Approval to vary the effect of the Ipswich Planning Scheme (2006) including Level of Assessment for Material Change of Use for Business Uses (including but not limited to Bulky Goods Sales (<25,000m² GFA), Shop/Professional Office (<250m² GFA), Café/Restaurant, Fast Food Premises, Medical Centre, Vehicle Sales Premises, Veterinary Clinic), Shopping Centre (<2,000m² GFA), Recreational Use (limited to Indoor Recreation), Entertainment Uses (limited to Club and Licensed Club), Industrial Uses (including but not limited to Service/Trades Use, General Industry Use, Special Industry Use (limited to Concrete Batching Plant)), Community Uses (excluding Cemetery, Crematorium and Hospital) and Major Utility Uses <p>Where: 7002, 7003, 7005 & 7006 Unnamed Road and 7006 Mount Jullerat Drive, Swanbank Qld 4306 On: Lots 400, 402, 403 & 405 on SP283238 and Lot 404 on SP313797 Approval sought: Material Change of Use - Variation Application seeking Preliminary Approval that includes Variation Approval Application ref: 6333/2023/VA</p> <p>You may obtain a copy of the application and make a submission to: Ipswich City Council PO Box 191, Ipswich Qld 4305 council@ipswich.qld.gov.au (07) 3810 6666 www.ipswich.qld.gov.au Copies of the full application can be viewed or obtained from the Assessment Manager</p> <p>Public notification requirements are in accordance with the Planning Act 2016</p>	<p>PUBLIC NOTICES AND EVENT</p> <p>PROPOSAL TO UPGRADE A TELSTRA MOBILE PHONE BASE STATION WITH 4G/5G AT LOT 8 PLAN SP229573 KEIDGES ROAD SPRING MOUNTAIN QLD 4300</p> <ol style="list-style-type: none"> The proposal on the existing telegraph consists of: <ul style="list-style-type: none"> Replacement of (6) panel antennas 2.533m long on existing masts Ancillary works including the replacement of (6) tower mast amplifiers behind antennas, replacement of (3) remote radio units on existing masts, and installation of (3) junction boxes. Telstra regards the proposed installation as Low-impact Facilities under the Telecommunications (Low-impact Facilities) Determination 2016 ("The Determination") based on the description above. In accordance with Section 7 of CS64: 2020 Mobile Phone Base Station Deployment Code, we invite you to provide feedback about the proposal. Further information and/or comments should be directed to Emily Wardlaw on behalf of Telstra, 0422 685 472, PO BOX 586, Eastwood, VIC 3103, consultation@acquiricom.com.au by Monday 24th March 2025. Further information can also be obtained from https://www.rfssa.com.au/4124008 <p>Telstra Limited A.C.N. 085 174 781 Acquiricom Pty Ltd A.C.N. 603 876 240</p>
<p>General Notices</p> <p>PUBLIC NOTICES AND EVENT</p> <p>Swanbank and New Chum Public Health Inquiry - call for submissions</p> <p>Submissions to the Swanbank and New Chum Public Health Inquiry are now open to the public. If you have health-related concerns attributable to odours from the Swanbank and New Chum Industrial Estates you can email a written submission to PublicHealthInquiry_Swanbank@health.qld.gov.au by 5pm on 31 March 2025.</p> <p>Your submission should:</p> <ol style="list-style-type: none"> Name the suburb you spent the most time in since 2016 when you were affected by the odour and how long you lived there, including if you are a current or past resident. Describe your experiences and the impact of the odour on your everyday life since 2016. Describe any health condition/s which you attribute to the odour including symptoms, frequency of symptoms, whether or not you have seen a medical professional, received a diagnosis, received treatment, and/or received a prescription to manage your symptoms. <p>If you have already expressed your interest to meet with Dr Gerrard to discuss your health concerns, you do not need to submit a written submission.</p> <p>For more information visit https://www.health.qld.gov.au/research-reports/reports/review-investigation/swanbank-public-health-inquiry</p> <p> Queensland Government</p>		<p>Buy, & Sell in our</p> <p>Motoring section of Network Classifieds.</p> <p>Network Classifieds 1300 666 808</p> <p>Employment</p> <p>PROFESSIONAL</p> <p>DISCRIMINATION IN ADVERTISING IS UNLAWFUL</p> <p>The Queensland Anti-Discrimination Act 1991 makes it unlawful for an advertiser to show any intention to discriminate on the basis of sex, pregnancy, race, age, marital status, political or religious belief or physical features, disability, lawful sexual activity, sexual orientation, HIV/AIDS status or on the basis of being associated with a person with one of the above characteristics, unless covered by an exception under the Act. As Network Classifieds could be legally liable if an unlawful advertisement is printed, Network Classifieds will not accept advertisements that appear to break the law. For more information about discrimination in advertising, contact your legal advisers or the Queensland Human Rights Commission (QHRC).</p>	



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30 TODAY Thursday, 6 March, 2025

Greta plans to take opportunity to advocate for healthcare workers

BY ROWAN ANDERSON

GOODNA name Greta Mukherjee has been selected as a national finalist for Miss Galaxy Australia 2025.

The 24-year-old India-born healthcare professional, now an Australian citizen, sees the pageant as an opportunity to advocate for healthcare workers and inspire others to succeed.

"I want to inspire people," she said.

"Through being a national finalist, I'm using it as a platform to promote the healthcare field and educate people about the contributions healthcare workers make."

As a clinical coordinator in the National Disability Insurance Scheme (NDIS), Ms Mukherjee leads a team of over 60 staff, providing clinical supervision and education.

She also founded Unscripted Healthcare, an initiative promoting health awareness in Australia.

Having moved to Australia in 2018 to study nursing,

she worked hard at taking on challenges, including working full-time while studying and chairing her university's Equity Department.

She was later accepted into the University of Queensland's Doctor of Medicine program in 2022, but life took an unexpected turn.

"After contracting Covid-19 twice and surviving a car accident that left me with a fractured back, I had to withdraw from medical school," she said.

At the time, it felt like the end of everything I had worked for. But setbacks can also lead to new opportunities.

Now, she uses her platform to advocate for healthcare workers, minorities and im-

migrants navigating similar struggles.

"There is a misconception that young professionals, particularly women in leadership, must prove themselves more than their male counterparts," she said.

"Success is not just about achievements, it's about staying true to your values, pushing through obstacles, and continuing to grow."

The 2025 Miss Galaxy Australia National Final is in Sydney from April 30 to May 3, with winners earning the chance to represent Australia internationally.

PROUD AUSTRALIAN: Staying true to her values.

OPPORTUNITY: Greta Mukherjee aims to inspire.

STEPHANIE TOWERS has achieved a ground-breaking milestone as the first First Nations student to gain admission into the University of Southern Queensland's (UniSQ) Bachelor of Biomedical Sciences (Medicine Pathway) program, paving the way for greater Indigenous representation in the medical field.

Last year, Ms Towers was named Dux of Bremer State High School, recognising her outstanding academic achievements.

"I have always dreamed of pursuing a career in medicine, driven by my desire to give back to the healthcare community that provided incredible care for me when I was younger," she said.

"Being the first First Nations student in the Medical Pathway program is an incredible honour."

"Representation in medicine is so important, and I am proud to be part of a program that is building a stronger, more inclusive healthcare system for our regional and rural communities."

With Ipswich's Indigenous population at 4.5 per cent, Ms Towers' success is a powerful step towards

greater representation in the medical field.

Applicants for UniSQ's Medical Pathway program must meet rigorous entry requirements, including a minimum Australian Tertiary Admission Rank (ATAR) of 95.

Shortlisted candidates undergo an intensive selection process, including a panel interview conducted by the UniSQ School of Health and Medical Sciences.

Successful candidates progress through further interviews before being offered a place in the prestigious program.

GREAT HONOUR: Stephanie Towers is driven by a desire to give back to the healthcare community.

UniSQ Bachelor of Biomedical Sciences Coordinator Edward Bliss commended Ms Towers' dedication and perseverance.

"Stephanie's passion for medicine and improving the health and wellbeing of the community is truly inspiring," Dr Bliss said.

"The highly competitive nature of this program makes securing a place a remarkable achievement."

"She is leading the way for future First Nations medical professionals, and we are excited to support her on this journey."

ROWAN ANDERSON

SWANBANK AND NEW CHUM PUBLIC HEALTH INQUIRY - call for submissions

Submissions to the Swanbank and New Chum Public Health Inquiry are now open to the public.

If you have health-related concerns attributable to odours from the Swanbank and New Chum Industrial Estates you can email a written submission to PublicHealthInquiry_Swanbank@health.qld.gov.au by 5pm on 31 March 2025.

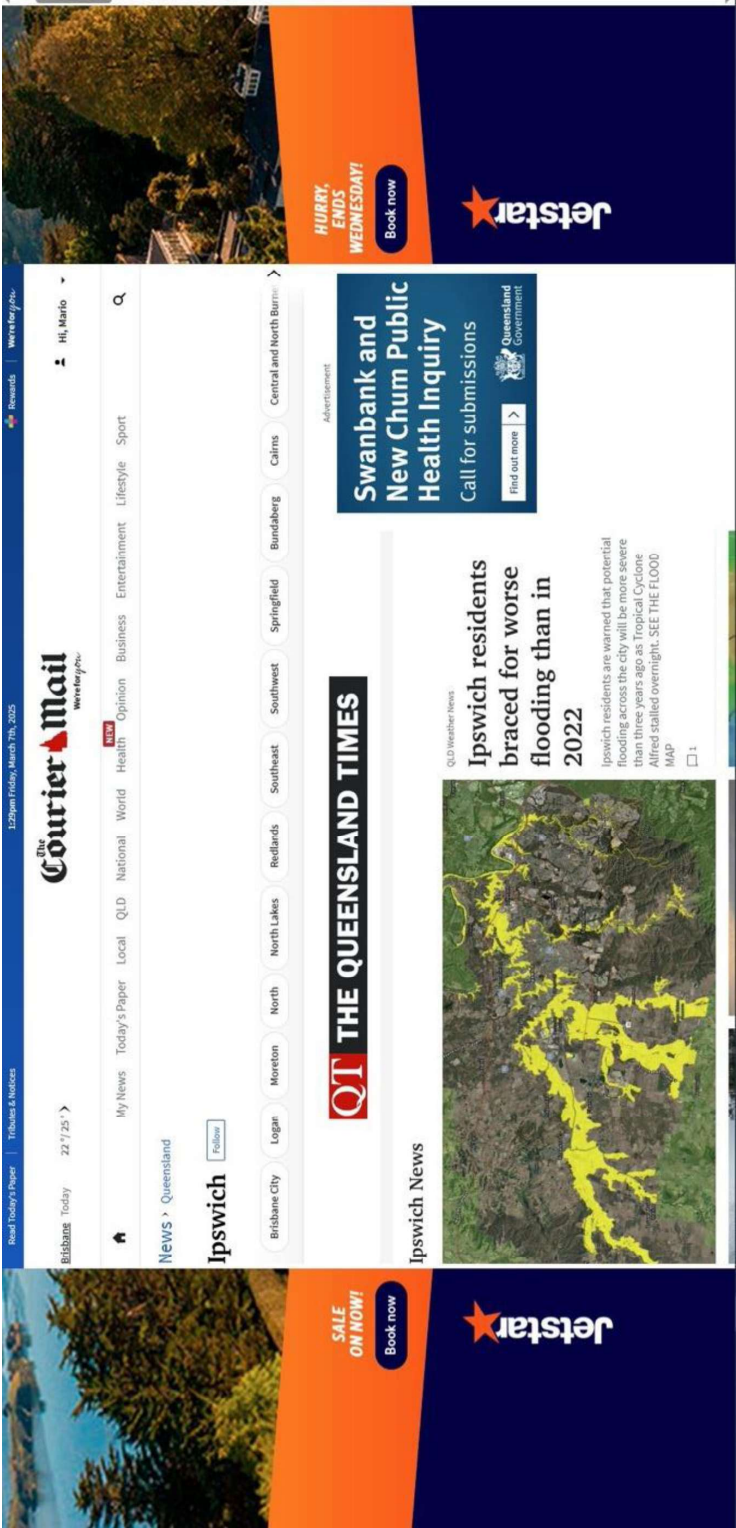
Your submission should:

1. Name the suburb you spent the most time in since 2016 when you were affected by the odour and how long you lived there, including if you are a current or past resident.
2. Describe your experiences and the impact of the odour on your everyday life since 2016.
3. Describe any health condition/s which you attribute to the odour including symptoms, frequency of symptoms, whether or not you have seen a medical professional, received a diagnosis, received treatment, and/or received a prescription to manage your symptoms.

If you have already expressed your interest to meet with Dr Gerrard to discuss your health concerns, you do not need to submit a written submission.

For more information visit <https://www.health.qld.gov.au/research-reports/reports/review-investigation/swanbank-public-health-inquiry>

Queensland Government





Appendix H. Incidence and age standardised rates (per 100,000) of selected cancers at SA2 level, Queensland, 2018-2022

SA2 code and name	Exposure status	SEIFA quintile	Incidence (number of cases)				ASR (95% CI)			
			Lung	Liver	Kidney	All cancers	Lung	Liver	Kidney	All cancers
1284 - Bundamba	E	1	33	7	5	280	67.0 [46.4, 91.7]	13.6 [5.9, 25.3]	10.8 [4.0, 22.1]	559.9 [496.3, 627.3]
1287 - Ipswich - East	E	1	78	13	21	665	65.1 [51.6, 80.3]	10.7 [5.9, 17.3]	17.8 [11.2, 26.2]	566.5 [524.3, 610.4]
1293 - Raceview	E	2	41	4	32	521	45.7 [32.9, 60.7]	4.4 [1.4, 9.6]	37.8 [26.0, 52.0]	608.1 [557.0, 661.4]
1294 - Ripley	E	3	8	2	3	172	34.2 [15.7, 61.7]	3.7 [0.8, 10.3]	6.2 [1.7, 14.9]	652.0 [558.5, 753.0]
1295 - Riverview	E	1	11	3	1	84	49.2 [25.4, 82.2]	12.6 [3.4, 30.3]	2.7 [0.3, 9.9]	405.0 [323.5, 496.1]
1299 - Collingwood Park - Redbank	E	1	33	2	6	230	80.6 [55.8, 110.3]	3.8 [0.8, 10.5]	14.2 [5.7, 27.7]	516.7 [452.2, 585.6]
1302 - Redbank Plains	E	1	49	10	13	430	73.1 [54.3, 94.9]	13.9 [6.9, 23.8]	15.6 [8.5, 25.1]	563.0 [511.1, 617.4]
1565 - Augustine Heights - Brookwater	E	5	7	2	2	136	54.3 [23.4, 101.3]	5.1 [1.1, 14.3]	5.1 [1.0, 14.2]	678.2 [569.4, 796.9]
1566 - Bellbird Park	E	2	16	1	5	154	46.4 [27.0, 71.7]	2.5 [0.3, 9.4]	13.8 [5.1, 28.3]	451.0 [382.8, 524.9]
Total exposed (E) SA2s	E		276	44	88	2672	58.8 [52.1, 65.9]	9.1 [6.7, 12.0]	18.4 [14.8, 22.4]	553.8 [533.0, 575.0]
1311 - Boronia Heights - Park Ridge	PE	1	59	10	16	509	59.5 [45.4, 75.6]	10.8 [5.4, 18.4]	18.5 [10.8, 28.6]	544.9 [498.6, 593.2]
1297 - Camira - Gailles	PE	2	28	6	8	285	50.4 [33.8, 70.8]	15.6 [6.3, 30.3]	15.8 [7.2, 28.5]	581.5 [516.0, 650.9]
1285 - Churchill - Yamanto	PE	2	12	3	3	179	33.5 [17.9, 55.0]	8.3 [2.3, 20.0]	8.1 [2.2, 19.6]	528.4 [454.0, 608.5]
1300 - Goodna	PE	1	25	6	5	230	53.3 [34.8, 76.1]	12.5 [5.0, 24.4]	9.9 [3.6, 20.2]	469.8 [411.2, 532.4]
1286 - Ipswich - Central	PE	1	29	4	8	232	69.4 [46.8, 96.9]	9.5 [3.1, 20.8]	19.0 [8.7, 34.2]	559.5 [490.0, 633.8]
1288 - Ipswich - North	PE	3	7	2	6	146	28.3 [12.2, 52.7]	6.0 [1.2, 16.8]	18.4 [7.4, 35.8]	600.0 [506.9, 701.1]
1289 - Karalee - Barellan Point	PE	4	11	2	1	186	45.1 [23.3, 75.5]	5.4 [1.1, 15.1]	5.5 [0.7, 20.3]	571.4 [492.4, 656.4]
1290 - Karana Downs	PE	4	16	0	9	196	65.5 [38.1, 101.2]	- [0.0, 0.0]	29.6 [14.2, 51.9]	605.3 [523.7, 692.9]
1291 - Leichhardt - One Mile	PE	1	32	2	8	215	79.1 [54.4, 108.7]	5.3 [1.1, 14.7]	20.8 [9.5, 37.4]	547.5 [476.9, 623.1]

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1292 - North Ipswich - Tivoli	PE	1	36	4	6	241	74.3 [52.3, 100.5]	9.9 [3.2, 21.6]	14.6 [5.9, 28.4]	526.7 [462.4, 595.3]
1304 - Springfield Lakes	PE	4	20	6	11	324	52.0 [32.2, 77.1]	15.1 [6.1, 29.3]	14.4 [7.4, 24.1]	551.3 [493.0, 613.0]
Total partial exposed (PE) SA2s	PE		275	45	81	2743	55.5 [49.2, 62.3]	9.1 [6.7, 12.0]	15.7 [12.5, 19.4]	542.5 [522.4, 563.0]
1305 - Beaudesert	NE	1	66	9	14	607	59.3 [46.0, 74.5]	7.3 [3.5, 12.8]	14.8 [8.3, 23.6]	561.8 [518.0, 607.3]
1306 - Beenleigh	NE	1	37	4	10	285	73.0 [51.6, 98.3]	8.9 [2.9, 19.4]	19.4 [9.7, 33.2]	581.5 [516.1, 651.0]
1314 - Crestmead	NE	1	27	7	9	273	68.4 [45.5, 96.5]	12.2 [5.3, 22.8]	16.4 [7.9, 28.7]	602.1 [532.9, 675.6]
1329 - Daisy Hill	NE	4	17	2	5	182	52.6 [31.2, 80.4]	4.3 [0.9, 11.9]	11.2 [4.1, 23.0]	493.5 [424.6, 567.8]
1384 - Dayboro	NE	4	20	2	6	306	32.1 [19.9, 47.7]	3.5 [0.7, 9.7]	8.6 [3.5, 16.7]	577.9 [515.0, 644.4]
1385 - Eatons Hill	NE	5	12	0	2	202	32.6 [17.3, 53.4]	- [0.0, 0.0]	9.1 [1.9, 25.4]	563.2 [488.4, 643.5]
1308 - Edens Landing - Holmview	NE	2	30	3	7	199	82.0 [55.7, 113.8]	8.7 [2.4, 20.8]	18.9 [8.2, 35.3]	521.7 [451.9, 596.7]
1274 - Inala - Richlands	NE	1	72	21	9	436	78.1 [61.2, 97.2]	22.4 [14.0, 32.9]	9.5 [4.6, 16.6]	470.0 [427.0, 515.2]
1309 - Mount Warren Park	NE	2	17	6	8	198	40.3 [23.9, 61.6]	12.8 [5.2, 25.0]	21.6 [9.9, 38.9]	518.8 [449.2, 593.5]
1009 - Redland Bay	NE	3	47	8	12	543	43.1 [31.8, 56.3]	6.8 [3.1, 12.2]	11.7 [6.2, 19.2]	518.6 [475.9, 563.1]
1319 - Regents Park - Heritage Park	NE	2	35	7	20	357	58.3 [40.8, 79.1]	9.6 [4.1, 17.9]	26.3 [16.3, 39.0]	493.2 [443.4, 545.6]
Total non exposed (NE) SA2s	NE		380	69	102	3588	55.9 [50.4, 61.6]	9.9 [7.7, 12.4]	14.9 [12.2, 17.9]	530.0 [512.8, 547.5]
Total of selected SA2			931	158	271	9003	56.6 [53.0, 60.3]	9.4 [8.0, 11.0]	16.1 [14.2, 18.0]	540.5 [529.4, 551.7]
Queensland			3	2360	4277	166171	47.5 [46.7, 48.2]	7.5 [7.2, 7.8]	14.1 [13.7, 14.5]	543.7 [541.1, 546.3]

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Appendix I. Observed and expected numbers of selected cancers and the corresponding standardised incidence ratio at SA2 level, Queensland, 2018-2022

SA2 code and name	Exposure status	SEIFA quintile	Observed incidence				Expected (based on age-specific rates for Qld)				SIR (95% CI)			
			Lung	Liver	Kidney	All cancers	Lung	Liver	Kidney	All cancers	Lung	Liver	Kidney	All cancers
1284 - Bundamba	E	1	33	7	5	280	24.0	3.9	7.1	271.7	1.38 (0.95-1.93)	1.81 (0.73-3.73)	0.71 (0.23-1.65)	1.03 (0.91-1.16)
1287 - Ipswich - East	E	1	78	13	21	665	59.7	9.3	16.2	644.4	1.31 (1.03-1.63)	1.40 (0.74-2.39)	1.29 (0.80-1.98)	1.03 (0.95-1.11)
1293 - Raceview	E	2	41	4	32	521	42.9	6.7	12.0	471.1	0.96 (0.69-1.30)	0.59 (0.16-1.52)	2.67 (1.82-3.77)	1.11 (1.01-1.21)
1294 - Ripley	E	3	8	2	3	172	11.0	2.0	4.4	160.0	0.73 (0.31-1.43)	0.99 (0.12-3.57)	0.69 (0.14-2.00)	1.08 (0.92-1.25)
1295 - Riverview	E	1	11	3	1	84	10.3	1.6	2.7	108.6	1.07 (0.53-1.91)	1.91 (0.39-5.59)	0.37 (0.01-2.07)	0.77 (0.62-0.96)
1299 - Collingwood Park - Redbank	E	1	33	2	6	230	19.7	3.3	6.3	238.6	1.68 (1.16-2.34)	0.61 (0.07-2.20)	0.95 (0.35-2.07)	0.96 (0.84-1.10)
1302 - Redbank Plains	E	1	49	10	13	430	30.7	5.3	10.7	400.5	1.60 (1.18-2.11)	1.87 (0.90-3.44)	1.21 (0.65-2.07)	1.07 (0.97-1.18)
1565 - Augustine Heights - Brookwater	E	5	7	2	2	136	9.6	1.8	4.0	141.5	0.73 (0.29-1.51)	1.12 (0.14-4.06)	0.50 (0.06-1.80)	0.96 (0.81-1.14)
1566 - Bellbird Park	E	2	16	1	5	154	14.5	2.4	4.8	179.9	1.11 (0.63-1.80)	0.41 (0.01-2.28)	1.04 (0.34-2.43)	0.86 (0.73-1.00)
Total exposed (E) SA2s	E		276	44	88	2672	222.3	36.7	68.2	2616.2	1.24 (1.10-1.40)	1.21 (0.88-1.62)	1.29 (1.03-1.59)	1.02 (0.98-1.06)
1311 - Boronia Heights - Park Ridge	PE	1	59	10	16	509	47.5	7.4	13.0	517.3	1.24 (0.95-1.60)	1.36 (0.65-2.50)	1.24 (0.71-2.01)	0.98 (0.90-1.07)
1297 - Camira - Gailes	PE	2	28	6	8	285	23.3	3.9	7.2	269.3	1.20 (0.80-1.74)	1.56 (0.57-3.39)	1.11 (0.48-2.18)	1.06 (0.94-1.19)
1285 - Churchill - Yamanto	PE	2	13	3	3	179	16.0	2.6	4.8	183.7	0.82 (0.43-1.39)	1.15 (0.24-3.37)	0.62 (0.13-1.81)	0.97 (0.84-1.13)
1300 - Goodna	PE	1	25	6	5	230	23.2	3.8	7.1	270.4	1.08 (0.70-1.59)	1.59 (0.58-3.46)	0.71 (0.23-1.64)	0.85 (0.74-0.97)

Item 16.2 / Attachment 3.

1286 - Ipswich - Central	PE	1	29	4	8	232	21.3	3.4	6.0	233.7	1.36 (0.91-1.95)	1.19 (0.32-3.04)	1.34 (0.58-2.64)	0.99 (0.87-1.13)
1288 - Ipswich - North	PE	3	7	2	6	146	11.0	1.9	3.6	130.5	0.64 (0.26-1.32)	1.07 (0.13-3.88)	1.67 (0.61-3.64)	1.12 (0.94-1.32)
1289 - Karalee - Barellan Point	PE	4	11	2	1	186	14.7	2.5	4.8	174.7	0.75 (0.37-1.34)	0.81 (0.10-2.92)	0.21 (0.01-1.17)	1.07 (0.92-1.23)
1290 - Karana Downs	PE	4	16	0	9	196	15.5	2.6	4.9	181.8	1.03 (0.59-1.67)	0.00 (0.00-1.42)	1.82 (0.83-3.46)	1.08 (0.93-1.24)
1291 - Leichhardt - One Mile	PE	1	32	2	8	215	18.4	3.0	5.6	212.2	1.74 (1.19-2.45)	0.67 (0.08-2.41)	1.44 (0.62-2.83)	1.01 (0.88-1.16)
1292 - North Ipswich - Tivoli	PE	1	36	4	6	241	23.6	3.6	6.2	247.9	1.52 (1.07-2.11)	1.11 (0.30-2.84)	0.97 (0.36-2.11)	0.97 (0.85-1.10)
1304 - Springfield Lakes	PE	4	20	6	11	324	22.3	4.0	8.9	326.0	0.90 (0.55-1.39)	1.50 (0.55-3.27)	1.24 (0.62-2.22)	0.99 (0.89-1.11)
Total partially exposed (PE) SA2s	PE		275	45	81	2743	236.8	38.5	72.0	2747.4	1.16 (1.03-1.31)	1.17 (0.85-1.57)	1.13 (0.89-1.40)	1.00 (0.96-1.04)
1305 - Beaudesert	NE	1	66	9	14	607	55.9	8.7	15.0	590.3	1.18 (0.91-1.50)	1.04 (0.47-1.97)	0.93 (0.51-1.56)	1.03 (0.95-1.11)
1306 - Beenleigh	NE	1	37	4	10	285	23.7	3.8	6.9	265.2	1.56 (1.10-2.15)	1.05 (0.29-2.69)	1.45 (0.69-2.66)	1.08 (0.95-1.21)
1314 - Crestmead	NE	1	27	7	9	273	19.1	3.3	6.6	241.4	1.41 (0.93-2.05)	1.92 (0.70-4.17)	1.37 (0.63-2.61)	1.13 (1.00-1.27)
1329 - Daisy Hill	NE	4	17	2	5	182	17.5	2.9	5.4	201.8	0.97 (0.56-1.55)	0.70 (0.08-2.53)	0.93 (0.30-2.17)	0.90 (0.78-1.04)
1384 - Dayboro	NE	4	20	2	6	306	27.1	4.4	8.2	306.5	0.74 (0.45-1.14)	0.45 (0.05-1.63)	0.73 (0.27-1.59)	1.00 (0.89-1.12)
1385 - Eatons Hill	NE	5	12	0	2	202	16.0	2.8	5.5	198.3	0.75 (0.39-1.31)	0.00 (0.00-1.34)	0.36 (0.04-1.32)	1.02 (0.88-1.17)
1308 - Edens Landing - Holmview	NE	2	30	3	7	199	16.9	2.8	5.4	204.2	1.78 (1.20-2.54)	1.07 (0.22-3.14)	1.31 (0.53-2.69)	0.98 (0.84-1.12)
1274 - Inala - Richlands	NE	1	72	21	9	436	43.8	7.1	13.1	504.8	1.64 (1.29-2.07)	2.95 (1.83-4.51)	0.69 (0.31-1.30)	0.86 (0.78-0.95)
1309 - Mount Warren Park	NE	2	17	6	8	198	20.3	3.1	5.4	215.8	0.84 (0.49-1.34)	1.92 (0.70-4.17)	1.48 (0.64-2.91)	0.92 (0.79-1.05)
1009 - Redland Bay	NE	3	47	8	12	543	51.1	8.2	14.9	568.3	0.92 (0.68-1.22)	0.98 (0.42-1.93)	0.81 (0.42-1.41)	0.96 (0.88-1.04)
1319 - Regents Park - Heritage Park	NE	2	35	7	20	357	33.1	5.6	10.9	401.4	1.06 (0.74-1.47)	1.24 (0.50-2.56)	1.83 (1.12-2.83)	0.89 (0.80-0.99)



Total non-exposed (NE) SA2s	NE			380	69	102	3588	324.	52.7	97.3	3698.0	1.17 (1.06-1.30)	1.31 (1.02-1.66)	1.05 (0.86-1.27)	0.97 (0.94-1.00)
Total of selected SA2				931	158	271	9003	783.	127.	237.4	9061.6	1.19 (1.11-1.27)	1.24 (1.05-1.45)	1.14 (1.01-1.29)	0.99 (0.97-1.01)

Appendix J. Summary of actions taken by DETSI to address odour issues since 2018

DETSI has taken a number of specific actions to mitigate and reduce odour generation from the industrial areas including:

- 2018—surveying residents to understand odour concerns
- 2018—setting up an Odour Abatement Taskforce
- 2019—engaged a specialist to undertake a review and prepare two reports on the Critical Evaluation of Composting Operations and Feedstock Suitability
- 2019—the Phase 1 and 2 Critical Evaluation of Composting Operations and Feedstock Suitability reports were recognised as ‘recognised entity reports’ in order to enable them as grounds for licence amendments
- 2019-2021—in consultation with industry DETSI developed the best practice guideline (https://www.des.qld.gov.au/policies?a=272936%3Apolicy_registry/era-gl-bpem-composting.pdf) and updated the model operating conditions (https://www.des.qld.gov.au/policies?a=272936%3Apolicy_registry/pr-co-composting.pdf)
- 2020-2021—introduction of Envirosuite to predict odour events and monitor weather conditions, commenced a trial using ‘e-noses’ to detect odour to alert officers to events occurring in real-time and trialled drones
- 2021—engaged a specialist to develop a complementary report on Organic Odour Feedstock Rating Report (https://environment.desi.qld.gov.au/_data/assets/pdf_file/0023/340727/organicfeedstockodourrating.pdf) to determine the odour potential of a feedstock not listed in the recognised entity reports and to consider the odour potential of mixing two or more feedstocks, for example, FOGO
- 2021—made minor updates to the best practice guideline (https://www.des.qld.gov.au/policies?a=272936%3Apolicy_registry/era-gl-bpem-composting.pdf)
- 2022—significant on-ground compliance response to flooding in a landfill cell at a landfill facility including:
 - expanding the air monitoring program at locations around the site
 - installing hydrogen sulphide monitors at concerned residential locations
 - providing volatile organic compound sample collection canisters to concerned residents
 - analysed the results at a Queensland Health laboratory
 - engaged with Queensland Health on the results
 - published the air monitoring results online.
- 2022-2023—engaged a specialist to develop a more comprehensive air monitoring plan for the industrial areas and worked with Queensland Health on the scalable plan, the monitoring equipment and monitoring locations

- 2023—in May the final report from the independent review of the EP Act by retired Planning and Environment Court judge Mr Richard Jones and Barrister Ms Susan Hedge was released including 18 recommendations
- 2023—implemented a five-point plan (outlined in Section 7.2.1) to address odour issues
- 2023—in September DETSI released a consultation paper on the recommendations from the independent report that had not yet been implemented, including the proposal to amend the EP Act to reflect the recommendations
- 2023—in September DETSI expanded the air monitoring program by inviting potentially affected schools and early childcare centres to participate in the monitoring program following several community members at a community meeting in Redbank Plains raised concerns about their children's well-being and potential exposure to odours while at school
- 2023—in December DETSI filed an application for a restraint order seeking NuGrow immediately cease receiving certain waste until enclosed/in-vessel infrastructure is operational and to overhaul its operations to reduce the risk of odour to the community
- 2024—subsequent to the independent review, DETSI amended the EP Act via the EPOLA (Powers and Penalties) Bill which was passed in June 2024
- 2024—in August further amendments were made to the EP Regulation to strengthen regulations to help reduce odour impacts from composting facilities on nearby communities
- 2024—in September the Court granted a restraint order against NuGrow in relation to the odour being caused to the community
- 2024—in November Cleanaway received a penalty of more than \$600,000 after pleading guilty to seven offences relating to odour nuisance that impacted surrounding residents in 2022. This also included a public benefit order of \$212,000 directly funding community projects. This was the highest penalty ever handed down under the EP Act for offences relating to environmental odour nuisance and set a new precedent in Queensland for odour prosecutions
- 2024—DETSI secured transitional arrangements for WMI to move from open windrow composting to enclosed or in-vessel systems. These requirements require WMI to cease receiving odorous feedstocks if it has not complied with the regulatory requirements for in-vessel or enclosed composting by 30 September 2026
- 2025—in February DETSI launched an online interactive map (<https://www.qld.gov.au/environment/management/monitoring/air/air-programs/odour/swanbank-new-chum/air-monitoring>) that provides a centralised interactive platform for the community to access data about air monitoring in and surrounding Swanbank and New Chum.

NB: The actions outlined here represent those DETSI can disclose to the public. Some actions however cannot be disclosed.

DETSI continues to respond to community reports, undertake site inspections and hold operators to account through taking enforcement action. More detail on these can be found in the individual compliance site history (refer to Appendix E).

Appendix K. Response to E-petition



Minister for the Environment and the Great Barrier Reef
Minister for Science and Innovation

Your Ref: A1239821
Our Ref: CTS 02556/24

1 William Street Brisbane Qld 4000
GPO Box 5078 Brisbane
Queensland 4001 Australia
Telephone +61 7 3719 7330
Email environment@ministerial.qld.gov.au

14 March 2024

Mr Neil Laurie
The Clerk of the Parliament
Parliament House
George Street
BRISBANE QLD 4000

Dear Mr Laurie

Thank you for your letter of 15 February 2024 enclosing a copy of Parliamentary Petition No. 3957-23 concerning health and amenity impacts from private waste company activities in the Swanbank Industrial Area, Ipswich.

I acknowledge the petitioners' request of the House to do all in its powers to protect the health and safety of residents in the Ipswich region that have been exposed to odour nuisance from the waste industry.

I can assure the petitioners that we are a Government which listens to the community and acts. I would also like to acknowledge the strong advocacy by the Members for Bundamba, Ipswich, and Jordan on behalf of their local community. Last year I attended a community meeting at Redbank Plains to hear firsthand of the odour issues impacting the community. These odour issues are unacceptable and addressing odour has been, and continues to be, a Government priority.

Environmental impacts from a number of industries present increasingly complex regulatory challenges. Odour issues around the Swanbank Industrial Area are not new and are a result of a complex intersect of residential encroachment, difficulties in contemporising licenses issued for some of the high odour producing activities, and some non-compliant operators.

The Department of Environment, Science and Innovation is the environmental regulator charged with the responsibility for addressing community concerns and ensuring environmental authority (EA) holders are complying with their environmental obligations. Where the department identifies non-compliance, enforcement action can be taken to compel operators to comply and to hold them accountable. For the avoidance of any doubt, the Odour Abatement Taskforce is a unit from within the department based in Ipswich, and largely responsible for compliance activities in the Swanbank area. The Taskforce has been supplemented with additional surge staffing drawn from across Queensland given the scale of the issues in the Swanbank area.

Responses to the points raised in the petition are provided below:

- **Department of Environment, Science and Innovation and the Odour Abatement Taskforce to conduct proactive enforcement and compliance activities for waste operations**

Odour is one of the most difficult and complex issues for the department to investigate and resolve due to the difficulties associated with proving the source of odours to the high standard required by courts. While difficult, the department has engaged external scientists and engineers who specialise in odour to assist with its odour investigations. These people are the premier consultants in this field.

The department received finding from one of its odour experts late last year and was able to identify that NuGrow Ipswich Pty Ltd, who operate a composting facility in the Swanbank Industrial Area is a primary source of odour. The department then sought an interim restraint order from the Planning and Environment Court that if granted, would limit certain aspects of the business. Importantly, this would include restrictions on receiving certain highly odorous wastes, with the aim of bringing relief to the local community. The Court is currently considering the order, and a decision will be delivered at a date in the future. This proceeding demonstrates the department's commitment to holding non-compliant operators to account.

Since July last year, the department has executed several proactive compliance campaigns in the Swanbank Industrial Area and the broader Ipswich area. This has included a multi-agency waste transport intercept in the area, targeted and detailed site inspections of composting facilities in the Swanbank Industrial Area, disaster preparedness inspections for all waste sites in the Swanbank Industrial Area, and site inspections of all licenced activities with the potential to cause odour impacts across the Ipswich region.

Of the operators located just in the Swanbank Industrial Area, 121 site visits have been conducted since June 2023, which is already more than twice that conducted in the previous year. Since June 2023, 14 enforcement actions have been taken, including issuing over \$90,000 in on-the-spot fines. Several matters are before Court and other alleged offences remain under investigation with potential future Court action to follow. While not all of these matters relate to addressing odour, again this demonstrates that the department will hold non-compliant operators to account.

- ***The immediate cessation of operations where non-compliance is shown***

Legislation administered by the department contains a list of grounds for the suspension or cancellation of permits, licences or authorities. These grounds include the holder being convicted of an offence under that legislation or not meeting specified suitability criteria. For serious contraventions of legislation, the department does consider suspension or cancellation of permits or licences. However, these actions may only be pursued after the prescribed grounds have been satisfied.

Similarly, Ipswich City Council who is responsible for approving development applications within its jurisdiction, holds the responsibility of ensuring compliance with the conditions of these approvals. Ipswich City Council possesses the authority to enforce measures in cases where businesses fail to meet these conditions. The Queensland Government has encouraged Ipswich City Council to consider the available levers it has to assist in addressing the odour issues impacting community.

On 13 February 2024, the Miles Government introduced new legislation into the Queensland Legislative Assembly to provide stronger protection for communities impacted by environmental issues such as odour, dust and noise. If passed, the Environmental Protection (Powers and Penalties) and Other Legislation Amendment Bill 2024 (the Bill) will give the environmental regulator additional tools to prevent environmental harm before it occurs, punish those breaking the law, and force them to take faster clean-up action. The proposed changes will ensure there is appropriate emphasis on human health, wellbeing and safety in Queensland's environmental laws, and shifts the focus to proactive prevention of environmental impacts.

This Bill will implement the Government's response to a review of the powers and penalties under the *Environmental Protection Act 1994* (Qld) undertaken by retired Judge Richard Jones and Barrister Susan Hedge in 2022, which was initiated in part due to the significant odour nuisance issues experienced by the Ipswich community after the rainfall event in February 2022. The review provided 18 recommendations, several of which have already been delivered through the *Environmental Protection and Other Legislation Amendment Act 2023* which was passed by the Queensland Parliament in March 2023. The Bill will finalise the Government's response to the recommendations.

While these proposed changes do not provide powers for the department to cause the immediate cessation of a business upon identifying non-compliance, they will work towards strengthening the department's regulatory ability to enforce compliance with environmental legislation and community expectations.

- ***Have the regulator direct compost and mulching operations to enclose their facility***

The department is undertaking an EA modernisation process to update composting EAs to best practice standards. This includes requiring enclosed composting infrastructure at facilities receiving highly odorous feedstocks that are nearby to residential areas.

Changes to authorities to date have been through negotiation and agreement, with several operators in Queensland voluntarily adopting best practice composting standards. Where agreement cannot be reached, a legislative process is required that affords natural justice through consultation, review and appeal rights. This means that for some operators, the modernisation process becomes protracted and resource intensive. This is in addition to timeframes for planning approval and construction.

With this in mind, I have requested the department identify options for Government to consider which would strengthen regulations to expedite progress of EA modernisation and provide a more level playing field across the compost sector.

- ***The establishment of air quality stations in suburbs where odour complaints have been lodged with the Odour Abatement Taskforce***

Over the coming months, the department is also expanding its air monitoring capabilities in the Swanbank Industrial Area. This is based on recommendations provided by an independent air expert engaged by the department.

The expanded air monitoring program will include rolling out and relocating additional wind/weather stations at locations identified to best assist the department's understanding about impacts on community and will adopt new technology to provide close to real time monitoring of certain air quality parameters. Expanding the existing network allows for more contemporary and reliable data to inform compliance activities and will include online viewing access for community.

- ***Quarterly public community meetings to be held by Odour Abatement Taskforce and the Regulator Department of Environment, Science and Innovation***

I am pleased to note that the progress of the department's key initiatives is being communicated to residents regularly through the department's enhanced community engagement activities. Since September 2023, the department has been releasing regular newsletters, holding monthly community reference group meetings and hosting monthly community drop-in sessions along with representatives of Queensland Health and Biosecurity Queensland from the Department of Agriculture and Fisheries.

The newsletters are currently reaching over 2,000 subscribers and the five most recent editions have yielded strong open rates. These strategies aim to provide a better balance of regular engagement between community and the regulator.

- ***The State Government to direct cleanaway at their New chum landfill site to permanently close Cell 3B and commence rehabilitation***

The department continues to require Cleanaway to raise its environmental performance to protect environmental values and community from any unlawful impacts from its operations through compliance inspections, EA amendments and enforcement action.

To minimise any future risks, the department has amended Cleanaway's EA to strengthen protections and include a raft of strict new conditions to manage groundwater and minimise the potential for odour emissions.

The landfill will only be able to recommence receiving waste once Cleanaway has rebuilt the remaining void and installed necessary infrastructure in accordance with the requirements of its EA and the approvals issued by the Ipswich City Council. Once completed, this will be the only landfill void available to Cleanaway after the Planning and Environment Court refused its application to expand landfilling operations on the site.

The department continues to closely monitor Cleanaway's activities to ensure that it is complying with the conditions of its EA and will continue to respond to any reports or issues that arise at the New Chum facility in accordance with its role as the environmental regulator.

- ***The declaration of an environmental health event in relation to air pollution created by the waste industry; and***
- ***The establishment of a panel of inquiry into the health impacts of the waste industry on residents***

The public health concerns raised by the petitioners are acknowledged. While these concerns fall within the portfolio responsibilities of the Honourable Shannon Fentiman MP, Minister for Health, Mental Health and Ambulance Services, Queensland Health is working closely with the Department of Environment, Science and Innovation, providing advice in response to air monitoring results. To date, no air sample has exceeded health guidelines.

I am advised that various referral pathways have been established for residents to access health advice. Residents are encouraged to visit their general practitioner (GP) or the local Ripley Satellite Hospital to have any health concerns assessed. Residents may also contact 13HEALTH for confidential advice from a registered nurse. As of 28 February 2024, Queensland Health advised that no calls have been received by 13HEALTH relating to Swanbank odour.

Queensland Health has also advised that:

- it has sent out three alerts to GPs in partnership with surrounding Primary Health Networks. These alerts highlight to GPs the possibility that patients may present with symptoms associated with their proximity to the Swanbank Industrial Area. Local GPs have been asked to report individual cases to Queensland Health which will assist in collecting information on any health impacts that may be attributable to the Swanbank Industrial Area;
- the Chief Health Officer has met with medical representative groups, to encourage GPs in the West Moreton community to utilise the referral pathways for community members who may have health issues related to the Swanbank Industrial Area odours – and report these to Queensland Health;
- as of 29 February 2024, only two community members have been referred through this arrangement. A review did not reveal any specific links between each person's medical condition and any odour being caused.

Queensland Health has also assessed cancer rates in selected areas around the Swanbank Industrial Area. Overall, there has not been an increase in the cancer rates for any of the common cancers, including lung cancer, in any of these areas over the last 20 years.

Queensland Health is of the view that the establishment of a Panel of Inquiry or an Environmental Health Event Register would be difficult to justify under the *Public Health Act 2005* as the health-based guideline values for air quality have not been exceeded and currently, there is no substantial information directly linking the Swanbank Industrial Area to any adverse health outcomes in the community.

Regardless, Queensland Health notes that these mechanisms would not provide the remedies sought by the community to alleviate their current health concerns for the following reasons:

- a Panel of Inquiry is unlikely to identify information that is not already known, for example, the source of air pollutants; and
- measures have already been implemented to monitor and track the health concerns of the community which would be the primary focus of an Environmental Health Event Register.

I trust that this information is of assistance to the petitioners.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Leanne Linard', is positioned above the printed name and title.

Leanne Linard MP
**Minister for the Environment and the Great Barrier Reef and
Minister for Science and Innovation**

Appendix L. Copies of GP Health Alerts



GP Health Alert

Re: Odour complaints related to the Cleanaway New Chum solid waste landfill, Collingwood Park

Dear colleagues

I just wanted to draw your attention to this issue as I am sure that some of you may have already seen patients presenting with symptoms, which they feel are related to the odour coming from the landfill. The complaints have mainly come from the suburbs surrounding the landfill and include Collingwood Park, Goodna, Bellbird Park, Redbank, and Riverview.

The most common symptoms are:

- Headaches
- Nausea
- Watery eyes
- Nasal congestion
- Other upper respiratory tract symptoms such as irritated throat, cough, or wheeze especially if the person has allergies, asthma, and other chronic lung problems.
- Sleep problems
- Annoyance
- Depression

All these factors can reduce quality of life so odour complaints should be taken seriously

In general, most substances that cause odours in outdoor air are not at levels that are harmful to health.

The following conditions may trigger symptoms even when odours are below irritation levels.

- If the odour has an unpleasant smell
- If the person has had a previous bad experience with the odour
- If the person believes the odour is harmful
- If the person is stressed by the odour

Sensitive populations:

- The young
- Females
- Non-smokers
- People who suffer from
 - Migraines
 - Allergies
 - Asthma
 - Chronic lung disease



- Depression and anxiety disorders

As part of your clinical assessment, it is important to obtain details of the odour such as:

- When the odour occurs e.g., time of day
- How often the person is exposed to the odour
- The strength of the odour
- The offensiveness/characteristics of the odour
- The symptoms the person experiences and how soon after the exposure to the odour these occur.
- The type of land use and nature of human activities in the vicinity of the odour

Responses to these questions are invaluable to public health and the Department of Environment and Science (DES), who are responsible for regulating environmental contaminants, and the investigation and management of the odour producing activity.

For further information about the issue please see the following link to the DES website

[Cleanaway New Chum odour issues | Environment, land and water | Queensland Government \(www.qld.gov.au\)](https://www.qld.gov.au/environment/land-and-water/cleanaway-new-chum-odour-issues)

It is important for your patient to advise the DES of the odour and this can be done by contacting the Pollution Hotline on 1300 130 372 which is available 24 hours a day, 7 days a week.

It would be appreciated if you could contact the public health unit on phone 38184700 (business hours) when you see a patient, who is suffering health effects related to odours.

Thank you for your assistance.

Regards

Dr Penny Hutchinson

Public Health Physician

West Moreton Public Health Unit



Health alert

Odour complaints related to the Swanbank Industrial Area

Please be aware that patients may present with symptoms they feel are related to the odour coming from the Swanbank Industrial Area. The complaints have mainly come from the suburbs surrounding the area and include Swanbank, New Chum, Collingwood Park, Ebbw Vale, Ripley, White Rock, Bundamba, Riverview, Brookwater and greater Springfield area.

The most common symptoms reported are:

- headaches
- nausea
- watery eyes
- nasal congestion
- other upper respiratory tract symptoms such as irritated throat, cough, or wheeze, especially if the person has allergies, asthma, and other chronic lung problems
- sleep problems
- annoyance
- depression.

All these factors can reduce quality of life, so odour complaints should be taken seriously.

However, in general, most substances that cause odours in outdoor air are not at levels that are harmful to health.

The West Moreton Public Health Unit wants to find out how many residents are seeking medical attention for the health effects they are experiencing. Please contact the unit on 3271 8744 during business hours to discuss your patient's concerns with a public health physician.

Even when odours are below irritation levels, symptoms may be triggered if:

- the odour has an unpleasant smell
- the person has had a previous bad experience with the odour
- the person believes the odour is harmful
- the person is stressed by the odour.

Sensitive populations:

- young people
- women
- non-smokers
- people who suffer from



- migraines
- allergies
- asthma
- chronic lung disease
- depression and anxiety disorders

As part of your clinical assessment, it is important to obtain details of the odour such as:

- when it occurs e.g., time of day
- how often the person is exposed to it
- its strength
- offensiveness/characteristics
- symptoms experienced and how soon after exposure these occur
- type of land use and nature of human activities near the odour

Responses to these questions are invaluable to public health and the Department of Environment and Science (DES), who are responsible for regulating environmental contaminants, and the investigation and management of the odour producing activity.

For more information, visit [Swanbank odour management | Environment, land and water](#)

It is important for your patient to advise the DES of the odour, and this can be done by contacting the Pollution Hotline on 1300 130 372, which is available 24 hours a day, 7 days a week.



West Moreton Health

01/11/2024

Enquiries to: Public Health Unit
Telephone: (07) 3271 8744
Facsimile: (07) 3818 4701

GP Health Alert

Re: Health complaints related to odour from the Swanbank Industrial Area and advice regarding available mental health services.

Update

The Department of Environment, Science, and Innovation (DESI) has recently been successful in obtaining a court-ordered restraining order which will require NuGrow Ipswich Pty Ltd to overhaul its operations and reduce nuisance odours.

The odour affected areas continue to be those surrounding the Swanbank site (Swanbank, New Chum, Collingwood Park, Ebbw Vale, Ripley, White Rock, Bundamba, Riverview, Brookwater, and Springfield) have experienced considerable distress and may present to their GP with symptoms.

In general, most substances that cause odours in outdoor air are not at levels that are harmful to health.

Although positive news these changes will take some time and residents may continue to experience significant distress from offensiveness of the smell which can lead to:

- The fear that the odour is harmful to their health.
- Concern physical symptoms experienced are related to the odour.
- Negative impacts on property values so residents are unable to relocate and may feel trapped.
- The need to keep doors and windows closed with no access to fresh air.
- A reluctance to have visitors to their homes.

All these factors can lead to poor mental health and reduced quality of life.

The West Moreton Public Health Unit (WMPHU) has engaged with the Ipswich Medicare Mental Health Centre (who are aware of the issues concerning the residents) and are available to provide free mental health support for adults.



Address

Public Health Unit
The Park Centre for Mental Health
Public Health Building
Orford Drive, Wacol Q 4076

Postal address

Locked Bag 500
Archerfield Q 4108

Phone: (07) 3810 4700

www.health.qld.gov.au/westmoreton

Please see further information about the Ipswich Medicare Mental Health Centre in the attached flyer.

The WMPHU is still interested in the number of residents who present to their GP with odour related symptoms so please contact the PHU on 07 32718744 during business hours or email Dr Penny Hutchinson, public health physician, at penny.hutchinson@health.qld.gov.au.

For further information about the background to this issue please see the following link to the DESI website

[Swanbank odour management | Environment, land and water](#)

It is important for residents to advise the DESI of the odour, and this can be done by contacting the Pollution Hotline on 1300 130 372 which is available 24 hours a day, 7 days a week.

Thank you for your assistance.

Appendix M. Jurisdictional comparison

The below table provides a comparison of several environmental regulatory matters for Queensland, New South Wales, Victoria, South Australian and Western Australia. Tasmanian and the Northern Territory are not included given differences in regulated activities and limited comparative material publicly available.

The information provided in this table has been drawn from the DETSI submission to the Inquiry.

Do environmental approvals issued within the jurisdiction expire?				
Queensland	New South Wales	Victoria	South Australia	Western Australia
No. While the <i>Environmental Protection Act 1994</i> (EP Act) (https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1994-062) provides that DETSI can state a period after which an EA lapses (refer to s. 201 of the EP Act), EAs are generally not issued for a	No. Once a licence is issued, it comes into force and remains in force until it is surrendered by the licence holder or is revoked or suspended by the NSW EPA. Refer to s. 77 of the <i>Protection of the Environment Operations Act 1997</i>	Yes. Environmental permits (https://www.epa.vic.gov.au/for-business/permissions/permits#3A~%3Atext%3DA%20permit%20is%20valid%20for%20a%20maximum%20of%202and%20have%20adequate%20risk%20management%20controls%20in%20place) (required for a low complexity activity with medium to high-risk) are valid for a maximum of five years, with the option to renew before it expires. Operating licences (https://www.epa.vic.gov.au/for-business/permissions/licences/operating-licences) (required for complex high-risk industrial and waste activities that are ongoing) will expire after 20 years except for landfills which can have a term of up to 99 years. Refer to s. 75 of the	Yes. Environmental authorisations remain in force for a term specified by the South Australian EPA with the option to renew before expiry. Refer to s. 43 of the <i>Environment Protection Act 1993</i> – https://www.legislation.sa.gov.au/_/legislation/lz/c/a/environment	Yes. Works approvals and licences continue in force for the period specified in the works approval or licence with the option to renew before expiry. Refer to s. 63 of the <i>Environmental Protection Act 1986</i> – https://www.legislation.wa.gov.au/legislation/prod/filestor.e.nsf/FileURL/mrdoc_47972.pdf?%24FILE/EnvironmentalProtectionAct1986-%5B09-w0-01%5D.pdf?OpenElement . The Western Australian Department of Water and Environmental Regulation

specific term and do not expire. The exception is trial EAs which can be issued for no longer than three years (refer to s. 125(7) of the EP Act.	https://legislation.nsw.gov.au/view/html/inforce/act-1997-156 .	Environment Protection Act 2017 – https://www.legislation.vic.gov.au/in-force/acts/environment-protection-act-2017/016 .	protection act 1993/current/1993.76.auth.pdf. The South Australian EPA (https://www.epa.sa.gov.au/business_and_industry/licences) advise that most licences are granted for five years. While the term of a SA EPA (https://www.sa.gov.au/topics/business-and-trade/licensing/environmental-licensing) licence is generally five years, it can vary from one to ten years, based on the EPA's assessment of the risk or	(https://www.wa.gov.au/system/files/2023-05/guidance-statement-licence-duration.pdf) advises that it prefers longer term (20 year) licences to provide greater certainty to industry, reduce the administrative burden on both industry and the department.
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				duration of the activity.	
Do environmental approvals issued within the jurisdiction undergo a review after a certain timeframe?					
Queensland	New South Wales	Victoria	South Australia	Western Australia	
No. Environmental authorities issued within Queensland do not undergo a statutory or regular review after a certain timeframe.	Yes. Licences are required to be reviewed at least once every five years. The NSW EPA is required to give public notice of its intention to review a particular licence. Refer to s. 78 of the <i>Protection of the Environment Operations Act 1997</i> .	Yes. The EPA may, in accordance with the regulations, review an operating licence after the operating licence has been in force: <ul style="list-style-type: none"> • for 4 years; or • for any longer period determined by the EPA. As a result of this review, there may be a variation of licence conditions or revocation of the licence. (Refer to s. 76 of the <i>Environment</i>	Yes. The South Australian EPA notes conditions on a licence will be subject to regular review to ensure that harm to the environment is minimised or avoided. Amendments to licence conditions may be made through the review or renewal process.	Yes. The Western Australian Department of Water and Environmental Regulation (https://www.wa.gov.au/system/files/2022-04/Guideline-Industry-Regulation-licence-reviews.pdf) advised it undertakes licence reviews to ensure a licence remains up to date with current regulation and relevant policy, and to ensure a licence continues to effectively identify and manage the current potential risks of activities undertaken under the licence to the environment and public health. Licence reviews also allow the department to work in a cycle of continual improvement with licence holders to ensure each licence reflects contemporary scientific, social, environmental, and governance standards. Reviews may be undertaken based on: <ul style="list-style-type: none"> • General triggers (e.g. periodic licence reviews required to evaluate risk 	

		<i>Protection Act 2017).</i>		<p>associated with premises issued long duration licences (e.g. greater than 10 years duration))</p> <ul style="list-style-type: none">• Strategic triggers. <p>The Western Australian Department of Water and Environmental Regulation advises that strategic licence reviews are part of the systematic analysis of multiple related premises. The group of premises may be derived from an industry sector or several sectors, or from an association with each other by geographical area, emission type, location and siting, or be due to the existence of a sensitive receptor (for example, a review of all premises with emissions to air, in response to an emergent airborne contaminant of concern).</p> <p>The department will undertake licence amendments resulting from a licence review in accordance with the procedure specified in s. 59B of the <i>Environmental Protection Act 1986</i>.</p>
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Item 16.2 / Attachment 3.

Can the administering authority initiate an amendment to an environmental approval?				
Queensland	New South Wales	Victoria	South Australia	Western Australia
<p>Under limited circumstances including where the EA holder has agreed to the amendment in writing, the amendment is administrative or there is a significant change to the activity.</p> <p>The administering authority in Queensland can initiate a process to amend an EA where the amendment is considered necessary and desirable, or the EA holder has agreed in writing to the amendment. Where the holder has not agreed in writing to the amendment, the circumstances where the administering authority can propose an EA amendment are stipulated under s. 215. Some examples are:</p>	<p>Yes, but the NSW EPA will consult with the holder of the authority.</p> <p>The NSW EPA can initiate a licence variation in consultation with the licensee (refer to s. 58 of the <i>Protection of the Environment Operations Act 1997</i>). The EPA will always consult on any proposed conditions or amendments to a licence.</p>	<p>Yes, but the holder has appeal rights if the amendment is not administrative.</p> <p>The Victorian EPA can amend a permission by issuing a notice of amendment to the permission holder. Refer to s. 58 of the <i>Environment Protection Act 2017</i>. In this situation, the permission holder has the right of appeal.</p> <p>The EPA may also amend a permission for administrative reasons. As these amendments don't alter the obligations of the permission holder, no appeal rights exist.</p> <p>The EPA will discuss any proposed changes to an existing permission with</p>	<p>Yes, but the holder has a right to appeal an amendment decision for review.</p> <p>Pursuant to section 45 of the <i>Environment Protection Act 1993</i>, the EPA may impose a condition of an environmental authorisation or vary or revoke a condition previously imposed by the EPA, by notice in writing to the person holding the authorisation.</p> <p>Amendments may be made when renewing the authorisation or when the EPA considers the amendment necessary as consequence of prescribed circumstances.</p>	<p>Yes, but the holder has a right to appeal an amendment decision.</p> <p>Under s.59 of the <i>Environmental Protection Act 1986</i>, the Chief Executive Officer of the Western Australian environment department may amend a licence at any time, including but not limited to:</p> <ul style="list-style-type: none"> • varying the conditions which apply to a licence • removing redundant conditions, or • imposing new conditions and requirements where necessary. <p>Before making an amendment, a notice about the proposed</p>

<ul style="list-style-type: none">the EA was issued because of a materially false or misleading representation or declaration, made either orally or in writingthere is a significant change in the way, or extent to which, the activity is being carried out.		the permission holder before it is amended.		<p>amendment must be given to the operator and the operator can make a submission about the proposed amendment. Refer to s. 59B of the Environmental Protection Act 1986.</p> <p>If the licence holder or any other person objects to any licence amendments that result from a licence review, they may lodge an appeal with the Minister for Environment within 21 calendar days of the licence holder being notified of the amendment.</p>
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Swanbank Public Health Inquiry

Government response: Public Health Inquiry – odour issues at Swanbank and New Chum industrial areas

Background

The Queensland Government commissioned a Public Health Inquiry (the Inquiry) into the odour-related health concerns of the community living in the vicinity of the Swanbank Industrial estate under the *Public Health Act 2005* (PH Act). The Inquiry was initiated in response to deep and sustained community concern about the health impacts of odours emanating from the Swanbank and New Chum industrial areas since 2013.

A Panel of Inquiry (the Panel) was commissioned with Dr John Gerrard, Medical Director, Immunology, Gold Coast Hospital and Health Service and the former Chief Health Officer as the Chair and Inquiry lead.

Dr Lyn Denison, Technical Director, was appointed as a member of the Panel to support the Chair. The Panel heard directly from residents, community groups, local governments, regulators, industry representatives, and health professionals.

The Swanbank and New Chum industrial areas (the Industrial Areas) have long played a vital role in Queensland's economic and environmental landscape. From mining and power generation to waste management, resource recovery, and other industrial activities, these areas have been critical to the state's growth. Yet, as Ipswich and its surrounding communities have expanded rapidly, the intersection of industry and residential life has created complex and pressing public health challenges. The Inquiry's scope was to investigate the health effects of odour from the industrial areas and to recommend actions to mitigate the impacts in accordance with the Inquiry Terms of Reference.

Findings and recommendations

The Inquiry concluded that the odour from the industrial areas is highly offensive and is affecting the health and wellbeing of Ipswich residents. Planned residential growth near the industrial areas will further exacerbate the problem in the coming years.

The Inquiry made 8 recommendations which call for sustained, collaborative action across government, industry and the community to enhance odour management, strengthen regulatory interventions, increase transparency and ensure that public health remains at the centre of decision-making.

The recommendations of the Inquiry focussed on:

- providing immediate relief to the community from offensive odours
- options for providing long-term relief from highly offensive odours, either through the construction of enclosed composting operations, or by relocating them to a new location
- auditing of all remaining odour-producing companies and developing an overarching odour management plan for the Industrial Areas
- strengthening the air monitoring program to more accurately assess community health impacts
- prohibiting future residential developments from encroaching within buffer distances for the Industrial Areas
- establishing an inter-departmental committee to oversee the implementation of the recommendations.

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Government response

The Queensland Government (the government) welcomes the findings and recommendations of the Inquiry. The community surrounding the Swanbank and New Chum industrial areas have been adversely impacted by odour for many years.

The government has taken a range of actions to address the odour issues over several years, including imposing stricter licence conditions and a court-ordered restraint to provide a long-term transition to best practice composting. In addition, interim measures have been implemented to mitigate odour impacts, which are benefiting the local community. While these actions mark significant progress, there remains an opportunity to build on this foundation.

The government recognises the importance of the waste and recycling sector across Queensland. However, the industry has obligations and a general environmental duty to ensure that they are not causing harm to neighbouring communities. The government expects industry to take those obligations seriously.

The government agrees with the findings of this Inquiry that odours are impacting on the health and wellbeing of the neighbouring community. However, it is also reassured by the Inquiry finding that there is no evidence of increased risk of cancer in the exposed population.

The government supports the Inquiry recommendations and will work in partnership with local government, industry and the community to implement them in a timely manner.

A number of the recommendations will require further investigation into potential regulatory review, which will be undertaken as a priority. In implementing any recommendations from the Inquiry, the government is acutely aware of the need to avoid undermining existing compliance and regulatory actions that are already underway.

The Queensland Government supports the establishment of the Swanbank Inter-Departmental Committee to oversee the implementation of the recommendations. Transparency for the community is critical and it is expected that there will be ongoing consultation and engagement with community and industry stakeholders as the government implements the recommendations of the Inquiry.

A detailed government response to the Inquiry recommendations is provided in Table 1 below.

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Table 1: Government response to recommendations

#	Recommendation	Government response	Comments
1	<p>Provide some immediate relief from the most offensive odours from composters</p>	<p>Supported, building upon the actions already undertaken</p>	<p>The government has investigated options for providing immediate relief to the community and is taking all possible steps to progress actions quickly.</p> <p>As a result of the actions taken to date, there has been a 70% reduction in community odour complaints over the past year. In addition, the number of odour complaints to date in 2025 is the lowest in 7 years, indicating that the actions already taken are having a positive effect.</p> <p>These actions are consistent with independent expert advice and include issuing a restraint order for one composting operator and amending licence conditions for others. This requires industry to undertake immediate steps to mitigate odour impacts, as well as ongoing monitoring and a transition from open windrow composting operations to in-vessel/enclosed operations, in accordance with set milestones.</p> <p>These milestones were developed in recognition of the approval and construction timeframes involved, and consideration of the interim measures introduced to mitigate odour impacts on the community.</p> <p>If composting operators have not constructed in-vessel/enclosed facilities in accordance with their licence and/or court order by September 2026, the facility must cease composting highly odorous feedstocks.</p> <p>The government cannot bring forward any of these timeframes without being inconsistent with the orders of the court. However, the government will continue to work collaboratively with operators to voluntarily fast track actions wherever possible.</p>
2	<p>Consider 2 options to provide long-term relief from highly offensive odour from composting</p> <p>There are 2 options for the Queensland Government to consider for managing the public health risk associated with odour from composting</p>	<p>Supported</p>	<p>Option 1</p> <p>The government is supportive of the operators transitioning to in-vessel operations as per the orders of the court. The government cannot compel composting operators to move. If composting operators are willing to relocate, the government will support by assisting with fast-track approvals, if required.</p> <p>Composting operators considering relocation are encouraged to engage with their respective local governments as part of their investigations into alternative sites. Local government may provide assistance through supporting and facilitating the identification of suitable areas or precincts based on the regulatory framework</p>

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Table 1: Government response to recommendations

#	Recommendation	Government response	Comments
	<p><i>Option 1: Support industry to find a new location to compost.</i></p> <p><i>Option 2: Support industry to ensure construction of permanent enclosed facilities</i></p>		<p>of their local planning scheme. The respective local government will provide development pre-lodgement services for businesses seeking to develop new sites for composting activities within their council areas.</p> <p>The government becomes involved in assessing development applications if a development proposal affects a state interest. This may include assessing applications for planning or environmental approvals that are required for composting operators to establish themselves at alternative sites. To support this process, the government's State Assessment and Referral Agency (SARA) offers a free pre-lodgement service to assist with streamlining the development application process, especially for more complex development applications. This can be undertaken as part of site identification and due diligence in advance of lodging a development application, to assist in identifying any potential issues or land use conflicts related to establishing new composting operations.</p> <p>Option 2</p> <p>Where companies decide to remain in the Swanbank/New Chum industrial areas, they will need to move to in-vessel/enclosed facilities to process odorous feedstock and comply with amended environmental authorities and/or imposed court orders. This requirement has already been imposed on all composting operators in the area and will require operators to move to in-vessel/enclosed facilities by no later than September 2026, or to cease receiving highly odorous feedstocks.</p>
3	Apply recommendations 1 and 2 to the other commercial composting site operating in Ipswich	Supported	<p>The government will continue to work with the other commercial composting operator in Ipswich. The government notes that this operator has proactively identified an alternative site outside the Industrial Areas to undertake composting operations using odorous feedstocks. The government will facilitate any development approvals or environmental permits required to expedite composting operations at the alternative site.</p>

Swanbank Public Health Inquiry

Table 1: Government response to recommendations

#	Recommendation	Government response	Comments
4	Audit all remaining odour-producing companies in the industrial areas and develop an overarching odour management plan	Supported, subject to further design of the audit program	<p>The government, through the Department of Environment, Tourism, Science and Innovation (DETSI), has undertaken comprehensive compliance activities and site inspections at a number of odour-producing facilities within the Industrial Areas. A range of actions have already been taken, or are underway to address non-compliance.</p> <p>DETSI, in consultation with the Ipswich City Council (ICC) and industry, will implement a tailored audit/compliance program of the odour producing waste facilities. The final program design will incorporate a risk-based approach, engaging external odour experts as appropriate.</p> <p>The government will work collaboratively with waste and resource recovery industry peak bodies, operators and ICC to develop an overarching odour management plan that addresses risks emerging from the audits.</p>
5	Consider undertaking an expanded air monitoring program in the industrial and nearby residential areas	Supported, subject to further design of the monitoring program	<p>The government has considered and will continue to implement, through DETSI, an expanded monitoring program. The final design of the program will be based on an evaluation of the potential costs and benefits of different monitoring frequencies and analyses, as well as further technical advice. The government will ensure that the results are made publicly available to provide complete transparency.</p> <p>DETSI will design the expanded monitoring program and will review the results to assess health risks and provide health protection advice, as appropriate, with support from QH.</p>
6	Protect industrial buffer zones from development	Supported	<p>The government notes that industry buffer zones are best addressed through local government planning schemes. The new Ipswich City Plan 2025, which commenced on 1 July 2025, includes a strategic framework that incorporates buffer zones around key Industrial Areas.</p> <p>The Ipswich City Plan 2025 was developed in close collaboration with the Department of State Development, Infrastructure and Planning (DSDIP). The government is supportive of local governments maintaining contemporary planning scheme policies and regulatory frameworks to appropriately plan for and assess development.</p>

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Table 1: Government response to recommendations

#	Recommendation	Government response	Comments
			To support industrial buffer zones administered by ICC and its assessment of applications under their planning scheme, SARA, in conjunction with DETSI, will continue to work collaboratively with ICC and industry to progress development applications in line with the Ipswich City Plan 2025.
7	Leverage existing laws and consider improvements to legislation to better manage odour	Supported, subject to further consultation and regulatory impact assessment	<p>The government will review existing laws to consider improvements for more effective management of odour impacts from Industrial Areas.</p> <p>The government notes that recent changes have already been made to environmental legislation and to planning laws to address several of the recommendations.</p> <p>Similarly, planning laws have already been leveraged through the development of the new Ipswich City Plan 2025, which incorporates state agency reviews supporting the establishment of buffer zones around key industrial areas and related assessment benchmarks within the City Plan strategic framework. The revised Plan imposes significantly tighter regulations on highly odorous industries proposing new or expanded activities. Specifically, the Ipswich City Plan 2025 has introduced a Resource Recovery and Waste Activity Code, which will apply to new development applications; however, this cannot be enforced retrospectively to existing operators.</p> <p>Further consideration of the suggested regulatory changes will be undertaken, including consultation with stakeholders and regulatory impact analysis where necessary. For example, rights and obligations associated with existing environmental authorities and planning and development approvals will need to be carefully considered, as well as any implications of suggested changes across the state or into the future, particularly in relation to amending conditions or cancelling permits.</p> <p>There are no 'unilateral' powers for the state or local government to revoke or change a development approval under the Planning Act. In addition, if a particular operator is not complying with their development obligations, it does not mean that the existing approval is ineffective or requires revocation or amendment. Further, there are significant practical and operational considerations due to development approvals being binding on the current owner and occupier as well as successors.</p> <p>Existing approvals may provide ongoing obligations and duties (e.g. with respect to land rehabilitation).</p>

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Table 1: Government response to recommendations

#	Recommendation	Government response	Comments
8	Establish an inter-departmental steering committee responsible for implementing these recommendations	Supported	<p>The government will establish an inter-departmental committee (IDC) to ensure a collaborative approach across agencies. The IDC will develop a detailed implementation plan in consultation with the community and industry reference groups.</p> <p>The government supports engagement with stakeholders as an integral part of the implementation of the recommendations. The government will seek feedback through existing forums where possible, including the Swanbank community reference group, as well as a separate industry reference group to be established.</p> <p>Both QH and DETSI agree to strengthen inter-agency collaborative arrangements to manage health risks associated with general odour. Both agencies are committed to working together to develop resources and issue joint alerts to manage odour health risks and enhance communication to the community to support their health and wellbeing.</p>