

## 3.2. Community Recycling Centre Operations

**AUTHOR:** Shivaan Kumar, Waste Management Officer

**ENDORSED BY:** Marcelo Occhiuzzi, Director Community, Planning and Environment

**ATTACHMENTS:** Nil

### **PURPOSE:**

The purpose of this report is to provide an update on the operations of the Northern Sydney Community Recycling Centre based in Artarmon.

### **EXECUTIVE SUMMARY:**

- North Sydney Council operates the Community Recycling Centre (CRC) on behalf of the City of Ryde and the Councils of Hunter's Hill, Lane Cove, Mosman, and Willoughby.
- Residents can safely dispose of household problem waste items including paint, motor oil, gas bottles, fire extinguishers, e-waste, light bulbs, batteries, smoke detectors, x-rays, printer cartridges and mobile phones.
- Over 28,700 residents used the CRC in Financial Year 22/23 of which 9,925 were from the North Sydney Council area and approximately 562,968kg of problem waste was collected.
- A total of 4,748g of wearable textile was also collected between October 2022 and June 2023.

### **FINANCIAL IMPLICATIONS:**

Funds for the establishment of the CRC were provided through the Environmental Protection Authority (EPA). Under the terms of the Deed of Agreement, the partner Councils have committed to funding the CRC for the term of the lease. North Sydney Council's contribution is funded from the Domestic Waste Management levy each financial year.

### **RECOMMENDATION:**

**1. THAT** the report on Community Recycling Centre Operations be received.

## **LINK TO COMMUNITY STRATEGIC PLAN**

The relationship with the Community Strategic Plan is as follows:

1. Our Living Environment
  - 1.2 Environmentally sustainable community
  
5. Our Civic Leadership
  - 5.2 Strong civic leadership and customer focussed services
  - 5.3 Community is engaged in what Council does
  - 5.4 Council services are efficient and easy to access.

## **BACKGROUND**

In 2016, the Northern Sydney Regional Organisation of Councils was successful in obtaining \$150,000 of grant funding from the NSW EPA's *Waste Less, Recycle More* Initiative to establish a Community Recycling Centre (CRC). The primary objective of the CRC was to facilitate the safe disposal of household wastes that would be hazardous to the environment and to public health.

The CRC was established in Artarmon in alliance with the City of Ryde and Hunter's Hill, Lane Cove, Mosman, and Willoughby Councils. The signed Deed of Agreement, Northern Sydney Community Recycling Centre ("Deed") underpins the development of the CRC and guarantees its financing for the term of the lease on the site. Under the terms of the Deed, North Sydney Council is responsible for the day-to-day operation and management of the CRC.

The CRC was opened for operations on 12 April 2017. With more residents dropping off problem waste each year, and limited room at the CRC for storage of waste, restrictions apply on the maximum quantity of waste dropped off per visit. A maximum limit of 20 litres or 20kg per customer per drop off is currently allowed.

Several household problem waste types are targeted at the CRC including paint, motor oil, gas bottles, fire extinguishers, e-waste, fluorescent light tubes/bulbs, batteries, smoke detectors, x-rays, printer cartridges and mobile phones. The program aims to increase community awareness of good recycling and disposal practices for household problem waste and to provide a sustainable solution for managing them. At present, the CRC also accepts wearable textiles (trial phase up to April 2024) with possible extension of the collection service.

## **CONSULTATION REQUIREMENTS**

Community engagement is not required.

**DETAIL**

The CRC keeps records of the number of visitors, postcodes and weight of waste collected each financial year. As seen in Figure 1 below, the CRC recorded its highest collected weight of materials in the last financial year (FY), resulting in 562,968kg of waste saved from landfill. FY19/20 experienced an increased number of drop-offs, coinciding with the first wave of COVID-19. As most residents either stayed or worked from home, many had more time to drop off items at the CRC. FY20/21 showed a similar trend but there was a significant drop in FY 21/22 as the CRC was closed for 5 months during extended lockdown.



Figure 1. Kilograms of items collected at the CRC since July 2017 till June 2023

Postcodes are recorded for each car entering the CRC. Last FY recorded one of the busiest years with over 28,700 cars visiting the CRC. A total of 9,925 residents from North Sydney Local Government Area (LGA) used the CRC, which made up approximately 34% followed by 66% from other Council areas. Figure 2 shows that out of the 9,925 residents, postcode 2065 (Crows Nest, Wollstonecraft, and St Leonards) recorded one of the highest users of the CRC, followed by 2060 (Lavender Bay, McMahons Point, North Sydney, and Waverton) and 2090 (Cremorne and Cremorne Point).

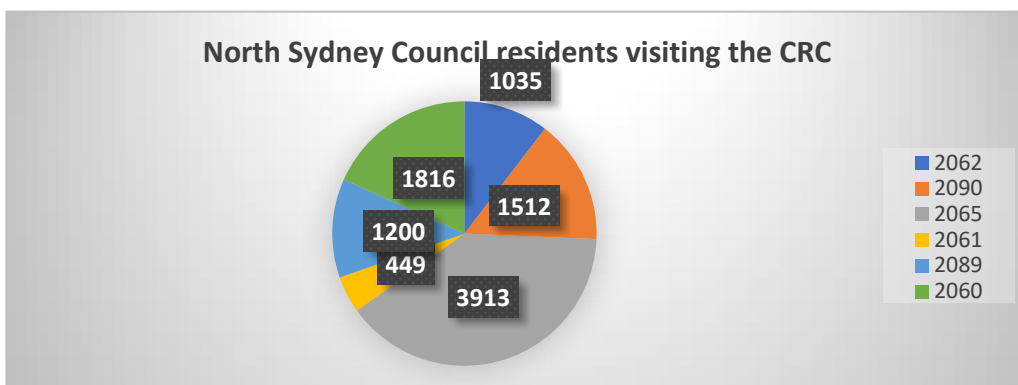


Figure 2 North Sydney Council residents visiting the CRC in FY22/23

## Resourcing

The NSW Environment Protection Authority (EPA) continues to facilitate the collection and disposal charges of seven of the nine designated problem waste types accepted at the facility. The costs associated with the disposal or recycling of motor oils and lead acid car batteries are borne by the alliance Councils and not by the EPA. All other day-to-day operational costs are shared by the partner councils based on the relative number of households in each respective LGA.

E-waste is collected under the Federal Government's National Television and Computer Recycling Scheme (NTCRS) which includes televisions, computers, printers, and other small computer parts. The objective of the Scheme is to increase the recovery of reusable materials in a safe, scientific, and environmentally sound manner. Non-scheme e-waste is also accepted at the CRC which includes small electrical kitchen appliances and other small day-to-day use items. The collection and recycling cost is evenly distributed between the alliance Councils and North Sydney Council's contribution is funded from Domestic Waste Management levy each FY.

## Problem Waste

In FY22/23, a total of 558,220kg of "problem waste" was dropped off at the CRC. Figure 3 shows that water-based paint made up approximately 42% of items dropped off followed by gas cylinders, 16% and oil-based paint, 15%.

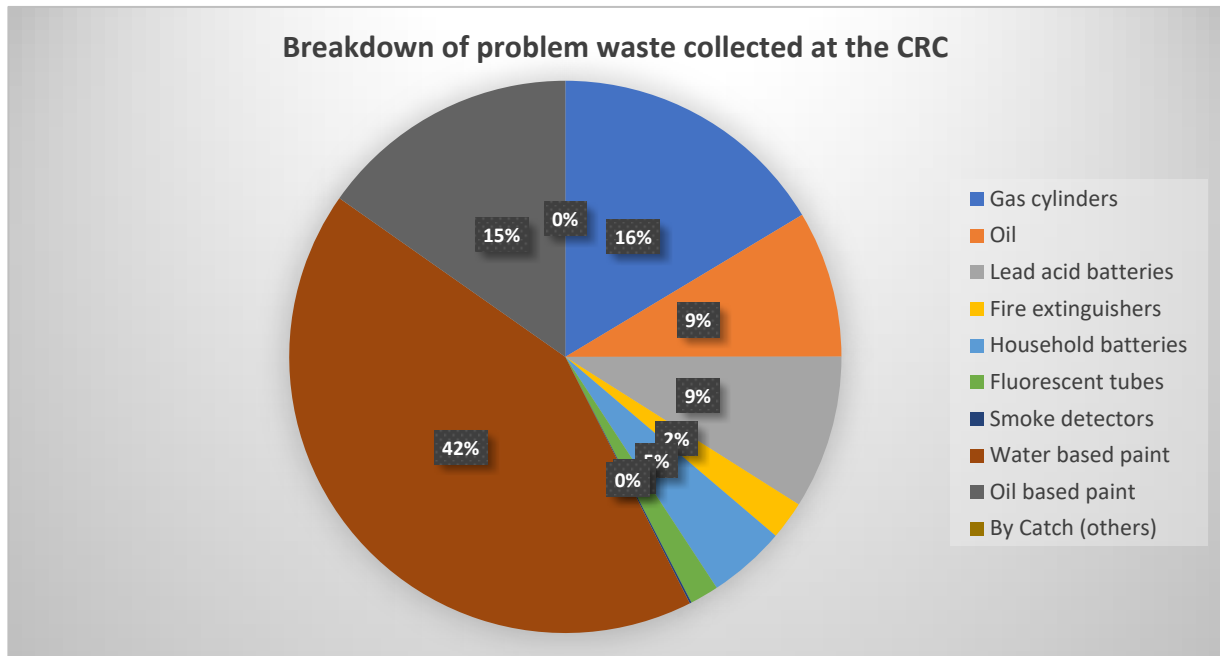


Figure 3. Breakdown of problem waste collected at the CRC during FY22/23

Table 1 below shows the list of problem waste collected at the CRC and how they are recycled and/or processed.

<b>Problem Waste</b>	<b>Recycled and processed method</b>
Paint	Paint is mixed with other waste solvents and used as an alternative to fuel in cement kilns. The metal containers are recycled.
Lead acid batteries	The batteries are sent to recyclers where the lead, acid and plastic are recovered and recycled.
Fluorescent tubes and globes containing mercury	Recyclers crush the tubes to separate the phosphor powder from the glass. They feed the powder through receiving containers, where it is filtered to capture fugitive mercury emissions. The mercury is then separated by distillation and sold for a range of industrial uses. The metals are also recycled.
Gas bottles	Undamaged bottles are retested, restamped, and entered into the hire industry. Damaged bottles are punctured and recycled as scrap metal.
Used household and motor oil	Oils are processed to product lubricant to be used in cars/machinery or to be used in waste to energy combustion
X-rays	Silver is extracted from granulated material, after a chemical reaction which is recovered and used in construction industry.

### **E-waste including mobile phones**

Figure 4 below shows that out of the 341,473kg of e-waste dropped off at the CRC, 96% is scheme based and is covered by the Federal Government's NTCRS Scheme whereas the other 4% is funded from the contributions from alliance Councils.

The first stage of the e-waste recycling involves dismantling, shredding, and sorting the device into various usable parts and materials including glass, metals, plastics, batteries, and printed circuit boards. Given the availability of infrastructure and an established end market to recycle, almost 90% of the materials recovered from e-waste are reintroduced as raw materials which are used in other new products.

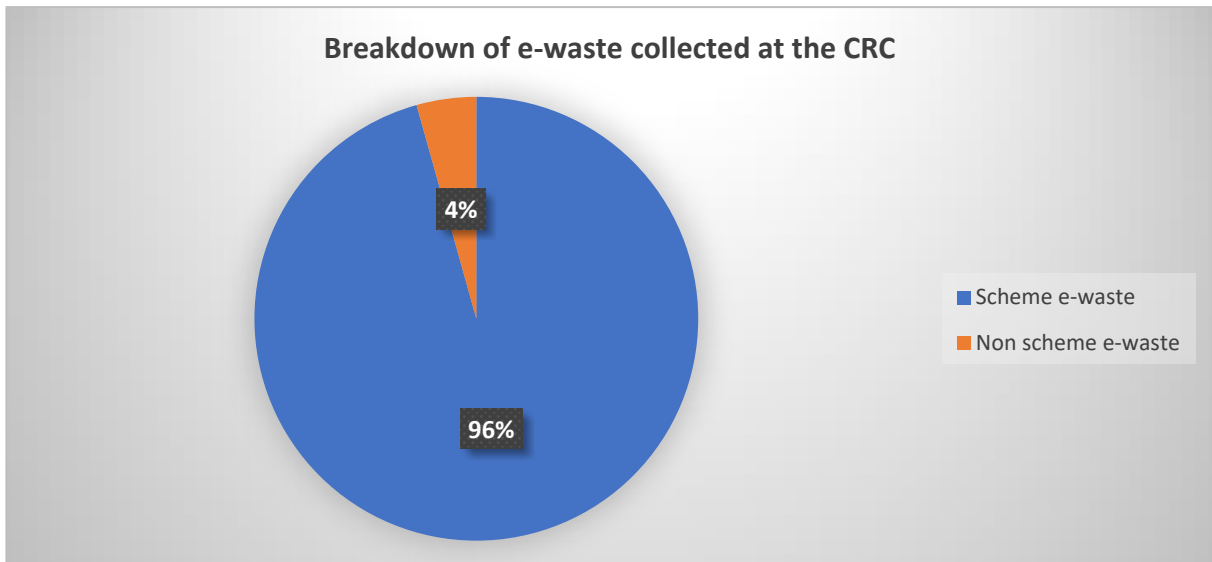


Figure 4. Breakdown of scheme and non-scheme e-waste collected at the CRC during FY22-23

### Textiles

The Textile Collection Trial at the CRC commenced in October 2022 and was due to conclude in April 2024 as per initial agreements with the collection provider. However, given the service was well received by members of the community, the Committee of Management extended the trial for another 12 months and is now due to expire on 30 April 2024 with further possible extension. In the last FY, a total of 4,748kg of textiles was collected with 96% classified as wearable and only 4% non-wearable.

### Future Direction

In 2021, the NSW Government released the *NSW Waste and Sustainable Materials Strategy 2041, Stage 1 Plan: 2021-2027*, which outlines the actions that will be taken over the next 6 years to move towards a circular economy.

The actions are backed by \$356 million in funding to help deliver priority programs and policy reforms including supporting the operations of CRC's.

At present, the CRC site is leased until 31 March 2025 with an option to renew for another 3 years.