

Frequently Asked Questions

Proposal for a Material Recovery Facility at Summerhill Waste Management Centre



City of
Newcastle

1. What is being proposed at Summerhill Waste Management Centre?

The City of Newcastle (CN) is proposing to expand its operations at the Summerhill Waste Management Centre to include a Material Recovery Facility, generally referred to as a "MRF".

The purpose of a MRF is to sort co-mingled recyclables into separate materials streams such as paper, cardboard, glass, plastics, steel and aluminium. The segregated recyclable streams are baled (except glass which is stored in large skip bins) and can then be sold to various recyclers for use in the manufacture of new products.

The MRF will receive primarily recyclables from CN household recycling bins but is also capable of sorting recyclables from other Councils and from the commercial sector such as shops and restaurants. The sorted recyclables will be free of contaminants and of high quality so recycling markets can be easily found. The MRF will be able to process up to 85,000 tonnes of recyclables per annum of which 15,000 tonnes will be from Newcastle households.

2. What is Summerhill Waste Management Centre?

Summerhill Waste Management Centre consists of a landfill and resource recovery facility owned by CN. The Centre is licensed by the NSW Environment Protection Authority (EPA) and is permitted to receive up to 352,000 tonnes per annum of waste for landfilling. About 23,000 tonnes of organics and 20,000 tonnes of recyclables are also received every year, but these materials are currently transported to other facilities for processing.

CN is in the process of constructing a fully enclosed Organics Processing Facility at the Summerhill Waste Management Centre. This Organics Processing Facility together with the proposed MRF will create a resource recovery hub for the Hunter Region.

3. What is included in the design of the proposed Materials Recovery Facility?

The facility design contains the following elements:

- A new building equipped with state-of-the-art sorting equipment to allow the highly automated segregation of co-mingled recyclables into individual material streams.
- Sorting equipment include conveyors, screens, optical sorting units for plastic, eddy current separators to sort aluminium from plastics, magnets to extract metals and glass breakers.
- Storage bays for baled recyclables awaiting transport to recyclers
- A new staff building

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4. Why is the proposed Materials Recovery Facility needed?

Until 2020, recyclables from most Hunter Councils including CN's were processed at a MRF located at Gateshead. This MRF, which was owned by a contractor, closed unexpectedly in 2020. Since the closure of the only MRF in the Hunter Region, recyclables collected from our households have been transported to a processing facility on the Central Coast which is very expensive. A MRF located at the Summerhill Waste Management Centre has the following benefits:

- It will allow processing of recyclables in Newcastle and eliminate long distance transport to other processing facilities.
- Processing recyclables locally is more cost efficient than long distance haulage.
- It will reduce greenhouse gas emissions by avoiding long distance haulage.
- As the MRF will be owned by CN, the risk of unexpected closure is removed and the recycling services can be provided into the future.
- It will allow greater control of the quality of the sorting process and the destination of the recyclables.
- It will create up to 28 new jobs.
- It will complement the Organics Processing Facility in the creation of a Resource Recovery Hub at SWMC that will incentivise the establishment of secondary businesses and create additional jobs.
- Recyclables from other Councils and the commercial sector can be accepted reducing the processing cost through economies of scale.
- Our community has told us that they support building a local MRF

5. What happens inside a Material Recovery Facility?

Recycling trucks empty the household recycling bins and then deliver the content to the MRF at the Summerhill Waste Management Centre. The co-mingled recyclables are unloaded inside the enclosed facility onto conveyors. The first step is removing non-recyclable materials (contamination) which must be done by hand.

Conveyors move the co-mingled recyclables through disk screen where paper and cardboard are separated. Glass falls through the screen and is then crushed into small pieces by glass breakers. Magnets remove metals from the conveyor and eddy currents split aluminium from plastic containers. Plastics are sorted using optical separators into various types (PET, HDPE, PVC).

The separated and clean paper, cardboard, aluminium, steel and plastics are baled so they can be efficiently stored. Glass is stored in large skip bins.

The baled materials or glass bins are temporarily stored on site. When markets are available, they are then loaded onto trucks for transport to recycling facilities where they are used to manufacture new materials.

The sorting process inside a MRF is highly automated. Only contamination (non-recyclable materials) are removed by hand.

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6. How is this project approved?

We intend to submit a development application (DA) supported by an Environmental Impact Statement (EIS) for planning approval later in 2022. Once the DA is submitted, there will be a public exhibition of the EIS to allow the community to have its say on the proposed design and operations. The proposal will be subject to approval by the Hunter and Central Coast Regional Planning Panel.

If the application is successful, construction will begin during 2023, with an expected completion date by October 2024.

7. How will the Material Recovery Facility minimise environmental impact?

The proposed MRF will form a critical part of CN's plan to create a Resource Recovery hub which focuses on diverting waste from landfill and contributing to a circular economy. This MRF will increase the capacity for recycling in Newcastle and the broader Hunter region. The MRF will be able to process and recover up to 2 million tonnes of recyclables over 25 years which can be used to make new products.

The MRF will be powered from the solar farm located at the Summerhill Waste Management Centre. In addition, the MRF will further reduce greenhouse gas emissions by avoiding lengthy haulage of recyclables to a MRF on the Central Coast.

8. I live close by, will I be able to see the Material Recovery Facility, or hear it or smell it?

The MRF operations will be conducted in a fully enclosed building to contain any noise and odour. The recyclables to be sorted and processed in the MRF have a low potential for odour. The MRF will be designed to minimise noise impacts during operation, taking into consideration equipment and plant, vehicle movements and access. The MRF will be of similar height to other buildings at the Summerhill Waste Management Centre and is unlikely to be visible from nearby residences.

9. Who will own the Material Recovery Facility and how many jobs will be created?

The MRF will be owned by CN, however it may be operated by a contractor. It is expected that up to 28 fulltime jobs will be created when the MRF is operational.

10. Will my rates increase to pay for the construction of the Material Recovery Facility?

There is currently no proposal to increase rates.

11. When will building work take place?

Construction is expected to commence in 2023

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12. How long will it take to build the Material Recovery Facility?

Construction is expected to take up to 16 months. It is anticipated that the MRF can be commissioned late in 2024 and will be fully operational by early 2025.

13. Will there be more trucks on the roads?

Truck activity along Minmi Road is expected to remain the same. CN recycling trucks will utilise the existing entry and exit routes to the Summerhill Waste Management Centre off Minmi Road. There will be a short-term increase in traffic to and from the Summerhill Waste Management Centre during construction.

CN is proposing to construct a second access road into the Summerhill Waste Management Centre from the Link Road, Wallsend. Should the MRF receive recyclables from other Councils, trucks delivering those materials are expected to use the new access road.

14. How will this positively impact the community?

Recycling is a key component of waste reduction and leads to many benefits. Recycling reduces the impact that manufactured items have on the environment by diverting materials away from landfill and reducing litter.

The MRF will process all household recyclables including glass, plastics, aluminium, paper, cardboard and steel generated by homes, workplaces, development sites and public spaces. These materials can then be used as a resource to manufacture new products, avoiding the need to mine resources. This helps to improve air and water quality, reduces greenhouse gas emissions and reduces energy consumption.

City of Newcastle is committed to meeting future infrastructure and service needs in line with the NSW Government's Waste and Sustainable Materials Strategy 2041 which will come into effect in July 2022.