# Air Quality Improvement at Nyrstar Port Pirie

COMMUNITY INFORMATION



## **Our Story**

Nyrstar is a global multi-metals processing company that produces and refines important metals essential for everyday life around the world.

For over 130 years, our Port Pirie site has employed generations of proud, hard-working people to create metals that go into car batteries, mobile phones, refrigerators and wind farms.

To ensure we continue to extract greater value from Australia's minerals in the generations ahead, we are focussed on improving the performance of our business.

One area of critical importance to us is improving air quality at our site.

Over recent years we have seen improvements that have helped lead-in-air concentrations measured in the community, however there is further work ahead.

We are pleased to share what we are doing to bring further improvements to air quality in the Port Pirie community.

We are licenced to operate by the Environmental Protection Authority and in line with current conditions, we are pleased to share with you the progress of our Environment Improvement Program.



## **Our approach to improving air quality at Nyrstar Port Pirie**



Photo top: Inspecting the filter from one of the site's air monitoring EBAM (Environmental Beta-Attenuation Mass Monitor) stations.





## Our Environmental Improvement Program Projects

The key focus of our Environmental Improvement Program is:

- Ensuring our on-site operations are sustainable for the long-term and;
- Investing in projects that deliver improved overall air quality in the Port Pirie community and at our site (including lead-in-air and S02 levels), effluent quality, groundwater management and waste management.

Photo below: Environment team employees checking air quality at the west/south/east EBAM station at the Nyrstar site.





PROJECT NAME	STATUS	PROJECT DETAILS
Pre-Treatment Trial		The Pre-Treatment Plant was part of the Smelter Transformation Development Program to fast- track removal of feed stockpile
Landfill Environment Management Plan (LEMP)		Nyrstar operates and maintains an on-site landfill. This LEMP has been prepared in accordance with licence conditions and outlines the management of potential environment risks and controls of this landfill area
Battery Bay Optimisation		Our site's 'Battery Bay' is an interim storage bay for materials before they're fed into the Blast Furnace. It has been reconfigured to better protect storage and handling from wind-prone areas
Materials Handling And Storage Improvement Plan		Our largest and most exposed stockpiles are now beneath an upgraded cover material which is stronger and more durable
Sewage Treatment System Leakage Reduction		Our sewage treatment system has been re-lined, and this project is now fully operational
Wastewater Options Study And Workshop		This options study identified a range of initiatives to improve water management at our site
Wharf Infrastructure Inspection, Maintenance & Monitoring Program		This project inspected the infrastructure in place at our wharf that stores and processes water, wastewater and stormwater
Product Recycling Facility		This important project is detailed in a feature section in this booklet
Upgrade Groundwater Monitoring And Management Program		This project will implement a groundwater monitoring program for our site. Its purpose will be to mitigate the risk of groundwater contamination and support our ongoing monitoring program
Demolition Of Redundant Plant And Equipment		This project supports the ongoing, progressive removal of redundant plant areas at our site. The benefits of this include removal of dust hazards and removing contaminated materials
5 Year Lead-In-Air Plan		This five-year plan outlines Nyrstar's intended focus on lead-in-air reductions in the medium-term with projects that improve air quality





## **Product Recycling Facility Project**

This \$23 million facility will allow materials used in our production processes to be stored and mixed in an enclosed facility.

In addition, the facility will be constructed nearby to existing processing plants, which will significantly reduce the handling and transport of these materials in the open air and with the aim of lowering lead-in-air concentrations moving from site to the Port Pirie community. Early works on this project have begun with project completion due in mid-2024. This project is co-funded with the South Australian Government.

Photo left: Nyrstar Environment team members Chloe, Kylie and Robert at the site Dental Clinic TEOM Air Quality Dust Monitoring Station. Photo top: Concept drawing of the new Product Recycling

Facility shed to be located at the Nyrstar site.







### **Alkaline Battery Recycling Initiative**

In September 2022, our Port Pirie site received accreditation from the Battery Stewardship Council to become the nation's first B-cycle accredited recycler of alkaline batteries to return the zinc and copper in these batteries to domestic and international markets. The majority of the other material in these batteries can also be re-used in cement products.

At its peak, our facility we will be able to recycle 2,000 tonnes per year (approximately 88 million AA alkaline batteries) and keep them out of landfill, where they would be a danger to the environment.

Photo left: The Nyrstar Environment team measuring dust particles on site with the Aerocet device. Photo top right: Batteries in the Blast Furnace process.

https://bcycle.com.au/ \_for more information and battery recycling collection points local to you.

Visit the B-cycle website:







### Light Detection & Ranging (LiDAR) Technology Trial

Infrared radar technology that improves dust detection and measurement is being trialled by Nyrstar.

The trial commenced in late 2022 and is currently underway. The technology is designed to improve the monitoring speed and measurement of dust generating events. The trial is determining whether it should help supplement our extensive monitoring system currently in place.

Photo top left: LiDAR equipment craned into place at the Archery Club. Photo top right: LiDAR equipment being set up at the back of the Nyrstar site.



#### Monitoring air quality in the community

In the interest of transparency and openness, Nyrstar operates an online Environment Monitoring Portal that allows the Port Pirie community to track air quality in real-time.

We have a variety of air quality monitors stationed out in the community to measure and monitor dust levels and wind direction and speed.





#### **Real-time data monitoring**

In-line with our EPA licence to operate, the Port Pirie community can track lead, SO2 and dust levels in the air in real-time through Nyrstar's online monitoring portal.

The data for the four monitoring sites located in the community at Ellen Street, Port Pirie West, Oliver Street and the Boat Ramp can be accessed via <u>www.nyrstarportpirie.com.au</u> or directly via the QR code below.



\* EBAM: Environmental Beta-Attenuation Mass Monitor \* TEOM: Tapered Element Oscillating Microbalance





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#### For more information about Nyrstar:

www.nyrstar.com



facebook.com/NyrstarPortPirie

in linkedin.com/nyrstar

#### To provide feedback:

Community Phone Number: (08) 8638 1500

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#### Other key contacts:

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