



NYRSTAR LICENCE RENEWAL

Port Pirie community update #6

Issued 30 June 2023

After extensive review and assessment, the Environment Protection Authority (EPA) has issued Nyrstar with a five-year licence that will extend to June 2028. This community update is to provide you with a summary of the new licence.

This longer-term licence reflects Nyrstar's current performance, will enable improved environmental outcomes, and allows Nyrstar to demonstrate its long-term commitment and investment in lead emission reduction.

The new licence will be available on the EPA website after 1 July 2023.






Environmental focus areas

The EPA expects long-term commitment and investment in lead emission reduction. A five-year licence gives Nyrstar the certainty that it requires for its operations, and sets clear expectations for their lead in air performance.




Nyrstar has commenced important projects aimed at improving plant stability, such as a pre-treatment plant and a product recycling facility, which the EPA supports.

Materials storage and handling remain a contributor to emissions from the site, and the EPA has imposed conditions to achieve improved lead-bearing stockpile management to reduce, and where possible eliminate, open stockpiling of lead-bearing material on site.


Licence changes from 1 July 2023

AREA	CHANGES										
<p>PROGRESSIVE LEAD-IN-AIR (LiA) LIMIT AND TARGET REDUCTIONS OVER FIVE YEARS</p> 	<p>Annual average lead in air (LiA) limits will reduce in a stepwise manner during each year of the licence down to a level of 0.32 micrograms (μg) per cubic metre (m^3) of air, measured as total suspended particulates (TSP):</p> <table border="0"> <tr> <td>December 2023</td> <td>0.38 $\mu\text{g}/\text{m}^3$ TSP lead</td> </tr> <tr> <td>December 2024</td> <td>0.36 $\mu\text{g}/\text{m}^3$ TSP lead</td> </tr> <tr> <td>December 2025</td> <td>0.34 $\mu\text{g}/\text{m}^3$ TSP lead</td> </tr> <tr> <td>December 2026</td> <td>0.32 $\mu\text{g}/\text{m}^3$ TSP lead</td> </tr> <tr> <td>December 2027</td> <td>0.32 $\mu\text{g}/\text{m}^3$ TSP lead</td> </tr> </table> <p>In addition, LiA targets (based on 3-month and 12-month rolling averages) have been tightened in a stepwise manner and will need to be investigated and reported to the EPA in the event of any exceedance.</p> <p>Exceeding limits would result in a regulatory response from the EPA, however target exceedances are intended as an opportunity for Nyrstar to reflect on and improve operations, and to demonstrate to the EPA that it has implemented appropriate responses.</p>	December 2023	0.38 $\mu\text{g}/\text{m}^3$ TSP lead	December 2024	0.36 $\mu\text{g}/\text{m}^3$ TSP lead	December 2025	0.34 $\mu\text{g}/\text{m}^3$ TSP lead	December 2026	0.32 $\mu\text{g}/\text{m}^3$ TSP lead	December 2027	0.32 $\mu\text{g}/\text{m}^3$ TSP lead
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<p>LiA GOAL TO BE ACHIEVED IN THIS LICENCE PERIOD</p> 	<p>The 2022 licence included a LiA goal to achieve a 12-month rolling average of $0.25\mu\text{g}/\text{m}^3$ TSP lead. This was referenced in the Environment Improvement Program (EIP) condition with actions, timeframes and milestones to support the goal.</p> <p>The licence now references June 2028 as the timeframe within which Nyrstar should demonstrate that this goal will be achieved.</p> <p>The LiA goal is where the EPA expects Nyrstar to be in the longer-term.</p>										
<p>ADAPTIVE MANAGEMENT APPROACH</p> 	<p>An adaptive management framework has been included by the EPA whereby LiA results will be continuously assessed against annual LiA goals specified in the licence.</p> <p>This licence will help to drive key environmental improvements through the development of a new Environment Improvement Program (EIP) with a key focus on actions and timeframes to reduce dust and lead emissions towards annual LiA goals.</p> <p>Where goals are not met, this may trigger the EPA to require Nyrstar to review and or amend the EIP.</p>										

Licence changes from 1 July 2023

AREA	CHANGES
<p>SULPHUR DIOXIDE (SO₂) EMISSIONS LIMITS</p> 	<p>Sulphur dioxide (SO₂) emission standards within the licence are proposed to be tightened to reflect recent changes to the <i>Ambient Air Quality National Environment Protection Measure (NEPM)</i> and the <i>SA Environment Protection (Air Quality) Policy</i>. This includes changes in both the 1-hour and 24-hour SO₂ concentrations.</p> <p>Nyrstar would be expected to not exceed an SO₂ concentration of 0.02 parts per million (ppm - previously 0.08 ppm) over a 24-hour averaging period or 0.1 ppm (previously 0.2 ppm) over a 1-hour averaging period, using continuous monitoring that is publicly available on the Nyrstar website.</p>
<p>REDUCE OPEN STOCKPILES OF LEAD BEARING MATERIAL</p> 	<p>A requirement to develop and implement a plan to reduce, and where possible eliminate, open stockpiling of lead-bearing materials at the site has been included in the new licence.</p> <p>Approval from the SA Planning Commission has been given to operate a dedicated pre-treatment facility to assist in the removal of secondary feed stockpiles onsite. The product recycling facility will also result in improved handling and storage of lead bearing materials.</p>
<p>WASTEWATER DISCHARGE IMPROVEMENTS</p> 	<p>Conditions aimed at improving wastewater discharges are included in the licence to achieve the following:</p> <ol style="list-style-type: none"> 1. Completion of an investigation into a water balance and a metal load assessment with a focus on sources and pathways. 2. Use of the investigation to inform options aimed at improving wastewater management issues at the site. 3. Development of an action plan to improve wastewater management. <p>Nyrstar has made improvements to the quality of its wastewater discharged from the site. A further tightening of the 1M flume wastewater discharge has occurred based on current and projected performance.</p>

Licence changes from 1 July 2023

AREA	CHANGES
<p>CONSOLIDATING MONITORING AND REPORTING</p> 	<p>Regulatory monitoring and reporting requirements for a range of aspects (i.e. LiA, SO₂, and wastewater discharge quality) have been consolidated into a single framework.</p> <p>The EPA now also requires Nyrstar to monitor and report dust deposition results at a range of locations across Port Pirie.</p>

EPA regulation of environmental management at lead smelter facilities

In June 2022, EPA staff visited smelting sites in Trail (British Columbia, Canada), Broken Hill (NSW) and Mount Isa (Queensland) to establish connections with operators, regulators and other government staff. Information was shared and staff learned about improvements at sites. They also spoke with health professionals, community program workers, and other regulators.

These tours provided the teams across each organisation with first-hand insights into regulation and strategies for environmental management at lead smelter facilities within the international community. EPA staff liaised with international counterparts about the effectiveness and challenges of regulatory strategies. This has further informed the EPA in its approach towards establishing a longer five-year term licence for Nyrstar Port Pirie.



Kalimna Roe-Simons and Sophie Martin from the EPA's Nyrstar Licence Management team in yellow high-vis, with their counterparts in Trail, Canada.

Future Lead in Air (LiA) improvements

Nyrstar has made commitments to the South Australian Government that the construction of a product recycling facility will enable improvements to site operations. Nyrstar expects this will reduce concentrations of LiA levels by up to 25%, compared to monitoring levels recorded in December 2020 ($0.41 \mu\text{g}/\text{m}^3$). The facility is due for completion in mid-2024.

FURTHER INFO

For **further information** please contact the Principal Adviser Community Engagement:

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w: www.epa.sa.gov.au (please follow the links to 'Community' then 'Stay Informed')

