



LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

No. 318

WRITTEN QUESTION

J Davis to the Minister for Lands, Planning and Environment, Hon Joshua Burgoyne MLA:

Darwin Airshed Cumulative Air Quality

1. **What advice has the Minister received on whether cumulative emissions from existing liquefied natural gas (LNG) facilities, the proposed Middle Arm precinct and future industrial development in the Darwin airshed will remain within applicable air quality standards?**

- a. **Has the Northern Territory Environment Protection Authority (the Authority) advised the Minister of any level of deterioration in air quality it would regard as unacceptable? If so, on what date, and can that advice be provided?**

No such advice has been provided to the Minister. NT EPA advice to the Minister is published [here](#).

- b. **Has the Authority advised the Minister of the level of uncertainty in the modelling relied on, and can that advice be provided?**

No such advice has been provided to the Minister.

Environmental Impact Assessment (EIA) advice from the NT EPA to the Minister is published for each project: [Completed assessments register | NTEPA](#).

- c. **Which modelling assumptions would need to prove incorrect before air quality standards could be exceeded, and is that sensitivity analysis recorded in any document?**

The NT air dispersion modelling guidance recommends that if standards are exceeded, the modelling must be revised to include various emission control strategies until compliance is achieved at the lowest possible emission rate. Also, sensitivity analysis involving variation of parameters such as source release parameters and efficiency of pollution control equipment can be conducted to select the most cost-effective and environmentally effective control

strategy. [Guidance for Modelling Dispersion of Air Pollutants in the NT](#)

d. If monitoring identified increasing pollution levels, what action would be taken and by whom?

Licensees are required to monitor emissions and take action if limits are exceeded as per their licence conditions.

Additional self-reporting of environmental harm is also required and available at [Section 14 reported incidents | NTEPA](#).

Currently, exceedances of pollution levels monitored by the Government monitoring network (for example pollution from vehicles and bushfire smoke) are published online and NT Health uses this information to issue health alerts.

2. What is the current cumulative pollution load in the Darwin airshed, by pollutant, and what proportion of the applicable standard does it represent?

Annual reports on the implementation of the National Environment Protection Measures (NEPMs), including on Ambient Air Quality, Air Toxics and the National Pollutant Inventory in the Northern Territory, are available at [NEPC annual reports - DCCEE](#).

a. In which document or system is the cumulative load recorded, and is it published?

Modelling of cumulative emissions may be a requirement of an environmental impact assessment and inform licence conditions and approvals. EIA documentation is available at [Completed assessments register | NTEPA](#). Cumulative load is not required to be reported under current licence conditions.

b. If a cumulative load is not maintained in that form, on what basis are cumulative impacts assessed when a licence is granted or varied?

Modelling of cumulative emissions may be a requirement of an EIA, and if so, would inform licence conditions and approvals.

3. Has the Authority advised the Minister, or recorded in any published document, a point at which no further industrial emissions should be approved in the Darwin airshed regardless of an individual proposal's compliance with its licence conditions?

No such advice has been provided to the Minister.

a. If so, what is that point, and in which document is it recorded?

N/A.

- b. If not, has the question been considered and, if so, on what date?

N/A

4. Has a maximum allowable emissions limit been determined for the Middle Arm precinct?

No.

- a. If so, what are the limits, for which pollutants, and in which document are they recorded?

Middle Arm Precinct strategic proposal requires assessment under the *Environment Protection Act 2019* (EP Act). EIA documentation is available at [Middle Arm Sustainable Development Precinct | NTEPA](#). The Terms of Reference for the environmental impact statement includes requirements regarding air quality.

- b. Which pollutants are expected to be the limiting factors?

Middle Arm Precinct strategic proposal requires assessment under the EP Act. Refer [Middle Arm Sustainable Development Precinct | NTEPA](#).

- c. What proportion of the airshed's remaining capacity would the proposed precinct consume?

Middle Arm Precinct strategic proposal requires assessment under the EP Act. Refer [Middle Arm Sustainable Development Precinct | NTEPA](#).

- d. Will those limits be published before final approvals are granted?

Middle Arm Precinct strategic proposal requires assessment under the EP Act. Refer [Middle Arm Sustainable Development Precinct | NTEPA](#).

5. In which published guideline, policy or procedure is the Authority's approach to assessing cumulative air quality impacts set out? Please provide the title and date of each.

The NT air dispersion modelling document provides guidance for assessing and reporting of cumulative air quality impacts in the Territory. [Guidance for Modelling Dispersion of Air Pollutants in the NT](#).

- a. Has the Authority advised the Minister that the current regulatory framework is sufficient to protect the community

from predicted increases in industrial air pollution? If so, on what date, and can that advice be provided?

The EP Act is contemporary and includes consideration of potential significant impacts to the environment. The [NT EPA's factors and objectives](#) includes air quality, community and economy and human health factors.

NT EPA advice to the Minister is published at [Advice to Minister | NTEPA](#).

EIA advice from the NT EPA to the Minister is published for each project: [Completed assessments register | NTEPA](#).

- b. Has the Authority recommended stronger air quality protections, or dedicated clean air legislation, at any time? If so, on what date, in which document and what was the Government's response?**

NT EPA is committed to the protection of air quality and has implemented a number of measures to strengthen regulation of air emissions in the Darwin airshed. Information is published online at [Darwin airshed emissions management | NTEPA](#).

NT EPA has formally advised the Minister of the review of licences, including air quality conditions, for LNG facilities is available at: [Final Draft Letter NT EPA Advice to Minister - LNG Licence Review](#).

NT EPA made a submission to the Parliamentary Scrutiny Committee on the Safe Air Bill, available at: [Environment Legislation Amendment \(Safe Air\) Bill 2026 – Northern Territory Government – Legislative Assembly](#).

6. The Authority's Environmental Factor Guidance: Atmospheric Processes - Greenhouse Gas Emissions was approved on 1 August 2025.

- a. Are cumulative greenhouse gas (GHG) emissions assessed alongside cumulative air pollution impacts, and in which document is that requirement recorded?**

NT EPA guidance is published at [Environmental management | NTEPA](#).

Assessing cumulative emissions may be a requirement of an environmental impact assessment. EIA documentation is available at [Completed assessments register | NTEPA](#).

- b. Is there a greenhouse gas emissions threshold beyond which a proposal may be assessed as environmentally unacceptable? If so, what is it and where is it published?**

Proposals are assessed case-by-case. EIA documentation is available online EIA documentation is available at [Completed assessments register | NTEPA](#).

- c. **That Guidance states that in determining whether a proposal has the potential to have a significant impact on the environment, the Authority “will consider statutory decision-making processes that can regulate GHG emissions to meet the NT EPA’s objectives such as the *Petroleum Act 1984* for onshore gas projects and the Australian Government’s Safeguard Mechanism for industrial projects”. For how many proposals since 1 August 2025 has the Authority relied on either of those processes in that way, and in which document is that reliance recorded in each case?**

The NT EPA’s Statements of Reasons for decisions and assessment reports are published on the EIA register at [Middle Arm Sustainable Development Precinct | NTEPA](#).

- d. **That Guidance records a document review period of 12 months from its approval on 1 August 2025. Has it been reviewed? If so, on what date and with what outcome; if not, when will the review be completed?**

No. The Guidance will be reviewed periodically and in response to changes in the policy or regulatory environments or expert advice.

- e. **How are a proposal’s greenhouse gas emissions weighed against the Territory’s and the Commonwealth’s emissions reduction targets when an environmental approval is decided?**

The Minister’s Statement of Reasons for a decision to grant an environmental approval are published at [Environmental approvals | Department of Lands, Planning and Environment](#).

- f. **Has any proposal been refused, or had conditions imposed, by reference to those targets? If so, which and on what date?**

No decision to refuse to grant an environmental approval has been made. The Minister’s statement of reasons for a decision to refuse to grant an environmental approval would be published at [Environmental approvals | Department of Lands, Planning and Environment](#).

7. **NT Health engaged SLR Consulting Australia Pty Ltd to prepare an Independent Preliminary Human Health Risk Assessment of emissions from the Ichthys LNG Acid Gas Removal Unit hot venting, revision 3.0 dated 26 February 2026. That assessment records that it “is not a health study monitoring specific individual health responses in the community”, and that it “covers only one of the two LNG**

facilities at Bladin Point”. Other than that assessment, what work has been commissioned or undertaken to assess the long-term health impacts of industrial air pollution on Darwin residents?

This should be referred to the Minister for Health.

- a. Has any epidemiological study of respiratory illness rates near industrial areas been conducted or commissioned? If so, by whom, on what date, and has it been published?**

This should be referred to the Minister for Health.

- b. Has any assessment been made of the combined effects of industrial pollution and bushfire smoke exposure?**

This should be referred to the Minister for Health.

- c. That assessment was commissioned by NT Health in response to the discovery of under-reporting, rather than as part of granting, renewing or varying a licence. When an environment protection licence for a Darwin airshed LNG facility is granted, renewed or varied, is health advice obtained? If so, from whom, and where is that advice recorded?**

Proponents are required to provide all relevant information to allow the assessment of applications by the regulator. Requirements vary depending on the nature of an application. A human health risk assessment from the proponent may be required to support the application.

- d. That assessment recommends, in relation to benzene, toluene, ethylbenzene and xylenes (BTEX), “that a screening-level, Darwin airshed-wide HHRA be undertaken that considers all significant BTEX sources across facilities, including (but not limited to) hot venting, acid gas incinerators, ship loading, tank venting, and other relevant point and area sources”. Will that assessment be commissioned, by what date, and what funding has been allocated to it?**

That is a decision for Minister for Health and Chief Health Officer.

The Air Environment report commissioned by the NT EPA recommended further air quality impact assessment and revision to the human health risk assessment to account for the updated air quality impact assessment.

INPEX has recently conducted and provided this air quality modelling to the Department. Following internal review, the modelling will be provided to the NT EPA, NT Health and the Chief Health Officer. This will inform the need for a further human health risk assessment.

The EIA for INPEX's proposed CCS projects requires further modelling and human health risk assessment. The Terms of Reference for the three environmental impact statements are published on the EIA register at [Middle Arm Sustainable Development Precinct | NTEPA](#).

- e. **That assessment also recommends that future assessments be based on dispersion modelling considering “Facility-wide, rather than just hot venting Acid Gas Removal Unit (AGRU) emissions” and that “emissions for ethylbenzene and xylenes also be included at a minimum”. Has that recommendation been accepted, and has facility-wide modelling including ethylbenzene and xylenes been required of either Bladin Point licensee?**

INPEX has conducted and recently provided this modelling to the Department, which is undergoing internal review.

- f. **That assessment records that SLR agrees with the recommendation of Air Environment (2025) that “an independent long-term monitoring program in the Darwin airshed would be useful”. Has such a program been established or committed to? If so, what funding is allocated to it in each of 2025-26 and 2026-27, and under which output is it recorded; if not, on what basis was that recommendation not adopted?**

INPEX is continuously monitoring benzene, toluene, ethylbenzene, and xylenes (BTEX) in the airshed.

There is a long-term Government monitoring program in the Darwin airshed based on the requirements of the Ambient Air Quality NEPM.

The “Safe Air” Bill which is currently before Parliament is designed to create a power to establish cost-recovered environmental monitoring schemes, with a view to establishing an industry-funded, government operated air quality monitoring network for the Darwin airshed to improve and expand the Government-operated air quality monitoring program, particularly to monitor for BTEX.

8. **How are vulnerable populations, including children, older residents and people with respiratory illness, accounted for when pollution impacts are assessed?**

Projects requiring environmental impact assessment are assessed case-by-case. Terms of reference for an environmental impact statement or a direction from the NT EPA for a proponent to provide additional information, may also specify requirements about air quality assessments and/or health impact assessments and context about the population and/or sensitive receptors. Health-based guideline values and investigation limits are based on risks to vulnerable populations. These values form the basis of impact

assessment and modelling. The NT EPA has published [Guidance for Modelling Dispersion of Air Pollutants in the NT](#)

- a. Are licence conditions set by reference to average population exposure or to protection of the most sensitive group, and in which guideline is that recorded?**

Health-based guideline values and investigation limits are based on risks to vulnerable populations. These values form the basis of impact assessment and modelling.

- b. Has any assessment been undertaken of schools, childcare centres or aged care facilities near industrial areas? If so, which, and on what dates?**

The siting of air quality monitoring stations is based on the requirements of the Ambient Air Quality NEPM. No monitoring has been undertaken by the Department for the specific facilities mentioned above; however, these sites are considered sensitive receptors and air quality impact assessment of industrial emissions requires air pollutant levels at these locations to comply with published environmental standards.