

Environment Protection Act 2017

Licence number 219663 Issue date 28/02/2020 Last amended 16/12/2021 **Expiry date** Refer WA_G4 Licence holder Spark North East Link Pty Limited **ACN/ABN** 82 633 649 439 / 633 649 439 **Registered address** Level 14, Tower Three, International Towers Sydney Exchange Place, 300 Barangaroo Avenue Barangaroo, NSW 2000 **Activity site** North East Link Tunnel, VIC **Prescribed** L03 (Road tunnel ventilation systems) permission activity

Issued on 28 February 2020 under section 19B of the *Environment Protection Act 1970* and continued under section 471 of the *Environment Protection Act 2017* (the Act).

Quentin Cooke

Team Leader – Approvals, Permissioning

Delegate of Environment Protection Authority Victoria (EPA)



Environment Protection Act 2017

Context

Environment Protection Authority Victoria (EPA) is Victoria's environmental regulator acting in accordance with the *Environment Protection Act 2017* (the Act). Our regulatory role is to work with community, industry and business to prevent and reduce the harmful effects of pollution and waste on Victoria's environment and people.

Why we issue development licences

A range of development activity types are prescribed in the Environment Protection Regulations 2021 (the Regulations) because they give rise to risks of harm to human health or the environment. We issue development licences so applicants can lawfully undertake prescribed development activities. Section 44 of the Act provides that a person must not engage in a prescribed development activity except as authorised by a development licence in respect of that activity.

When we issue development licences

EPA can issue a development licence under section 69(1) of the Act. When issuing a development licence, EPA takes into account a number of factors, including the measures an applicant has taken or proposes to take in order to comply with the Act when engaging in the prescribed permission activity.

EPA can amend, suspend or revoke a licence for a range of reasons. This can include in response to changes in activities, risks or licence holder performance. All development licence details are publicly accessible via the EPA Public Register.

Key information and obligations

Interpretation

For the purposes of this development licence "You" means the "licence holder" identified on the first page. Unless a contrary intention appears, words or terms used in the conditions of your licence have the same meaning as in the Act, and in any regulations made pursuant to the Act.

Compliance

Your licence is subject to conditions. These conditions confer legal obligations on you as the licence holder. Some of these are general in nature, while others require you to do (or not to do) specific things. The requirements of these conditions do not detract from each other in any way, nor do they affect any other duties or obligations with which you are required to comply by law. You must fulfil all duties and perform all obligations set out in this licence or otherwise required by law.



Environment Protection Act 2017

Strict penalties apply for non-compliance with any part of your development licence.

You must comply with the Act and regulations administered by EPA. This includes, but is not limited to, compliance with the general environmental duty (GED).

Duties under the Act

Under the Act, you have legal obligations in relation to your prescribed and non-prescribed activities. These legal obligations exist to minimise risks of harm to human health and the environment from pollution and waste.

You may be committing an offence and be liable to a penalty under the Act if your actions or omissions constitute a breach of these legal obligations.

General environmental duty

The Act places the onus on you to understand the risks associated with your operation or activity and requires you to minimise the risk of harm. This is called the general environmental duty (GED).

Sections 6 and 25 of the Act provide the legal basis for the GED. These sections state that a person engaging in an activity which may give rise to risks of harm to human health or the environment from pollution or waste must eliminate or minimise those risks, as far as reasonably practicable.

Duty to notify EPA of notifiable incidents

A notifiable incident is a pollution incident that causes or threatens to cause material harm to human health or the environment or is a prescribed notifiable incident. Under section 32 of the Act, you have an obligation to notify EPA of a notifiable incident as soon as practicable after you become aware of the incident.

Duty to take action to respond to harm caused by pollution incident

Under section 31 of the Act, if a pollution incident has occurred as a result of an activity (whether by act or omission) and the pollution incident causes or is likely to cause harm to human health or the environment, a person who is engaging in that activity must, so far as reasonably practicable, restore the affected area to the state it was in before the pollution incident occurred.

Duty to notify of contaminated land

Under section 40(1) of the Act, a person in management or control of land must notify EPA if the land has been contaminated by notifiable contamination as soon as practicable after the person becomes aware of the notifiable contamination.



Environment Protection Act 2017

Notifiable contamination means contamination which is prescribed in the Regulations, or contamination for which the cost of action to remediate the land is likely to exceed \$50,000, or any other prescribed amount.

Duties relating to industrial waste, priority wastes and reportable priority wastes

Under parts 6.4 and 6.5 of the Act, a person has obligations in relation to the generation, receiving, recording, managing, transporting, and disposal of industrial, priority wastes and reportable priority wastes. These duties include:

- Duties of persons depositing industrial waste.
- Duties of persons receiving industrial waste.
- Duty of persons involved in transporting industrial waste.
- Duties of persons managing priority waste.
- Duty to investigate alternatives to waste disposal.
- Duty to notify of transaction in reportable priority waste.
- Duty of persons transporting reportable priority waste.

For further information on waste classifications see schedule 5 of the Regulations.

Further information and resources

To aid compliance with the Act and the Regulations, Environment Reference Standards (ERS), Compliance Codes, Position Statements and Guidelines have been developed to address a range of environmental objectives, permitted and non-permitted activities and risks.

You should understand how the Victorian environment protection framework applies to you and your activity, operation or business by making yourself familiar with the Act, Regulations, Compliance Codes and other relevant guidance material.

To assist you with understanding your obligations refer to www.epa.vic.gov.au.

Amendment

You can apply at any time to EPA for an amendment to your licence under section 57 of the Act. EPA may also decide to amend a licence under its own initiative according to section 58 of the Act.

Transfer

A person may apply to EPA for the transfer of this licence to a new licence holder pursuant to section 56 of the Act.



Environment Protection Act 2017

Duration of licence and renewal

This development licence is subject to the expiry date identified on the first page of this licence. It will remain in force until that time unless it is first surrendered by the licence holder (with consent from EPA), or it is suspended or revoked by EPA. EPA may decide to extend the term of the licence under section 72 of the Act. Note that an application for a development licence renewal must be submitted to EPA before the licence expiry date.

Development licence structure

Your development licence has multiple parts:

- Conditions
- Appendix 1 locality plan
- Appendix 2 activity plan

Note

Where this development licence refers to Environmental Performance Requirements (EPRs) they refer to the EPRs for the North East Link as approved by the Minister for Planning on 21 July 2021 (Document No: NEL-GE01-NEL-ZW1-SZ00-GEN-PRO-00001_A). The application of the EPRs in this document is limited to the construction and operation of the tunnel ventilation system and does not extend to the broader North East Link Project.



Environment Protection Act 2017

Conditions

General conditions

WA_G1	Subject to the following conditions, this approval allows the construction of the following works and associated equipment - Tunnel ventilation systems associated with the construction and operation of twin tunnels of approximately six kilometre in length supporting the North East Link.	
WA_G2	The works must be constructed in accordance with the application accepted on 8 March 2019 as augmented or amended by additional information dated 5 and 20 September, 1, 7, 14, 21 and 24 October, 15 and 18 November and 5 December 2019 ('the application'), except that, in the event of any inconsistency arising between the application and the conditions of this approval, the conditions of this approval shall apply.	
	This approval expires:	
	 on the issue or amendment of an operating licence relating to all works covered by this approval 	
WA_G4	 when EPA advises in writing that all works covered by this approval have been satisfactorily completed and no operating licence is required, or 	
	 five years from the date of issue of this approval, unless the works have been commenced by this date to the satisfaction of EPA. 	

Specific conditions

Before commencing construction of the following components of the works, you must provide to EPA a report or reports outlining the plans and specifications of those components, including details of:

WA_W1

1) Final design of tunnel ventilation system with the engineering approach based on 'typical' parameters and assumptions to demonstrate that the system can meet the required EPRs for air quality (AQ2 and AQ3) and GHG emissions (SCC2 and SCC3). The design must be reviewed by a consultant or engineer who has demonstrated qualification and experience in road tunnel ventilation design suitable for the project. This entity can be the appointed independent environmental auditor for the North East Link Project (IEA), if suitable, or another suitable entity, independent form the project, subcontracted by the IEA. It must include:



Environment Protection Act 2017

- A. Final design of the smoke extraction system. This should consider the alternative engineering solutions below to provide an equivalent safety standard for tunnel users:
 - a) eliminating the smoke duct in the whole tunnel;
 - b) eliminating the smoke duct in the cut and cover sections (at least south of Manningham Interchange); or
 - c) a different engineering design of the smoke duct allowing for more efficient usage of the jet fans in the cut and cover section.
- B. Report of final design of ventilation, consisting of:
 - a) detailed ventilation design, including all relevant parameters for the design of the ventilation system (jet fans and axial fans), ventilation stations, as well as for the smoke duct which covers leakage rates from closed smoke dampers, casting joints, connections to other structures, etc), if semi-transverse ventilation is required;
 - b) description of the final design of the ventilation control system for normal and incident operation, including its physical space requirements with consideration of the effect on positioning and number of jet fans;
 - proposed leakage rates from closed smoke dampers, casting joints, connections to other structures, etc. in the smoke extraction system design, if semi-transverse ventilation is required.
- C. Conceptual provision for retrofitting of future particulates pollution control equipment to be installed at the tunnel ventilation structures.
- D. The content of the Fire Engineering Brief and Fire Engineering Report must be reviewed and agreed by the Emergency Services in accordance with the process outlined in AS4825. Fire and life safety systems and facilities must be designed and constructed in consultation with the Emergency Services.
- 2) An updated air quality assessment to demonstrate compliance with the State Environment Protection Policy (Air Quality Management) and EPR AQ2. The report must include:
 - A. Assessment of all emission points, including underdeck space (if provided) and on/off ramps.
 - B. Updated emission factors using PIARC 2019 data.
 - C. Modelling of the proposed air emission licence limits (in g/s) for all ventilation stacks.



Environment Protection Act 2017

- Monitoring programs to demonstrate compliance of in-tunnel air quality and ventilation structure emissions with EPR AQ5 and ambient air quality with EPR AQ4, including:
 - A. In-tunnel air quality monitoring:
 - a) detailed in-tunnel air monitoring program, including parameters, instruments, location of instrument installations.
 - b) tunnel ventilation control system linked to in-tunnel air monitoring, including related performance parameters and indicative alarm set points.
 - c) contingency measures to manage in-tunnel air quality in the event of incidents or emergencies.
 - B. Continuous monitoring program for the ventilation stack emissions, including parameters, assessment methodology and criteria which are linked to ambient monitoring data, as well as daily public reporting system.
 - C. Ambient air quality monitoring program:
 - a) including periods before and after the commencement of tunnel operation using the existing five monitoring sites relied upon within the application, or sites as otherwise agreed with EPA Victoria, inclusive of the specification and location of instruments.
 - b) provision for daily reporting of ambient air quality monitoring program results, on a publicly available website related to the project, or through EPA Victoria's Air Watch website. The reporting shall be undertaken for at least five years post commissioning of the project, or such lessor period, as agreed with the EPA.
- 4) A detailed noise assessment must be reviewed by an acoustic consultant or engineer who has demonstrated qualifications and experience in acoustic design and noise management suitable for the project. This entity can be the IEA, if suitable, or another suitable entity, independent from the project, subcontracted by the IEA). The assessment must demonstrate that the requirements set out in EPR NV6 will be met, including, but not be limited to:
 - A. Re-assessment of the background levels that may have varied due to different assessment locations, or due to potential change in background conditions.
 - B. Noise impact assessment on non-residential sensitive uses (i.e. classrooms in schools, libraries) using the lower value of the design sound level range of AS/NZS 2107 standards of those receptors.
 - C. The necessary refinements to the noise assessment, including:



- a) the fans and silencers ultimately selected for installation and consideration of the layout of the facility (including the noise path between the fan and the point of discharge). The assessment must consider:
 - i. silencer insertion-loss data based on dynamic testing of the product under similar operational conditions.
 - ii. the risk of flow-generated noise across the face of silencers.
 - iii. the acoustic performance throughout the life of silencers with explanation of how the potential for acoustic degradation in the performance equipment (such as silencers) through wear and dust build-up will be addressed.
- b) design of ventilation buildings and stack(s) and of substation buildings to prevent or otherwise minimise break-out noise.
- c) the need for adjustments to the predicted levels, having consideration of the character of the noise (tonal, impulsive or low frequency).
- D. Implementation of best practice noise control in accordance with clause 19 of SEPP N-1.
- 5) Prior to commencing construction of the works, provide a Construction Environmental Management Plan for the tunnel ventilation system detailing the proposed:
 - A. Noise management plan to demonstrate compliance with the EPRs NV3 and 4.
 - B. Dust management plan, including a real-time monitoring program to comply with the EPR AQ1.
 - C. Actions to minimise GHG emissions to comply with EPR SCC2.
 - D. Waste management plan to comply with EPR SCC4.

WA_W2	You must not commence construction of the works for which reports are required by condition WA_W1 until written EPA approval of those reports has been received.
WA_W3	Where any reports specified in condition WA_W1 and approved by EPA differ from the application, the works must be constructed in accordance with those approved reports.
WA_W4	You must notify EPA when the construction of the works covered by this approval has been commenced.



Environment Protection Act 2017

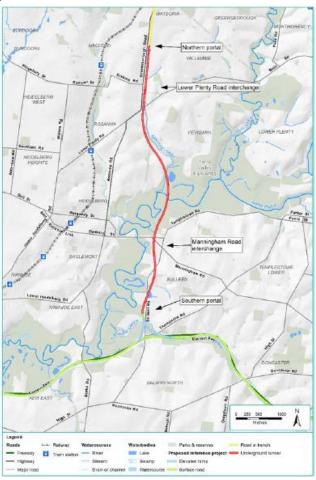
WA_W5	You must notify EPA when the construction of the works covered by this approval has been completed.
WA_W7	You must not commission or operate the works without the written approval of EPA.
WA_12.1	You must install all exhaust stacks so that provisions for sampling are included in accordance with EPA Publication 440.1 "A guide to the Sampling and Analysis of Air Emissions and Air Quality", or as approved by EPA.
WA_R1	At least three months before commencement of any commissioning, you must provide to EPA reports that include:
	 Operation environmental management plan (OEMP) for the tunnel ventilation system, which must include:
	 A. confirmed monitoring program for in-tunnel air quality and ventilation stack emissions to meet EPR AQ5, as approved under WA_W1 3) A and B.
	B. a noise monitoring program for the tunnel ventilation system and relevant fixed infrastructure to comply with EPR NV7. It should include contingency measures in the event of exceedances of noise limits.
	 A Sustainability Management Plan to comply with EPR SCC1 which must include targets and measures for the operation of the tunnel ventilation system.
WA_R5	You must not commence operation of the works until written EPA approval of the plans and reports required by condition(s) WA_R1 has been received.



Environment Protection Act 2017

Appendices

Appendix 1 – locality plan



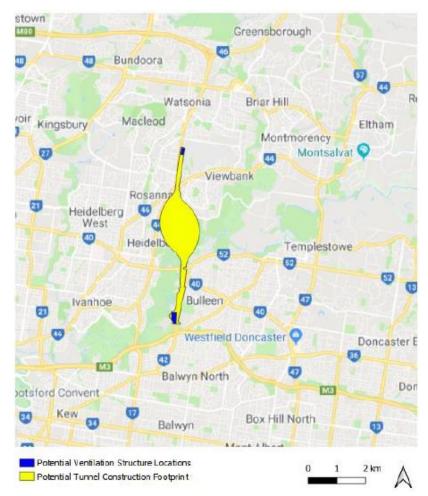
Development licence number	219663
Company name	Spark North East Link Pty Limited
ACN/ABN	82 633 649 439 / 633 649 439
Activity site	North East Link Tunnel, Vic
Issued	28/02/2020
Last amended	16/12/2021

Before relying on the information in this map, carefully evaluate its accuracy, currency, completeness and relevance. Obtain appropriate professional advice before using this information.



Environment Protection Act 2017

Appendix 2 – activity plan



Development licence number	219663
Company name	Spark North East Link Pty Limited
ACN/ABN	82 633 649 439 / 633 649 439
Activity site	North East Link Tunnel, Vic
Issued	28/02/2020
Last amended	16/12/2021

Before relying on the information in this map, carefully evaluate its accuracy, currency, completeness and relevance. Obtain appropriate professional advice before using this information.

