PART D – CONCLUSION

9 CONCLUSION

9.1 Summary

This Environmental Impact Statement (EIS) has been prepared to support a Staged State Significant Development application for the Erskine Park Resource Management Facility Concept Plan and Stage 1 Waste Transfer Station. A second EIS will be prepared to support an application for the second stage, being the Resource Recovery Facility.

Cleanaway is seeking to undertake the Concept Plan and the Development to allow for the continuation of waste management operations at its Erskine Park site, adjacent to the existing landfill which is expected to close within the next two years.

The Concept Plan and the Development provide important waste management infrastructure to meet the current and future waste management needs of the Sydney Region. It is aligned with NSW waste management policies in terms of providing for the treatment, transport and disposal of waste along with the recovery of waste resources.

The Concept Plan and Development have been shown to be consistent with the relevant local, State and Commonwealth government planning instruments.

A range of environmental issues were identified and assessed with appropriate mitigation and management measures identified to be carried through to the construction and operational phase. Particular attention was paid to the management of potential odour impacts associated with the Development with a number of measures incorporated into the design and operation of the Development to ensure an odour performance beyond that required by legislation.

The site's location in an industrial precinct, close to the motorway network and with access to B-Double approved routes minimises the impacts of additional traffic on the capacity of the local road network and exposure to traffic related noise.

The environmental impacts identified are considered to be manageable taking into account the measures incorporated in the design and the additional mitigation measures identified to be implemented in the construction and operation phases.

9.2 Ecologically Sustainable Development

Ecologically Sustainable Development (ESD) is a primary objective of environmental protection in NSW. ESD is an objective of the EP&A Act under Section 5(a)(vii) and is defined under Section 6(2) of the *Protection of the Environment Administration Act 1991* as:

> *6(2) For the purposes of subsection (1)(a), ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:*
>
> *a. the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation...*
>
> *b. inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*

c. conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,

d. *improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services….*

The overall objectives of ESD are to use, conserve and enhance natural resources. As a waste management facility, the Development aims to ensure the effective and efficient management of waste resources including the recovery of resources for onward sale in competitive markets. Specific features such as rain water harvesting, surface water management measures and provision for solar photovoltaic further contribute to the management of environmental resource.

This ensures that ecological processes are maintained facilitating improved quality of life, now and into the future. Cleanaway has shown a commitment to the use of innovative technologies and best practice in the design and operation of the facility. The EMP to be implemented at the facility would be designed to achieve and demonstrate environmental due diligence and implement procedures that provide on-going management in-line with the objectives of ESD.

9.3 Precautionary Principle

The Precautionary Principle, in summary, holds that if there are threats of serious or irreversible environmental damage, the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The Development has been assessed for impacts relating to air quality and odour, noise, traffic and transport, visual amenity, water resources, flora and fauna, Aboriginal heritage, and non-indigenous heritage. This EIS, combined with the consultation undertaken with relevant government agencies, has enabled Cleanaway to understand the potential implications of the Development and subsequently confirm the mitigation measures required.

In line with the precautionary principle, modelling of potential impacts, particularly in relation to odour, has adopted conservative assumptions with a commitment to verify actual emissions during the early stages of operations.

9.4 Intergenerational Equity

Intergenerational Equity is centred on the concept that the present generation should ensure the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. There is a moral obligation to ensure that today's economic progress, which would benefit current and future generations, is not offset by environmental deterioration.

The best management practices and mitigation measures identified in **Section 7** would assist in ensuring that the Development does not pose any significant impact or risk to the local environment or surrounding populace. Emphasis has been placed on anticipation and prevention of potential impacts, as opposed to undertaking later remedial action, as is evident in the alternatives considered and preferred options chosen for various aspects of the Development. These measures would assist in ensuring that current and future generations can enjoy equal and equitable access to social, environmental and economic resources.

9.5 Conservation of Biological Diversity and Ecological Integrity

The principle of Conservation of Biological Diversity and Ecological Integrity holds that the conservation of biological diversity and ecological integrity should be a fundamental consideration for development proposals.

The Development does not pose any significant threat to local biological diversity or ecological integrity. The facility would only operate within the proposed development 'footprint' and best management practices and mitigation measures would be implemented to ensure that the facility does not pose any significant impacts to the surrounding environment.

9.6 Improved Valuation, Pricing and Incentive Mechanisms

The principle of Improved Valuation, Pricing and Incentive Mechanisms deems that environmental factors should be included in the valuation of assets and services. The cost associated with using or impacting upon an environmental resource is seen as a cost incurred to protect that resource. The application of this principle remains in its infancy and, to date, there are few widely accepted methods by which monetary values are attributed to environmental factors. However, given the Development would only require minimal vegetation clearing and would not have any impacts to waterways, it should not significantly alter environmental resources. Furthermore, Cleanaway would bear the full costs associated with:

- The avoidance, abatement, containment and/or management of any incident that results in or has the potential to result in an environmental incident during the operation of the development;
- The appropriate management of all waste streams generated by the development; and
- Fulfilling and/or complying with the conditions of consent.

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11 ABBREVIATIONS

ABCB	Australian Building Codes Board
ABS	Australian Bureau of Statistics
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
ANZECC	Australia and New Zealand Environment and Conservation Council
ARQ	Australian Runoff Quality
ASS	Acid Sulphate Soils
ASX	Australian Securities Exchange
BH	Bore Hole
C&D	Construction and Demolition waste
C&I	Commercial and Industrial waste
CBD	Central Business District
CEEC	Critically Endangered Ecological Communities
CEMP	Construction Environmental Management Plan
CH_4	Methane
CIV	Capital Investment Value
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2-e	Carbon Dioxide Equivalent
CORTN	Calculation of Road Traffic Noise
dBA	A-weighted Decibels
DCP	Development Control Plan
DEC	Department of Environment and Conservation
DG	Dangerous Goods
DLWC	Department of Land and Water Conservation
DoE	Commonwealth Department of Environment
DP	Deposited Plan
DPE	NSW Department of Planning & Environment
DPI	NSW Department of Planning & Infrastructure (now Department of Planning & Environment)
EEC	Endangered Ecological Communities
EIS	Environmental Impact Statement
EP&A Act	NSW Environmental Planning & Assessment Act, 1979
EPA	NSW Environmental Protection Authority
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act, 1999
EPL	Environmental Protection Licence
GHG	Greenhouse Gas
GJ	Gigajoules
HNCMA	Hawkesbury-Nepean Catchment Management Authority

HVC	High Voltage Connection
INP	NSW Industrial Noise Policy
ISEPP	NSW Infrastructure State Environmental Planning Policy 2007
Kg/yr	Kilograms Per Year
kL	Kilolitre
KTP	Key Threatening Processes
kV	Kilovolts
kWhr/day	kilowatt Hours Per Day
L	Litre
LAeq	Equivalent Continuous Noise Level
LED	Light-emitting Diode
LEP	Local Environment Plan
LGA	Local Government Area
LOS	Level of Service
M	Metre
m/s	Metre Per Second
m^2	Square Metres
m^3	Cubic Metres
m^3/s	Cubic Metres Per Second
Mg/L	Milligrams Per Litre
ML	Megalitres
MSW	Municipal Solid Waste
N_2O	Nitrous Oxide
NATA	National Association of Testing Authorities
NCC	National Construction Code
NES	National Environmental Significance
NML	Noise Management Level
NO_2	Nitrogen Dioxide
NVIA	Noise and Vibration Impact Assessment
OEH	NSW Office of Environment and Heritage
OEMP	Operation Environmental Management Plan
OSD	Onsite Storage Detention
PAC	Planning Assessment Commission
PBS	Performance Based Standard
PCC	Penrith City Council
pH	A numeric scale used to specify the acidity or alkalinity of an aqueous solution
PM_{10}	Particulate Matter up to 10 Micrometres in Size
$PM_{2.5}$	Particulate Matter up to 2.5 Micrometres in Size
POEO Act	NSW Protection of the Environment Operations Act, 1997
RBL	Rated Background Level
RDF	Refuse Derived Fuel

RL	Reduced Level
RMF	Resource Management Facility
RMS	NSW Roads and Maritime Service
RNP	NSW Road Noise Policy
RRF	Resource Management Facility
S	Second
SEARs	Secretary's Environmental Assessment Requirements
SEI	Stream Erosion Index
SEPP	State Environmental Planning Policy
SO_2	Sulphur Dioxide
SRD SEPP	NSW State and Regional Development State Environmental Planning Policy 2011
SSD	State Significant Development
SWIA	Surface Water Impact Assessment
SWMP	Soil and Water Management Plan
tCO_2-e/yr	Tonnes of Carbon Dioxide Equivalent Per Year
TEC	Threatened Ecological Communities
TIA	Traffic Impact Assessment
TN	Total Nitrogen
TP	Test Pit
TP	Total Phosphorous
tpa	Tonnes Per Annum
TSC Act	NSW Threatened Species Conservation Act, 1995
TSP	Total Suspended Particulates
TSS	Total Suspended Solids
VIA	Visual Impact Assessment
WMP	Waste Management Plan
WSEA	Western Sydney Employment Area
WSROC	Western Sydney Regional Organisation of Councils
WSUD	Water Sensitive Urban Design
WTS	Waste Transfer Station