

# Summary of Monitoring Results

Moorebank Intermodal Precinct- West Precinct  
Stage 2 and Stage 3

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## Moorebank Intermodal precinct– West Stage 2 and Stage 3

SSD 7709 and SSD 10431

Stage 2 and Stage 3: Summary of Monitoring Results 2022

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## Acronyms and Definitions

Acronym / Term	Meaning
CFFMP	Construction Flora and Fauna Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CPESC	Certified Professional in Erosion and Sediment Control
CCC	Community Consultative Committee
CoC	Conditions of Consent
CSWMP	Construction Soil and Water Management Plan
DDG	Dust deposition gauge
EM	Environmental Manager
EPL	Environment Protection Licence
ESC	Erosion and Sediment Control
IPC	NSW Independent Planning Commission (formerly the NSW Planning Assessment Commission)
MIP	Moorebank Intermodal Precinct (formerly Moorebank Logistics Park)
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
PFOA	Perfluorooctanoic acid
PFHxS	Perfluorohexane sulphonate
PFOS	Perfluorooctane sulphonate
SSD	State significant development
TSS	Total suspended solids

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**1. Introduction**

This Summary of Monitoring Results Report (this Report) for Moorebank Precinct West (MPW) Stage 2 and Stage 3 has been prepared by Aspect Environmental Pty Limited on behalf of LOGOS for the reporting period January 2022 to December 2022 inclusive. This Report has been prepared in accordance with condition of consent (CoC) C21 of the MPW Stage 2 State significant development (SSD) 7709 development consent dated 11 November 2019, as modified and CoC A38 of the MPW Stage 3 SSD 10431 development consent dated 11 May 2021.

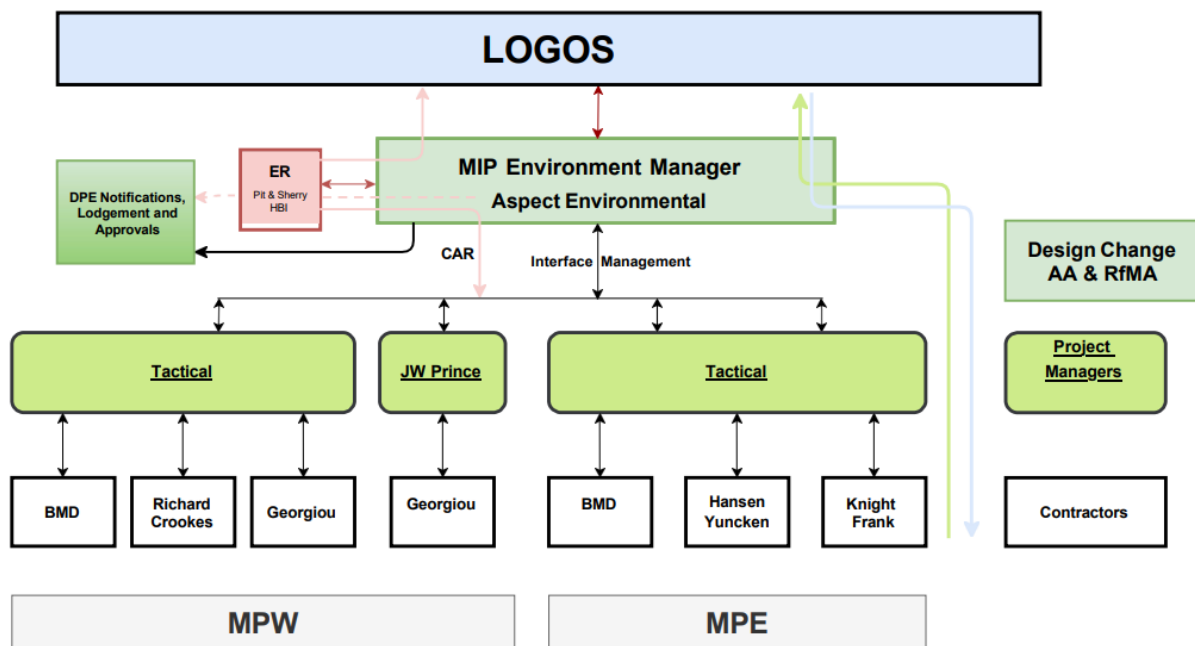
**1.1. Moorebank Intermodal Precinct**

The Moorebank Precinct East (MPE) and MPW are being developed into the Moorebank Intermodal Precinct (MIP). When completed, the MIP will move 1.55 million shipping containers annually by rail instead of road between Port Botany and Moorebank. MIP will also feature Australia’s largest purpose-built warehouse and distribution precinct, serviced by the latest automated technology which will see driverless shuttle carriers collect and transport containers around the precinct to be processed, unpacked and stored on site or distributed in smaller consignments.

Figure 1-1 identifies the environmental management process flow for documentation and reporting across the MPE and MPW developments implemented since December 2021.

Figure 1-1 Environment management process flow across the MPE and MPW developments during the reporting period

**MIP Environment Management Process Flow**



Construction activities are underway for both the MPW and MPE developments. Operational activities are progressively being commenced across MPE.

## 1.2. MPW Stage 2 development

Consent for the construction and operation of the MPW Stage 2 (SSD 7709) development was issued by the Independent Planning Commission (IPC) on 11 November 2019, being the second stage of development under the MPW Concept Approval (SSD 5066, as modified).

SSD 7709 has been subject to the following modifications:

- MPW Stage 2 Modification 1 (SSD 7709- Mod 1), approved on 24 December 2020 by IPC
- MPW Stage 2 Modification 2 (SSD 7709- Mod 2), approved on 30 September 2021 by IPC.

The SSD 7709 development consent (as modified) enables:

- construction and operation of a multi-purpose intermodal terminal facility including rail link connection
- construction and operation of a warehousing estate and freight village
- intersection upgrades on the Moorebank Avenue at Anzac Road and Bapaume Road in western Sydney
- construction and operation of on-site detention basins bioretention/ biofiltration systems and trunk stormwater drainage for the entire site
- construction of temporary ancillary facilities.

Construction activities as part of the MPW Stage 2 development commenced in December 2020.

## 1.3. MPW Stage 3 development

Consent for subdivision and construction of the MPW Stage 3 (SSD 10431) development was issued by IPC on 11 May 2021.

The MPW Stage 3 development involves:

- progressive subdivision of the MPW development into nine allotments
- importation of unconsolidated clean fill for compaction up to final land level and structural fill for warehouse pad completion
- establishment of a temporary works compound area in the southern portion of the MPW development
- ancillary development.

The MPW Stage 3 development is located wholly within the MPW Stage 2 construction footprint in the southern portion of the site (Figure 1-2). Construction activities commenced in November 2021.

Environmental monitoring, reporting and compliance reporting for the MPW Stage 2 and MPW Stage 3 developments was completed in accordance with the development consent requirements. Compliance reports are available on the project website (<https://moorebankintermodalprecinct.com.au/>).

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Figure 1-2: MPW Stage 2 and Stage 3 development layout



GDA94 / MGA zone 56  
1:13000 at A4

### LEGEND

- MPW Stage 2 construction area
- MPW Stage 3 project boundary
- MPE site
- ▲ Site access
- Watercourse

## LOGOS



Date: 17/08/2022 | Created by: AA | QC by: AW



#### 1.4. Purpose and scope

This Report has been prepared to address:

- CoC C21 of the MPW Stage 2 SSD 7709 development consent that requires:

*At least 48 hours before the commencement of construction until the completion of all works under this consent the Applicant must:*

*vi. Regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;*

*vii. A comprehensive summary of the monitoring results of the development, reported in accordance with the specification in any conditions of this consent, or any approved plans and programs.*

- CoC A38 of the MPW Stage 3 SSD 10431 development consent that requires:

*At least 48 hours before the commencement of construction until the completion of all works under this consent, or such other time as agreed by the Planning Secretary, the Applicant must:*

*iv. Regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;*

*v. A comprehensive summary of the monitoring results of the development, reported in accordance with the specification in any conditions of this consent, or any approved plans and programs.*

This Report satisfies the requirements of CoC C21(a)(vi) and (vii) of SSD 7709 and CoC A38 (a)(iv) and (v) of SSD 10431 by providing a summary of the environmental monitoring completed under CoC C20 (SSD 7709) and CoC A37 (SSD 10431):

*Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act.*

## 2. Environmental Performance

This section provides a summary of the monitoring results and associated environmental outcomes for the reported period, against the requirements of the relevant statutory requirements, limits or performance measures/criteria and requirements of any plan or program required under the SSD 7709 and SSD 10431 development consents.

### 2.1. Air quality

Table 2-1 provides the air quality requirements defined by the CoC and results for the reporting period.

Table 2-1 Air quality monitoring results

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
<p>Compliance Monitoring:</p> <p>Must ensure dust generated by the development do not cause exceedance of the following criteria at private property not associated with the development:</p> <ul style="list-style-type: none"> <li>a) 2g/m<sup>2</sup>/month maximum increase in deposited dust level; and</li> <li>b) 4g/m<sup>2</sup>/month maximum deposited dust level.</li> </ul>	<p>CoC B46 (SSD 7709)</p> <p>CoC C17 (SSD 10431)</p> <p>MPW dust deposition gauges (DDG)</p>	<p>Deposited dust levels were reported monthly.</p> <p>Exceedances of 2g/m<sup>2</sup>/month maximum increase in deposited dust level and 4g/m<sup>2</sup>/month maximum deposited dust level were recorded at four DDG locations in February, March, July, October and November.</p> <p>The exceedances in February, March and July were attributed to DDG movement (by unknown person) and flooding events along the Georges River rendering the results invalid.</p> <p>The October and November exceedances likely occurred when a construction contractor's boundary was adjusted allowing machinery to operate in close proximity to the DDG. The results are considered invalid.</p>

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### 2.2. Water quality

Table 2-2 provides the water quality requirements defined by both the Environment Protection Licence 21054 (EPL) and the Construction Soil and Water Management Plan (CSWMP) and results for the reporting period.

Table 2-2 Water quality monitoring results

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
<p><b>EPL 21054 discharge criteria:</b></p> <ul style="list-style-type: none"> <li>• pH: 6.5-8.5</li> <li>• Turbidity &lt;25 Nephelometric Turbidity unit</li> <li>• TSS &lt;50 mg/L</li> <li>• Perfluorooctane sulphonate (PFOS) 0.13 µg/L</li> <li>• Perfluorohexane sulphonat (PFHxS) 2 µg/L</li> <li>• Perfluorooctanoic acid (PFOA) 10 µg/L</li> <li>• PFOS and PFHxS total 2 µg/L</li> </ul>	<p>For each monitoring/discharge point or utilisation area specified in EPL L2.4 Table.</p>	<p>The required water quality monitoring was completed for all controlled water discharge events.</p> <p>Uncontrolled water discharge occurred during the reporting period as a consequence of high rainfall events exceeding EPL site specifications and were reported to EPA as required.</p> <p>All discharge point data and laboratory results were reported in the EPL Monitoring Report and are available on the project website (<a href="https://moorebankintermodalprecinct.com.au/">https://moorebankintermodalprecinct.com.au/</a>).</p>
<p>Water discharge performance:</p> <ul style="list-style-type: none"> <li>• Rainfall data</li> <li>• Water quality data</li> <li>• Dates of rainfall</li> <li>• Dates of sampling, results</li> <li>• Dates of release</li> </ul>	<p>Section 3.6 CSWMP</p>	<p>Site registers were maintained to include weather conditions and water quality monitoring results. Where EPL water quality criteria was met, water was reused onsite for dust mitigation, irrigation within grassy areas or was discharged in accordance with the EPL.</p>
<p>Site inspection of every sediment control device includes:</p>	<p>Section 3.6 CSWMP:</p>	<p>In accordance with CoC B32 (SSD 7709), monthly site inspections were undertaken by an independent Certified Professional in Erosion and Sediment</p>

## Summary of Monitoring Results Moorebank Intermodal Precinct- West Precinct Stage 2 and Stage 3

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
<ul style="list-style-type: none"> <li>Condition and maintenance requirements of each sediment control device</li> <li>Volume of sediment removed from each sediment retention system where applicable</li> <li>Sediment disposal location.</li> </ul>	Weekly and post rainfall event monitoring	<p>Control (CPESC), approved by DPE, to report on the implementation of the CSWMP and provide improvement recommendations. Erosion and Sediment Control (ESC) inspections were also conducted pre and post rain events and weekly to verify controls were in place and effective.</p> <p>CPESC reports, weekly and post rainfall events monitoring, identified maintenance requirements and improvements, which were actioned and closed out.</p>

### 2.3. Noise and vibration

Table 2-3 provides noise and vibration monitoring requirements defined by the Construction Noise and Vibration Management Plan (CNVMP) and results for the reporting period.

Table 2-3 Noise and vibration monitoring results

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
Construction noise and vibration management levels	Section 4.3 CNVMP Monthly monitoring reports	Results of noise and vibration monitoring were summarised in monthly reports. No non-conformances were identified during the reporting period.
Continuous vibration monitoring for construction works within 100m of the relevant ABB building.	Sections 4.4.6.1 CNVMP	No vibration works occurred within 100m of the ABB building.

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Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
Continuous vibration monitoring construction works within 100m of Kitchener House.	Sections 4.4.6.1 CNVMP	Vibration monitoring was conducted and showed no impact to Kitchener House.
Attended noise measurements within 28 days of significant equipment arriving on site to establish the actual noise levels and to confirm that the operating levels comply with table 30 CNVMP.	Sections 5.1.1 CNVMP	Sound power levels for new significant equipment arriving onsite was measured. Results were within the criteria identified for the equipment type in Table 30 CNVMP- Typical Construction Plant Sound Levels, dB(A).
Attended community noise monitoring	Sections 5.1.2 CNVMP	No non-conformances were identified during the reporting period.

## 2.4. Traffic

Table 2-4 provides traffic monitoring requirements defined by the Construction Traffic and Access Management Plan (CTAMP) and results for the reporting period.

Table 2-4 Traffic monitoring results

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
Monitoring incident/complaints for: <ul style="list-style-type: none"> <li>• Road Safety</li> <li>• Network efficiency</li> <li>• Heavy vehicle route plan</li> <li>• Access and parking arrangement</li> </ul>	Section 4-1 CTAMP Bi-monthly Complaints Register Incident Register	No incident and/or complaint was registered for the reporting period.

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Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
<ul style="list-style-type: none"> <li>Traffic on Moorebank Avenue during peak period</li> </ul>	Contractor Vehicle Tracking Report	

## 2.5. Biodiversity

Table 2-5 provides biodiversity monitoring requirements defined by the Construction Flora and Fauna Management Plan (CFFMP) and Koala Management Plan and the results for the reporting period.

Table 2-5 Biodiversity monitoring results

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
Nest box monitoring in compliance with Nest Box Monitoring Strategy - Annually during spring	Section 3.2.4 CFFMP/ CoC D21(d)(ii)(b) and Revised Environmental Mitigation Measures 6AA under MPW Concept Plan development consent (SSD 5066)	Annual nest box monitoring was conducted in spring as part of the 2022 nest box monitoring survey.
Inspect the delineation of “NO-GO” areas to ensure that the clearing boundary is intact and clearly visible. Inspect areas immediately adjoining the clearing boundary to ensure no material stockpiling, plant or equipment storage is located within a “NO-GO” area.	Section 4 CFFMP Daily monitoring by Site Supervisor	Daily site inspections were conducted. No non-conformances were identified during the reporting period.

## Summary of Monitoring Results Moorebank Intermodal Precinct- West Precinct Stage 2 and Stage 3

Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
Inspection of sediment control measures (sediment fencing) to ensure all measures are intact and functioning properly, to avoid indirect impacts on adjoining areas.	Section 4 CFFMP Weekly, and as soon as practical following rainfall monitoring by Contractor's Environmental Manager (EM)/ Site Supervisor	Weekly and wet weather inspections were completed. Basins and swales were operating effectively.
Inspection of cleared and disturbed areas, to confirm that appropriate stabilisation measures have been implemented. Inspection of cleared and disturbed areas, to identify the presence of establishing weeds.	Section 4 CFFMP Weekly monitoring by Contractor's EM	Weekly inspections were conducted that identified minor weed outbreaks on soil stockpiles. Weeds were treated and removed periodically. Long term soil stockpiles were stabilised.
Inspect Project site to determine weeds, vermin and pest species are not present in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area.	Section 4 CFFMP No less than every three months monitoring by Contractor's EM	Regular inspections were completed. Noxious and priority weeds were identified and treated. No vermin or pest species were identified.
Inspection of macroinvertebrate communities undertaken upstream and downstream of the proposed impact at the Georges River Bridge and reference locations to assist identification of any changes in aquatic communities.	Section 4 CFFMP Prior to, during and following construction monitoring by Contractor's EM	Not applicable within the reporting period.
Monitoring Bootland and Moorebank Offset	Section 9.1 Koala Management Plan	Flora and fauna monitoring was conducted in 2022 including offset site monitoring and results were reported in annual flora and fauna monitoring report.

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Monitoring Type/ Trigger Levels/ Requirements	Source/ Methodology	Results
Habitat monitoring	Section 9.1.3 Koala Management Plan	Flora and fauna monitoring was conducted in 2022 including habitat assessment and results were reported in annual flora and fauna monitoring report.



## **2.6. Heritage**

No unexpected finds were identified in the reporting period.

## **2.7. Community engagement**

The following community engagement activities were completed during the reporting period:

- The project website (<https://moorebankintermodalprecinct.com.au/>) was updated with relevant project documentation, including the Construction Environmental Management Plan, associated sub-plans and monitoring results.
- Complaints and enquiries were managed via an independent contractor and details were recorded in a community complaint register, which is available on the Project website.
- Three newsletters were published during the reporting period, in May, September and December 2022. The newsletter was posted to residents and uploaded to the Project website.
- The Community Consultative Committee (CCC) met on four occasions. The CCC meetings cover the entire MIP and meeting minutes are publicly available on the Project website.

## **2.8. Community complaints**

A summary of the community complaints received, and the actions completed are available on the Project website (<https://moorebankintermodalprecinct.com.au/>).

### 3. Non-Compliances

There were five non-compliances for SSD 7709 and two non-compliances for SSD 10431 recorded during the reporting period (Table 3-1 and Table 3-2, respectively).

Table 3-1 Non-compliances identified during the reporting period for SSD 7709

COC Ref	Detail	Proposed or Completed Actions	Status
A26	CoC A26 requires that all documentation provided to the certifier under A25 is submitted to the Planning Secretary. No evidence was provided of submission to the Planning Secretary.	Submit documentation required under A25 to the Planning Secretary.	WH5 and WH6 documentation was submitted to DPE on the 13 December 2022.
B32	Delayed submission of monthly CPESC inspection reports.	Timely submission of monthly CPESC inspection reports.	On the 24 August 2022 DPE issued a warning letter regarding the timing of CPESC report submissions.  This matter is considered closed.
B85	Permanent built surface works commenced at warehouse 6 and warehouse 5 prior to RMS (TfNSW) approval of a plan showing swept path for entry and manoeuvrability through the site.	Obtain approval from TfNSW of the swept path analysis report.	Moorebank Ave and Anzac Ave Swept Paths approved by TfNSW on the 24/6/22. TfNSW provided comment on manoeuvrability through site, but, advised that they do not issue approval for private roads. Swept Paths and manoeuvrability through site submitted to the Department (5 June 2023).
B125	On the 17 November 2022 a non-compliance was reported to DPE following the receipt of a complaint regarding helicopter works outside of construction hours.	Contractor was instructed to operate within the Projects approved construction hours.  The complainant was notified of upcoming helicopter activities.	DPE issued a warning letter to RCC in response to the non-compliance on the 9 December 2022.  This matter is considered closed.
B171	Works on the Western Ring Road commenced in	The Project is actively engaging with the Site	DPE issued a warning letter for commencement

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COC Ref	Detail	Proposed or Completed Actions	Status
	advance of the site audit report and site audit statement being issued for that area.	Auditor to achieve the finalisation of the site audit statement.	<p>of works prior to the issue of a site audit report and site audit statement.</p> <p>The site audit report and site audit statement were finalised on 26 September 2022. Both documents were submitted to DPE on 27 September 2022.</p> <p>This matter is considered closed.</p>

Table 3-2 Non-compliances identified during the reporting period for SSD 10431

COC Ref	Detail	Proposed or Completed Actions	Status
C44	The second Independent Audit Report and the Applicant's Response to the Independent Audit Report was uploaded to the website after the timeframe required by C44.	The second Independent Audit Report and Applicant's Response to the Independent Audit Report submitted to the Department on 4 November 2022 but was published on the Project website in February 2023.	Closed
C45	The first Independent Audit Report and Applicant's Response to the Independent Audit Report were prepared and submitted to the Department after the timeframe required.	The response to first audit findings was prepared and submitted to the Department on 27 April 2022 after 66 days from the site Independent Audit site inspection.	Closed

## 4. Statement of Compliance

This Report was prepared in accordance with the CoC C20 (SSD 7709) and CoC A37 (SSD 10431) and the reporting requirements under approved plans and programs.

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The Report addresses the requirements of CoC C21(a) (vi) and (vii) (SSD 7709) and CoC A38 (a)(iv) and (v) (SSD 10431).

Additional details regarding the environmental performance of the MPW Stage 2 and MPW Stage 3 developments are available in the compliance reports in accordance with CoC C14 (SSD 7709) and CoC A47-A49 (SSD 10431), which are available on the Project website (<https://moorebankintermodalprecinct.com.au/>).