resource management synergy

TOTAL CONTRACTING SERVICES

Londonderry Synergy Mobile Water Treatment Plant
Performance Report

Provided to: SafeWork NSW

Attention: Chris Bourke
Director
SafeWork NSW

Submitted by: Synergy Resource Management Pty Limited

Date: 14/11/2025

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This document was prepared for the intended purpose, and in alignment with, Synergy's interpretation of the project reporting requirements under the relevant Scope of Works. It is the professional opinion of both Synergy and its agents' that this document is reasonably supported by the limited testing and analysis undertaken on the project site to date. The opinions of Synergy and any of our agents within this document may be subject to modification as other relevant additional information on the groundwater on the project site is obtained through either the course of conducting site works or further testing and analysis of the groundwater after the date of issue.

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Revisions

- An electronic Database stores and controls the current electronic versions of this Report
- Key personnel will be notified of changes to the Report
- Printed copies of this report are to be considered as uncontrolled. Holders of printed copies should refer to the current electronic version for accuracy.

Revision Number	Date	Prepared by	Checked by	Approved for issue	
				Name	
0	14/11/2025	Reece Gray, Synergy - Senior Environmental Scientist	Ian Warren, Synergy – EHSQ Manager	Jeremy Tosswill, Synergy – Water Services Manager	14/11/2025

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1 Executive Summary

Synergy Resource Management Pty Limited (Synergy) is engaged by SafeWork NSW to undertake the removal and treatment of PFAS-impacted water at the TestSafe Australia facility, located at 919 Londonderry Road, Londonderry (NSW). The works are being conducted under Synergy's NSW EPA Mobile Water Treatment Plant Environmental Protection Licence (EPL 21225) and in accordance with the project-specific Water Treatment Management Plan (WTMP) and Environmental, Health, Safety & Quality (EHSQ) Management Plan.

TestSafe Australia is an internationally recognised testing, certification, and research facility. Historically, fluorine-based firefighting foams containing per- and poly-fluoroalkyl substances (PFAS) were used during testing operations, with runoff accumulating in two purpose-built catchment ponds in the north-western portion of the site. Due to their persistence, mobility, bioaccumulation, and potential toxicity, PFAS compounds represent a recognised environmental and human health risk. SafeWork NSW engaged Synergy to provide specialist water treatment services to manage water levels within the ponds and ensure compliant discharge back into the environment.

The objectives of the project are to:

- Treat approximately 1–1.5 million litres of PFAS-impacted water contained within the retention and detention dams;
- Achieve PFOS + PFHxS concentrations below the EPL 21225 discharge criterion (0.002 µg/L));
- Demonstrate compliance with EPL 21225 and NSW EPA discharge requirements; and
- Return treated water to designated irrigation areas within 30 metres of the treatment location under controlled conditions.

Synergy mobilised its Mobile Water Treatment Plant (WTP) to site following NSW EPA approval on 9 September 2025, completing commissioning later that month. Commissioning confirmed that the WTP met the discharge requirements of EPL 21225, achieving > 99 % reduction in PFAS concentrations, with all treated-water results demonstrating compliance with the licence limit of 0.002 µg/L. Supporting water-quality parameters (pH and TSS) remained stable and within acceptable ranges.

The WTP is currently operating on an as-needed basis in response to rainfall events that elevate dam water levels. Ongoing operations are supported by routine sampling, laboratory analysis, and reporting to confirm continued compliance and performance. The plant remains fully compliant with discharge criteria, with environmental monitoring and maintenance activities scheduled throughout the operational term of the contract.

List of Acronyms

Acronym	Definition
ALS	Australian Laboratory Services
AIX	Anion Exchange (resin)
DQOs	Data Quality Objectives
DW	Discharge Water
GAC	Granular Activated Carbon
SW	Surface Water
ISO/IEC	International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC)
LOR	Limit of Reporting
MWTP	Mobile Water Treatment Plant
NATA	National Association of Testing Authorities
PCoC	Potential Contaminants of Concern
PFAS	Per- & Polyfluoroalkyl Substances
PFHxS	Perfluorohexane sulfonic acid (PFHxS)
PFOA	Perfluorooctanoic acid (PFOA)
PFOS	Perfluorooctanesulfonic acid (PFOS)
QA/QC	Quality Assurance (QA) and Quality Control (QC)
QCD	Quality Control intra-lab Duplicate
QCT	Quality Control inter-lab Triplicate
RPD	Relative Percentage Difference
SAQP	Sampling, Analysis and Quality Plan
Synergy	Synergy Resource Management Pty Limited
TT	Tugun Tunnel
WTT	Water Transfer Tanks

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2 Introduction & Background

Synergy Resource Management Pty Limited (Synergy) is engaged by SafeWork NSW to treat PFAS-impacted water at the TestSafe Australia facility, located at 919 Londonderry Road, Londonderry (NSW). The works are being undertaken under Synergy's NSW EPA Mobile Water Treatment Plant Environmental Protection Licence (EPL 21225) and in accordance with the approved Water Treatment Management Plan (WTMP) and Environmental, Health, Safety and Quality (EHSQ) Management Plan.

TestSafe Australia is an internationally recognised testing, certification and research facility. Historically, fluorine-based firefighting foams containing per- and poly-fluoroalkyl substances (PFAS) were used during testing operations, with runoff accumulating in two purpose-built retention and detention dams in the north-western portion of the site. PFAS compounds are environmentally persistent, mobile and bioaccumulative and therefore represent a recognised environmental and human-health risk.

SafeWork NSW engaged Synergy to provide licensed mobile water-treatment services to manage and reduce PFAS concentrations within these dams and enable compliant discharge of treated water back into the environment.

Synergy mobilised its Mobile Water Treatment Plant (MWTP) to site following NSW EPA approval on 9 September 2025 and completed commissioning later that month. The plant has since entered operational service, treating water from the site's retention and detention dams in accordance with EPL 21225 requirements.

It is Synergy's responsibility to operate and maintain the WTP. Key personnel involved with the operation, management and commissioning of the WTP and their roles are detailed in Table 1.

Table 1 Key Personnel

Name	Role
Matt Sedon	Project Director
Jeremy Tosswill	Project Manager
Ian Warren	Environmental, Health, Safety and Quality Manager
Anu Ramiah	Project Supervisor
Reece Gray	Senior Environmental Scientist

2.1 Scope

The scope of this report is to compare and explain the performance of the WTP during the works by:

- Discussing the validity of results based on the Data Quality Objectives (DQOs) and the sampling and quality-control framework outlined in the Water Treatment Management Plan (WTMP) (Appendix A);
- Documenting the results;
- Reviewing and comparing the discharge results against the NSW EPL 21225 criteria; and,
- Outlining and including details about the circumstances which triggered any preventative measures, additional monitoring and / or responses.

3 Water Treatment Process

The intent of Synergy's design was to provide a MWTP to remove per- and poly- fluoroalkyl substances (PFAS) from impacted water collected within the TestSafe Australia facility. The plant treats water from two retention and detention dams located in the north-western portion of the site.

The treatment process comprises a series of pre-treatment and adsorption stages configured to achieve concentrations of PFOS + PFHxS < 0.002 µg/L, consistent with the requirements of the NSW EPA. The system operates at a controlled throughput of approximately 1 – 3 L/s via a variable-frequency drive (VFD) to maintain optimal contact time and process efficiency.

There are four stages of treatment throughout the entire treatment chain. The purpose of the multi-stage treatment approach is to utilise an array of well-established water treatment technologies.

The stages can be summarised by:

- Pre-treatment: Water collection and chemically enhanced settlement
- Filtration A: Media filtration using coal granular activated carbon (GAC)
- Filtration B: Media filtration using a macroporous anion exchange (AIX) resin
- Filtration C: Media filtration using coconut GAC and discharge

Figures and descriptions of the WTP layout and sampling points are included in the Water Treatment Management Plan (WTMP).

4 Assessment Criteria

The primary contaminant of concern (PCoC) for the Londonderry site is PFAS within the retention and detention ponds. Following consultation with the NSW EPA, discharge assessment criteria were adopted in accordance with EPL 21225 and relevant EPA water-quality guidance.

Under EPL 21225, Synergy is required to meet the PFAS concentration limits listed in Table 2 below prior to discharge.

In addition, general water-quality parameters such as pH and Total Suspended Solids (TSS) are monitored as part of Synergy's operational quality-control framework to confirm treatment stability and ensure that the discharged water is of acceptable environmental quality.

Table 2 Assessment Criteria for Discharge Water

Contaminants	Units	Site Criteria
Individual PFAS analytes (~30)	µg/L	< 0.002
Sum of PFAS (~30 analytes)	µg/L	< 0.002
pH	pH units	6.5-8.5
Total Suspended Solids	mg/L	<50
Visible Oil/Grease	Visual	Not Visible

The PFAS criteria relate to the 28–30 PFAS end-point compounds currently available for analysis by NATA-accredited laboratories.

The additional water-quality parameters (pH, TSS, and oil/grease) are not formal licence limits but are adopted as supporting indicators to confirm system performance and provide assurance that treated water is suitable for irrigation discharge.

Any result exceeding the criteria listed above will trigger further review and, where necessary, optimisation of the treatment process to maintain compliance and protect environmental quality.

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5 Quality Assurance / Quality Control

The data quality objectives (DQOs) provide a methodology to evaluate the effect of the sampling or analytical procedures on the quality of results. The objectives focus on assessing usability of the data in terms of accuracy and reliability in forming conclusions on the quality of water and subsequently the WTP performance. Table 3 summarises the DQOs and provides an assessment of compliance.

Table 3 Data Quality Objectives for Sampling and Analytical Procedures

QA/QC Elements	DQOs	DQOs Compliance
Primary Analytical Laboratory	Water Quality samples and duplicates to be collected and tested at the primary laboratory Australian Laboratory Services (ALS). The ALS Corporate NATA accreditation number is 825 and complies with the requirements of ISO/IEC 17025:2005.	All samples (excluding triplicate samples) were analysed at the primary laboratory ALS
Secondary Analytical Laboratory	Triplicate samples to be collected and tested at the secondary laboratory. Eurofins MGT (Eurofins). The Eurofins NATA Accreditation Number is 1261 and complies with the requirements of ISO/IEC 17025:2005.	All triplicate samples were analysed at the secondary laboratory Eurofins
Internal Laboratory QA/QC Procedures	Each analytical laboratory has a stringent quality assurance system, which includes performing a large range of in-house QA/QC assessment and tests. The QA/QC data is monitored by means of control charts and statistical analyses.	The QA/QC assessment was verified through review of laboratory data and internal validation checks.
Holding Times / Preservation	Sample preservation to be completed in accordance with laboratory standards. Samples to be delivered to the laboratory and extracted prior to expiry of holding time.	Samples were chilled and sample preservation was in accordance with laboratory standards (WTMP - Appendix A)
QA/QC Procedures	QA/QC procedures include design and implementation of sampling plan, chain of custody and documentation procedures, avoidance of contamination, adherence to sample handling, laboratory data verification and the use of quality control samples in accordance with Section 8.2 of AS4482.1-2005.	Generally, all QA/QC procedures were adhered to. The integrity of data based on QA/QC procedures outlined in the Water Treatment Management Plan (WTMP – Appendix A).
QC Samples Duplicates	To collect duplicate samples tested by the primary laboratory in accordance with sampling procedures described in the WTMP (Appendix A). Relative Percentage Differences (RPDs) are to be calculated and tested against limits set by AS4482.1-2005	Duplicate samples were collected in approximately one in every ten samples. RPDs were checked against limits and data integrity was verified in the data validation process.
QC Samples Triplicates	To collect triplicate samples tested by the secondary laboratory in accordance with sampling procedures described in Water Treatment Management Plan (WTMP, Appendix A). Relative Percentage Differences (RPDs) to be calculated and tested against limits set by AS4482.1-2005	Triplicate samples were collected in approximately one in every twenty samples. RPDs were checked against limits and data integrity was verified in the data validation process.

AS 4482.1 refers to Australian Standard 4482.1 - Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil, Part 2: Non-volatile and Semi-volatile compounds (2005)

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The QA/QC DQOs evaluated for the works conclude that the sampling and analytical procedures did not affect the quality of results or conclusions of the report, inferring the data integrity is sound and valid for use.

Supporting documentation for QA/QC and DQO verification is provided in:

- Appendix A: Water Treatment Management Plan (sampling and QA/QC framework)
- Appendix B: Certificates of Analysis (COAs)

6 Water Treatment Results

During the reporting period, the Synergy Mobile Water Treatment Plant (WTP) has operated intermittently in response to rainfall events that increased water levels within the TestSafe retention and detention dams.

A total of 17 discharge-water samples were collected and analysed by a NATA-accredited laboratory for the full PFAS suite and supporting water-quality parameters, in accordance with EPL 21225 and the project Water Treatment Management Plan (WTMP).

Analytical results of treated (discharge) water were reviewed and assessed against the contract criteria specified under EPL 21225.

All samples met the required discharge limits for PFAS, pH, and total suspended solids (TSS).

The table below presents a summary of the PFAS summations (PFHxS + PFOS, WA DER List, and total PFAS), along with general water-quality parameters.

Results for individual PFAS analytes are provided in Appendix B, with all reported values below the laboratory limit of reporting (< 0.0002 µg/L) and therefore fully compliant with the criteria of EPL 21225.

Table 4 WTP Summary Performance Data

Analytes	Unit	Contract Criteria	Surface Water		Discharge Water	
			Max	Average	Max	Average
pH (at 25 °C)	pH unit	6.5-8.5	8.47	8.47	7.78	7.67
Total Suspended Solids TSS	mg/L	<50	<5	<5	<5	<5
Oil and Grease	-	Not Visible	Not Visible			
PFASs Summations						
Sum (PFHxS + PFOS)	ug/L	0.002	37	37	0.0019	<0.0002
Sum of PFAS (WA DER List)	ug/L	0.002	49.5	49.5	0.0019	<0.0002
Sum of PFASs (n=30)*	ug/L	0.002	53.1	53.1	0.0019	<0.0002

6.1 Discussion

The analytical results confirm that the Synergy Mobile Water Treatment Plant (WTP) operating at the TestSafe Australia facility, Londonderry continues to perform in full compliance with the requirements of EPL 21225.

All treated-water samples analysed during the reporting period complied with the discharge criteria for PFAS, demonstrating consistent treatment efficiency and reliable system operation. PFAS concentrations in the treated water remained within required limits across all sampling events, confirming effective and stable removal performance.

Supporting parameters, including pH and Total Suspended Solids (TSS), remained stable throughout operations and within the control ranges adopted under the Water Treatment Management Plan (WTMP) (pH 6.5–8.5; TSS < 50 mg/L).

No exceedances, operational or maintenance issues were recorded during the reporting period.

The treatment system has continued to perform reliably, producing consistent, compliant results across all sampling events. Routine inspections, calibration checks, and media-condition reviews have ensured the plant remains in a proper and efficient state of operation.

Overall, the Londonderry WTP has demonstrated stable performance, effective PFAS removal, and sustained compliance with all regulatory and project-specific discharge criteria.

Ongoing monitoring will continue on an as-needed basis in response to rainfall events, with data reviewed to verify ongoing efficiency and confirm continued protection of the receiving environment.

7 Conclusion

The Synergy Mobile Water Treatment Plant (WTP) at the TestSafe Australia facility, Londonderry, has demonstrated effective and compliant operation in accordance with EPL 21225. All treated-water samples analysed during the reporting period complied with the discharge requirements for PFAS, confirming that the treatment process consistently achieves high removal efficiency and stable performance.

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Appendix A – Water Treatment Management Plan

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TOTAL CONTRACTING SERVICES

WATER TREATMENT MANAGEMENT PLAN

TREATMENT OF WATER TO REMOVE PFAS
TESTSAFE AUSTRALIA

SAFEWORK NSW

Contract Number: SAFE/31708
Document Identification Number. WTMP01
Document Revision Number: 2
Document Revision Date: 18/11/2025

(Controlled Copy)

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CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

1 – DOCUMENT DESCRIPTION & REVISION STATUS

1.1 – Document Description

This document outlines the Water Treatment Management Plan (WTMP) for the management of catchment ponds for the treatment and discharge of PFAS impacted waters located at 919 Londonderry Rd, Londonderry NSW 2753 (the Site), on behalf of SafeWork NSW Agency an executive agency related to the Department of Customer Service (TestSafe).

Synergy Resource Management Pty Ltd (Synergy) have developed the WTMP to identify and coordinate compliance with the statutory, regulatory, contractual and stakeholder requirements and to demonstrate its methodology to undertaking the engagement to gain approval from the NSW EPA to use their Mobile Treatment License EPL:21225

The WTMP shall be implemented in conjunction with the *Synergy – EHSQ Management Plan* and *Synergy – Sampling, Analysis and Quality Plan* to facilitate the Works.

1.2 – Revision Status

The following revision status record shall be maintained to identify the current revision status of the WTMP.

Revision Number	Revision Date	Prepared By		Reviewed and Approved By	
		Name	Position	Name	Position
0	19/08/2025	Jeremy Tosswill	Synergy, Water Services Manager	Ian Warren	Synergy, EHSQ Manager
1	10/09/2025	Reece Gray	Synergy, Senior Environmental Scientist	Ian Warren	Synergy, EHSQ Manager
2	18/11/2025	Reece Gray	Synergy, Senior Environmental Scientist	Ian Warren	Synergy, EHSQ Manager

1.3 E2 Project Assessment Conditions

Synergy understands the requirements associated with gaining NSW EPA approval to utilise their Mobile EPL 21225 and has referred to these requirements through the WTMP.

E2.1: The licensee must identify and assess all impacts and risk in relation to the licensed activity at each location where the mobile plant will operate.

E2.2: The assessment must include a site specific discharge impact assessment consistent with any of the matters in section 45 of the Act that are relevant.

E2.2a: The discharge impact assessment must also address matters referred to in any guidance provided to the licensee by the EPA to assist with satisfying this requirement.

E2.3: The assessment must justify the:

a) influent and treated water specifications for each contaminant and physical and chemical properties;
b) discharge methods, parameters and criteria, including where appropriate, for disposal to trade waste, for recycling, or discharge to the environment; and
c) plant design, configuration, siting and operation.

E2.4: The licensee must ensure identified potential adverse impacts and risk in relation to the licenced activity are managed to prevent any significant impact on the environment or human health.

1.4 – Records Management

The Synergy Project Manager shall oversee the production and issue of all Synergy project documentation and be responsible for promptly withdrawing, retrieving and disposing of obsolete and / or superseded documents. One copy of all obsolete and / or superseded project documentation will be retained and shall be identified as 'Obsolete' / 'Superseded', and initialed and dated in the top right corner of each page. All other copies will be destroyed to prevent inadvertent use.

The Synergy Project Manager shall ensure that all project documentation is maintained in accordance with the WTMP and that the information is legible, identifiable and traceable. All project documentation shall be maintained in an orderly manner to enable quick retrieval and kept in a secure and protected environment to minimise deterioration or damage, and prevent loss.

Completed project documentation and other contract related information shall be retained for legal and / or knowledge preservation purposes for a period of five years.
All electronic and paper information and records shall be maintained in an orderly manner to enable quick retrieval and kept in a secure and protected environment to minimise deterioration or damage, and prevent loss, unauthorised access, modification and disclosure.

1.5 – Review, Updates & Amendments

The Synergy Project Manager and / or EHSQ Manager shall perform regular reviews of the WTMP to maintain its currency and accuracy.

The Synergy Project Manager and / or EHSQ Manager shall also update the WTMP should deficiencies or opportunities for improvement be identified during the course of the works. The Synergy Project Manager shall provide a copy of the amended WTMP to the NSW EPA Representative for review / approval prior to its implementation.

Document Control and Records Management procedures are addressed in the *Synergy – Work Heath Safety Management Plan*.

2 - PROJECT INFORMATION

2.1 – Client Details

Organisation:	SafeWork NSW Department of Customer Service
Address:	919 Londonderry Rd, Londonderry NSW 2753
Contact:	Chris Bourke
Position:	Director Testing Services Regulatory Capability and Harm Prevention SafeWork NSW
Phone:	0434 562 565
Email:	chris.bourke@safework.nsw.gov.au
Contact:	David Farmer
Position:	Facilities Coordinator, Facilities Management Workplace Services People and Culture
Phone:	0408 595 081
Email:	david.farmer@customerservice.nsw.gov.au

2.2 – Principal Contractor Details

Organisation:	Synergy Resource Management
Address:	1/2 Forge Place Narellan, NSW 2567
Contact:	Jeremy Tosswill
Position:	Manager – Water Services
Phone:	0438 436 638
Email:	jeremy.tosswill@synergyresource.com
Contact:	Robert Tosswill
Position:	Operations Manager
Phone:	0488 111 584
Email:	robert.tosswill@synergyresource.com
Contact:	Reece Gray
Position:	Senior Environmental Scientist
Phone:	0407 899 040
Email:	reece.gray@synergyresource.com

2.3 – Background

TestSafe Australia is an internationally recognised testing, certification, research and investigation facility. It is the largest of its kind in the Southern Hemisphere and is one of a small number of such facilities worldwide offering benchmarked testing and certification services to a wide range of industries. Historically a fluorine-based foam (containing per- and poly-fluorinated alkyl substances (PFAS) was used onsite with runoff collecting in two purpose built catchment ponds. PFAS pose an environmental and health risk due to the persistence, mobility, bioaccumulation and toxicity potential they possess. TestSafe engage suitable qualified and experienced contractors that hold a NSW EPA issued mobile treatment license to undertake treatment of these ponds to manage water levels as required.

2.4 – Location of Works

The Site is located at 919 Londonderry Rd, Londonderry NSW 2753. The Works are specifically located in the Northwestern corner of the site as identified on the *Site and WTP Location Plan.*

Refer to Appendix 1 – Site & WTP Location Plan.

2.5 - Description of Works

Project Details	
Project/Contract Ref.	SAFE/31708
Project Name:	Treatment of Water to remove PFAS - TestSafe Australia
Site Address:	919 Londonderry Road, Londonderry. NSW 2753
Objectives:	The core objectives of the Works, as specified in the *SAFE31708 - RFT Part B - Attachment D - Statement of Work Template - Treatment of Water to Remove PFAS - TestSafe Australia* document, include: ▪ Remove and treat water with an average Sum of PFAS 85ug/L contained in the retention and detention dams to ensure it meets the Principal and NSW EPA requirements for release back into the environment; ▪ The treatment must remove PFOS + PFHxS contamination in water to below the detection limit of analysis (0.002 µg/L); ▪ Following successful treatment of the water release it back into the environment up to 30m away from the treatment area. Areas to be irrigated will be selected by the Principal; ▪ Transfer all sediment and organic matter back into the dam area upon completion of the works; ▪ Provide a detailed report of analysis that supports successful treatment of water having occurred and highlight any discrepancies; and ▪ Provide and maintain all licences required to perform the above activities.
Contract Duration / Term of Services	Synergy has entered into a Supply of Goods and Services Contract with SafeWork NSW, commencing on 28th July 2025. The contract specifies a Term of Services of thirty-six (36) months, with a scheduled completion date of 28th July 2028. The contract also includes options to extend for up to two (2) additional periods of twelve (12) months each.
Additional Scope Information:	Synergy understands that the requirement for water treatment is on an 'as needed' basis in response to rainfall events that raise the levels of the two retention and detention dams, with an expected volume of 1-1.5 Million Litres of water requiring treatment.
Principal Supplied Items:	Synergy understands that the Principal shall provide the nominated Synergy workers with limited access to the Site, including contractor passes, to facilitate the Works.
Permitted Workdays / Hours:	Synergy understands that the Site will be accessible 7.30m to 4pm Monday to Friday. Work may be permitted outside of these hours / days subject to prior approval from the Principal's Representative.
Project Stakeholders:	▪ SafeWork NSW; ▪ TestSafe Australia; ▪ Adjacent landowners / leaseholders; and ▪ Synergy Resource Management.

3 – POLICY STATEMENT

3.1 – General

The Synergy *Environmental Policy* statement sets the vision and direction for environmental performance of the business. The Policy outlines the organisations commitments, responsibilities and expectations for environmental management, and have been endorsed by the company Directors.

The Synergy *Environmental Policy* statement shall be communicated to all employees and interested parties with copies available in electronic format on the Synergy shared file server for access by all personnel. The *Environmental Policy* shall be publicly displayed in a prominent location at the Synergy head office and hard copies filed in the WTMP at worksite locations.

3.2 - Environmental Policy

Synergy Resource Management Pty Limited (Synergy) is committed to protecting the environment by avoiding, reducing and controlling adverse environmental impacts associated with its activities, products and services.

This commitment shall be achieved through:

- The enhancement of environmental performance;
- The fulfilment of compliance obligations;
- Establishing and achieving environmental objectives and targets; and
- Implementing and maintaining an Integrated Management System in accordance with the requirements of ISO 14001:2016 Environmental Management Systems to provide a framework that ensures the systematic management of environmental performance throughout all operations, functions and locations.

Synergy strives to achieve the financial and operational benefits that can result from implementing environmentally sound principles that strengthen the organisation's market position.

In order to implement the general provisions of this policy Synergy shall:

- Prevent environmental pollution as a result of the organisations activities, products and services;
- Ensure environmental management principals are included in organisational planning activities;
- Define roles and responsibilities for environmental management;
- Communicate environmental information to the relevant interested parties;
- Manage the way in which activities, products and services are designed, manufactured, distributed, consumed and disposed in consideration of life cycle perspective to prevent environmental impacts from being unintentionally shifted elsewhere within the life cycle;
- Implement a proactive approach to identify environmental aspects and eliminate or minimise impacts;
- Provide environmentally responsible systems of work and work environments;
- Provide adequate information, training, instruction and supervision with regard to environmental management;
- Implement environmentally responsible procedures for the transport, use and storage of plant, equipment, materials, products and substances;
- Strive to continually improve environmental performance;
- Implement systems for monitoring the effectiveness of environmental protection measures and performance;
- Ensure environmental incidents are reported / investigated with corrective action implemented to prevent reoccurrence; and
- Provide adequate resources to ensure that environmental management is a central part of the organisation's activities, products and services.

A copy of the current Synergy Environmental Policy will be communicated to all workers and shall be made available to all interested parties as a statement of the organisations environmental commitment.

This policy is applicable to Synergy in all its work operations, functions and locations and will be reviewed periodically to ensure that it remains relevant and appropriate.

MATT SEDON
Managing Director
(Revision 11 – 03/01/2024)

4 – RESPONSIBILITIES & ACCOUNTABILITIES

4.1 – Company Director's Responsibilities & Accountabilities

The Directors are responsible for defining, designating, documenting and communicating environmental accountabilities, and to support others to demonstrate their leadership as it applies to their areas of responsibility. The Directors shall also hold managers, supervisors and general workers accountable for their own specific responsibilities.

The Directors are responsible for the allocation of sufficient human, technical and financial resources, making effective arrangements for consultation and communication, identifying competencies required at all levels of the organisation, and the provision of specialist training, advice and services, to implement the Environmental Policy and to achieve objectives and targets for continual improvement.

MATT SEDON
Managing Director

MATT SMITH
Executive Director

4.2 - EHSQ Managers Responsibilities & Accountabilities

- Lead and promote a culture within the organisation that supports the intended outcomes of the integrated EHSQ Management System and it's continual improvement;
- Communicate the importance of effective implementation and conformance with the integrated EHSQ Management System;
- Direct and support persons to contribute to the effectiveness of the integrated EHSQ Management System;
- Support persons so that they can demonstrate leadership as it applies to their areas of responsibility;
- Manage compliance with applicable EHSQ, workplace injury management and workers compensation legislation, Standards and Codes of Practice;
- Establish, implement and maintain the IMS to comply with WHS (ISO 45001), Quality (ISO 9001) and Environmental (ISO 14001) Management Systems requirements; to maintain third party accreditations;
- Report on the performance of the IMS by completing the Internal Management System Audit for review by the Directors, senior management and general workers, as per the Management System Audit & Review Program;
- Coordinate the creation, approval, dissemination, maintenance, retention, withdrawal and disposal of Management System Supporting Documents and records;
- Ensure that the IMS Supporting Documents are periodically reviewed, revised as necessary and approved for adequacy;
- Monitor and maintain legislative and other requirements to ensure that the information made available is current and up to date;
- Ensure functional EHSQ responsibilities and accountabilities are explained to all workers;
- Ensure that Company induction training is provided to all workers;
- Coordinate the health surveillance monitoring of workers exposed to hazardous materials in the workplace;
- Formulate and deliver training in the requirements of Project Management Plans;
- Facilitate achieving the organisations obligations when performing the role of principal contractor;
- Communicate with all relevant stakeholders to reduce risks / impacts;
- Being part of the planning and design stage of trade activities;
- Confirm that site personnel have completed the appropriate training and that qualifications are current while organising additional training as required;
- Facilitate the annual training needs analysis;
- Develop processes to prevent adverse environmental impact occurring as a result of the organisation's activities, products and services;
- Develop processes to prevent work related injury and ill health and provide safe and healthy workplaces and work activities;
- Provide advice and assistance on EHSQ matters to workers;
- Implement the hazard / aspect identification, risk / impact management procedure and preparing ESWMS;
- Review the General Site Rules;
- Review the Safe Work Procedures;
- Investigate hazard and non-conformance reports and identify corrective action;
- Ensure that the organisation establishes and implements a process for consultation and participation of workers, which may

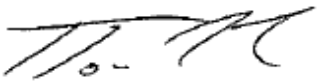
include WHS representatives, committees or other agreed arrangements;
- Facilitate the agreed consultation, cooperation and coordination arrangements with workers;
- Review consultation, cooperation and coordination arrangements periodically to ensure that they remain meaningful and effective;
- Protect workers from reprisal when reporting incidents, hazards, risks and improvement opportunities;
- Facilitate the incident reporting process and conduct investigations to identify corrective action;
- Ensure corrective action is implemented to prevent the reoccurrence of reported incidents;
- Facilitate the injury management, rehabilitation and recover at work process for injured workers;
- Ensure that the injured worker is given access to occupational rehabilitation services where appropriate;
- Liaise with parties involved in the occupational rehabilitation of, or provision of services to, the injured worker;
- Monitor the progress of the injured workers capacity to work;
- Take steps to prevent reoccurrence or aggravation of the injury by developing suitable return to work plans;
- Collate illness / injury information and statistics; and
- Acquire, communicate, consult and disseminate EHSQ related information.

IAN WARREN
EHSQ Manager

4.3 – Project Managers Responsibilities & Accountabilities

- Develop business opportunities with new and pre-existing client relationships;
- Liaise with clients and stakeholders as required to facilitate the works;
- Identify and maintain compliance with contractual and project stakeholder requirements;
- Identify and manage deviations to contract works and variations;
- Maintain project works programs and identify delays and opportunities for works acceleration;
- Assist with client invoicing and the subcontractor / supplier payments process;
- Perform general contract administration as required;
- Implement and monitor compliance with Project Management Plans;
- Ensure that work areas, work methods, materials, plant and equipment comply with pertinent legislation, regulations, Standards and Codes of Practice;
- Oversee the identification, maintenance and disposition of documentation and records;
- Obtain information from subcontractors for inclusion on the Approved Supplier List prior to their utilisation;
- Identify stakeholder permitting requirements and obtaining the necessary permits as required;
- Being part of the planning and design stage of trade activities;
- Facilitate and document WHS design review meetings;
- Implement processes to prevent adverse environmental impact occurring as a result of the organisation's activities, products and services;
- Implement processes to prevent work related injury and ill health, and provide safe and healthy workplaces and work activities;
- Communicate with the relevant stakeholders to reduce risks / impacts;
- Provide advice and assistance on EHSQ matters to workers and subcontractors;
- Identify when training for site personnel is required;
- Ensure that all plant and equipment is appropriately insured, licensed and registered;
- Implement the hazard / aspect identification, risk / impact management procedure and preparing ESWMS;
- Provide training in the requirements of ESWMS;
- Monitor compliance with the ESWMS prescribed control measures;
- Perform regular site inspections to ensure that correct procedures are followed, and that workers and subcontractors' personnel are adhering to EHSQ requirements;
- Plan and deliver site induction training, task specific training, and refresher training;
- Facilitate toolbox talks and pre-start meetings;
- Issue personal protective equipment where required and monitor its correct use in the workplace;
- Ensure that relevant certificates of competency, insurances, licenses or permits required to operate plant and carry out particular works are sighted prior to the commencement of those activities;

- Coordinate the inspection, testing and tagging of electrical plant and equipment;
- Ensure current Safety Data Sheets for all Hazardous Substances / Dangerous Goods on site are readily accessible;
- Ensure that Hazardous Substances and Dangerous Goods are used, handled and stored following the Safety Data Sheets requirements;
- Ensure that the First Aid Kit is adequately stocked and readily accessible at all times;
- Ensure adequate firefighting equipment is maintained and readily accessible at all times;
- Stop, reject or quarantine unsafe work areas, materials, plant and equipment;
- Report safety hazards and environmental aspects to the EHSQ Manager using the Hazard / Aspect Report and implementing the necessary corrective action;
- Report quality non-conformances to the EHSQ Manager using the Non-Conformance Report and implementing the necessary corrective action;
- Develop and implement site emergency procedures;
- Make every effort to eliminate workplace injuries and illnesses;
- Report all incidents in the workplace to the EHSQ Manager and participate in investigations for preventive action;
- Assist injured workers to return to pre-injury duties as soon as practicable after a work related injury or illness;
- Hold workers and subcontractor personnel accountable for their own specific responsibilities.



JEREMY TOSSWILL
Manager – Water Services

4.4 – Worker / Subcontractor Personnel Responsibilities & Accountabilities

- Follow instructions from Synergy Managers / Supervisors;
- Contribute to the effectiveness of the integrated EHSQ Management System;
- Maintain a safe and healthy workplace;
- Work in a safe manner without risk to themselves, other workers or the public;
- Perform work related activities in a manner that prevents adverse environmental impact;
- Comply with the Project Management Plans;
- Adhere to all General Site Rules and company policy statements;
- Operate, maintain and store all plant, tools and equipment safely and correctly;
- Correctly use, maintain and store personal protective equipment;
- Only perform tasks in which you are trained and competent;
- Only perform tasks in which you hold the relevant permits, certificates and licences;
- Immediately inform the applicable Project Manager / Supervisor of all unidentified hazards / aspects in the workplace and known hazard / aspects which have not been eliminated or effectively controlled;
- Perform documented plant pre-start checks daily before operation;
- Immediately inform the applicable Project Manager / Supervisor of all non-conforming plant, equipment, materials, products and activities;
- Operate plant and equipment in accordance with Environmental and Safe Work Method Statements (ESWMS), work procedures and operating manuals;
- Undertake repairs and maintenance to plant and equipment as required;
- Maintain plant and equipment on a regular basis in accordance with manufacturer guidelines and legislative requirements;
- Complete all tasks following the prescribed controls in ESWMS;
- Wear the mandatory Personal Protective Equipment (PPE) required at each worksite and additional task specific PPE identified in the ESWMS;
- Comply with and implement emergency and evacuation procedures;
- Participate in agreed consultation, cooperation and coordination methods to improve EHSQ;
- Immediately report incidents, injuries or illnesses sustained while at work to the applicable Project Manager / Supervisor and EHSQ Manager, and completing the Incident, Injury or Illness Report form;
- Cooperate with the Return-to-Work Plan if deemed fit for suitable duties;
- Make all reasonable efforts to return to work on pre-injury duties as soon as possible; and
- Cooperate in worksite changes designed to assist the rehabilitation of fellow workers.

5 – COMPLIANCE OBLIGATIONS

5.1 – Authorities & Regulators

Synergy will perform the works in accordance with the requirements of the following authorities where applicable:

- NSW Environment Protection Authority;
- SafeWork NSW.

5.2 – Statutory & Regulatory Requirements

The statutory and regulatory compliance obligations that are applicable to the Works are identified on the *Project Compliance Obligations Register*.

Refer to Appendix 2 - Project Compliance Obligations Register (SYN04).

Access to the documentation identified on the *Project Compliance Obligations Register* is available to Synergy project personnel on the Company's OneDrive server.

5.3 – Contractual Requirements

To achieve its compliance obligations Synergy shall complete the Works as specified under the Contract. The documentation / information which form the Contract are identified on the *Project Compliance Obligations Register*.

Refer to Appendix 2 - Project Compliance Obligations Register (SYN04).

6 – TRAINING, AWARENESS & COMPETENCE

6.1 – TestSafe Inductions & Training

Synergy workers and subcontractor personnel shall complete the following TestSafe inductions and training before performing works on the Site:

- TestSafe Site Induction
- General Induction for Construction Work; and
- Work Activity Based WHS Induction.

6.2 – Site Inductions

To ensure that Synergy workers and subcontractor personnel possess the requisite information, knowledge, and competencies all persons intending to perform works on the Site are required to complete Synergy site induction training prior to commencement. This will include statutory and regulatory obligations associated with the Works and the Site.

Attendees of the Synergy site induction are required to complete the *Site Induction Record* to confirm that they have been advised of, and have understood, the necessary information. During the Synergy site induction process, the inductee will be appropriately vetted to ensure they are suitably trained and competent for their intended tasks and familiar with the terms of the specification and required standards.

The *Site Induction Record* is provided in the *Synergy – Construction Safety Management Plan.*

6.3 – Work Activity Based WHS Induction Training

Work activity based WHS induction training shall be delivered during the daily pre-start meetings, including the relevant Environmental and Safe Work Method Statements. Pre-start meetings shall be completed daily before the commencement of work activities with the content recorded on the *Pre-Start Meeting Record*. Should works commence at two or more locations on the site simultaneously the work force shall convene in one group at the beginning of the day to complete the pre-start meeting.

The *Pre-Start Meeting Record* is provided in the *Synergy – Construction Safety Management Plan.*

The need for additional pre-start meetings may be identified where there are changes in work areas, plant, hazardous substances, dangerous goods, work processes or systems etc. which may require information to be provided regarding the potential hazards / impacts and necessary control measures.

7 - ASPECT IDENTIFICATION & IMPACT MANAGEMENT

Synergy shall establish, document, and maintain environmental aspect identification and impact management process for the activities, products, and services over which the organisation has control or influence, in accordance with legislative requirements. The aspect identification and impact management process shall be given due consideration in:

- The way work is organised, managed and carried out;
- The design of workplaces, work processes, materials, plant and equipment;
- The commissioning, fabrication, installation, handling and disposal of materials plant and equipment;
- The purchasing of goods and services;
- The subcontracting of plant, equipment, and services; and
- The inspection, maintenance, testing, repair and replacement of materials plant and equipment.

Aspect identification and impact management involves a systematic program of identifying all foreseeable workplace aspects, assessing the impacts arising from those aspects, and eliminating the impacts where possible, or controlling them, where it is not reasonably possible to eliminate them. This procedure is repeated as part of an ongoing process, especially when there are changes in the work site, working conditions, activities, materials, substances, plant and equipment, or there is new knowledge on aspects or changes in legislation.

Synergy shall ensure that workers are competent in the environmental aspect identification and impact management process through training provided during the company induction process.

7.1 - Aspect Identification

Environmental aspect identification is the process of identifying reasonably foreseeable work conditions, items, materials, products, services, plant, equipment, activities, situations or events etc. that have the potential to give rise to environmental impact. The aspect identification process shall also take into account the nature of the environmental impact. Site specific work activities are separated into sequential job steps to assist in the identification of potential aspects associated with each element of the task. The potential aspects associated with each job step are documented on the Environmental and Safe Work Method Statements (ESWMS) for that particular activity.

The following information shall be considered during the aspect identification and impact assessment process:

- Observation of workplace activities;
- Abnormal start-up and shut-down conditions, inclement weather and foreseeable misuse;
- Interaction with the public and other trades / services;
- Potential emergency situations;
- Previous operational experience;
- Consultation with workers who undertake the activities;
- Review of site inspection and audit results;
- Review of environmental incident reports and subsequent investigations;
- Review of manufacturer / supplier instructions;
- Review of Safety Data Sheets;
- Review of relevant industry information and environmental alerts; and
- Review of statutory and regulatory compliance obligations.

7.2 – Impact Assessment

Environmental impact assessment is the process used to determine the level of impact associated with each identified aspect, for the purpose of control. The priority of control increases as the established level of impact increases.

The impact level for potential workplace aspects shall be determined using a Risk / Impact Assessment Matrix. The Risk / Impact Assessment Matrix is used to compare the probability of the aspect occurring against the consequences if it were to occur, resulting in a rating number being assigned on the basis of the level of impact.

The matrix is used as an instrument for establishing the seriousness and priority that should be given to a particular aspect. The impact level for each aspect that has been identified shall be documented on the ESWMS formulated for that particular activity.

7.3 – Risk and Impact Assessment Matrix

Probability	Severity	
	For People	For Environment
A = Almost Certain (Expected in most circumstances)	V = Severe (Death or permanent disability)	V = Severe (Permanent impact)
B = Likely (Probably occur in most circumstances)	W = Major (Hospital admission required)	W = Major (Long term impact)
C = Possible (Could occur sometime)	X = Moderate (Medical Treatment Required)	X = Moderate (Medium term impact)
D = Unlikely (Not likely to occur in normal circumstances)	Y = Minor (First aid treatment required)	Y = Minor (Short term impact)
E = Rare (May occur in exceptional circumstances)	Z = Insignificant (No injury)	Z = Insignificant (No impact)

Severity \ Probability	A	B	C	D	E
V	1	3	6	10	15
W	2	5	9	14	19
X	4	8	11	17	22
Y	7	13	16	21	24
Z	12	18	20	23	25

Risk / Impact Ratings are as follows: 1 – 6 = Extreme, 7 – 11 = High, 12 - 17 = Medium, and 18 - 25 = Low.

7.4 - Control Measures

To control the level of impact that has been identified the 'hierarchy of control measures' shall be applied. The hierarchy of control measures sets out the order that the control measures must be considered in, based on reasonable practicality, with elimination of the aspect being the most effective.

- Eliminating the aspect;
- Substituting the aspect for one giving rise to a lesser risk;
- Isolating the source of the aspect;
- Engineering controls to reduce the level of impact; and
- Administrative controls to reduce the level of impact.

A combination of control measures may be implemented where a single control is not sufficient for the purpose.

The control measures required for eliminating the aspect, or reducing the associated impacts to acceptable levels where it is not reasonably practical to eliminate them, shall be documented on the ESWMS formulated for that particular activity.

7.5 - Environmental & Safe Work Method Statements

Environmental and Safe Work Method Statements (ESWMS) are the tool used to record the results of the aspect identification and impact assessment for particular site specific work activities and documenting the necessary control measures required to complete the correctly.

Synergy shall provide training to workers and subcontractor personnel so that they understand the requirements of the ESWMS. Personnel are required to read / sign the document prior to commencing the associated activity to confirm that they are aware of the necessary control measures required to perform the activity in an environmentally sensitive manner.

The ESWMS are provided in the *Synergy – Environmental, Health, Safety & Quality Management Plans*.

7.6 - Review & Evaluation

To ensure that aspect identification and impact management activities have been implemented effectively ESWMS shall be reviewed in consultation with workers undertaking the activities concerned. The review shall evaluate whether ESWMS' contain the necessary statutory information and that aspects associated with the activity have been identified, the level of impact is appropriate, and the control measures identified are adequate.

The review and evaluation of ESWMS shall be documented on the on the ESWMS Review Report and be shall be performed under the following circumstances:

- When deficiencies are identified during the completion of the ESWMS Review Report;
- When there has been failure in the control measures resulting in an injury, illness, near miss or environmental incident;
- Following a previously unidentified hazard / aspect being identified during site safety inspections;
- Following a previously unidentified hazard / aspect being identified through the hazard / aspect reporting process;
- Following a previously unidentified hazard / aspect being identified during a pre-start meeting or tool box talk;
- Following a previously unidentified hazard / aspect being identified through relevant industry material, regulator advice, or interested party information;
- Following changes to relevant Acts, Regulations, Codes of Practice and Australian Standards etc;
- Following a breach of statutory and regulatory compliance obligations;
- Following changes to the company policy statements;
- Following changes in tools, plant, equipment, products or materials etc; and
- Following a change to the scope of works or intended work methods.

Site personnel shall be re-trained in the requirements of amended ESWMS.

8 – ENVIRONMENTAL HAZARD / ASPECT REPORTING

8.1 – Minor Environmental Hazards / Aspects

Minor environmental hazards / aspects that are identified by the Synergy Project Manager may be verbally reported to the responsible worker or subcontractor personnel and recorded on the daily site diary. An environmental hazard / aspect is considered minor if it does not require significant rectification and will not result environmental impact if corrected immediately. An example of a minor environmental aspect is if erosion and sediment controls checks are not performed as required (daily).

Such minor environmental aspects do not require formal action through the issue of a Hazard / Aspect Report where they can be easily rectified on the spot through agreement with Synergy Project Manager and the responsible person.

8.2 – Major Environmental Hazard / Aspects

Failure of the worker or subcontractor personnel to rectify a minor environmental hazard / aspect, or for a previously identified minor environmental hazard / aspect being repeated, will result in the completion of a *Hazard / Aspect Report* by the Synergy Project Manager.

All other major environmental hazards / aspects, or known environmental hazards / aspects which have not been eliminated or the impact level suitably controlled, shall be recorded by the Synergy Project Manager on the *Hazard / Aspect Report (Part A)* which is to be submitted to the Synergy EHSQ Manager and the TestSafe Representative for review.

The information to be provided on the *Hazard / Aspect Report* include:

- A description of the environmental hazard / aspect;
- The specific location on Site that it occurred (where applicable);
- The person / s involved (where applicable);
- The associated tasks / work activities (where applicable);
- The associated products or materials involved (where applicable);
- The immediate actions taken to reduce the impact of the hazard / aspect; and
- The corrective actions implemented to prevent reoccurrence.

Refer to Appendix 3 – Hazard / Aspect Report (SYN13).

The Synergy EHSQ Manager shall liaise with the Synergy Project Manager and others involved with and / or witnessing the incident to determine the root cause and identify the corrective action required to prevent reoccurrence. The Synergy EHSQ Manager will record the corrective action required, nominate a person responsible for its implementation and specify an appropriate timescale on the *Hazard / Aspect Report (Part B)*.

The Synergy EHSQ Manager shall allocate an 'Event Number' for tracking purposes and record the *Hazard / Aspect Report* on the Synergy *Corrective Action Register* to monitor implementation of the corrective action.

The Hazard / Aspect Report with Parts A and B completed shall be issued to the nominated Synergy worker or subcontractor personnel responsible for implementation. The nominated person is required to sign and date the Aspect Report (Part C) once the corrective action has been implemented.

The Synergy Project Manager shall confirm that the corrective action has been implemented by countersigning the *Hazard / Aspect Report (Part C)*.

The Synergy Project Manager shall forward a copy of the *Hazard / Aspect Report* with Parts A, B and C completed to the Synergy EHSQ Manager and TestSafe Representative for review. Once all parties are satisfied, the Synergy EHSQ Manager shall close-out the event on the Synergy *Corrective Action Register*.

9 - CONSULTATION, COOPERATION AND COORDINATION

9.1 - Consultation, Cooperation & Coordination Arrangements

Synergy recognises that knowledge and experience throughout the workforce is a valuable resource and therefore workers and the appropriate stakeholders are expected to participate in the development and implementation of the Integrated Management System through direct communication and consultation.

Synergy promotes the active participation of all workers and stakeholders in the decision-making process. Workers and stakeholders are consulted and given opportunity and encouragement to be proactively involved in environmental matters affecting the organisation and its work activities.

9.2 - Pre-Start Meetings

Daily pre-start meetings shall be used as a tool for consultation, cooperation and coordination with workers for a variety of site and task based environmental issues in the workplace, such as:

- Conveying specific statutory and regulatory compliance obligations;
- General training;
- Providing information / documentation;
- Compliance with specific environmental controls;
- The identification of aspects, impact assessment and decisions made on measures to eliminate or control impacts;
- Assessing whether known aspects are being eliminated or suitably controlled;
- Confirming that the intended work methods and control measures conform with those identified in the ESWMS;
- Reviewing and amending ESWMS; and
- Identifying potential aspects arising from weather, site conditions or the interaction with other trades / services.

Pre-start meetings shall be completed daily before the commencement of work activities. The need for additional pre-start meetings may be identified where there are changes in work areas, plant, substances, work processes or systems which may require discussions on the potential hazards and control measures.

Pre-start meetings shall be recorded on the *Pre-Start Meeting Record* which will be signed by all persons in attendance.

The *Pre-Start Meeting Record* is provided in the *Synergy - Construction Safety Management Plan*.

9.3 - Toolbox Talks

Toolbox talks shall be used as a tool for consultation, cooperation and coordination with workers for more general environmental issues, such as:

- Changes in the scope of work or specification;
- Environmental information and training;
- Environmental performance;
- Environmental incidents and corrective actions;
- Emergency planning and response; and
- The review of policies, procedures and work processes.

Toolbox talks shall be conducted on a regular basis with the content recorded on the *Toolbox Talk Record* which will be signed by all persons in attendance.

The *Toolbox Talk Record* is provided in the *Synergy – Construction Safety Management Plan*.

9.4 - Community Engagement Protocols

Communication with stakeholders regarding the Works shall be through the appropriate TestSafe Representative only. Synergy workers and subcontractor personnel shall be instructed to direct all enquiries and / or complaints to the Synergy Project Manager, who shall record the details of the interaction on the Synergy *Record of Contact Form*. The Synergy Project Manager shall provide a copy of the completed Synergy *Record of Contact Form* immediately to the TestSafe Representative for response.

Refer to Appendix 4 – Record of Contact Form (SYN82).

10 – TREATMENT

10.1 – Subcontractors

Synergy maintains an *Approved Subcontractors List* of pre-qualified subcontractors that have been assessed for compliance with the appropriate environmental, health, safety and quality (EHSQ) management requirements, statutory / regulatory conditions, and whom have a demonstrated capability for performing works to the desired standard.

Synergy shall provide the details of all subcontractors it intends to engage to facilitate the Works for TestSafe approval prior. The subcontractor details provided shall include: the company name, contact person, contact details and insurance certificates of currency.

10.2 – Works Program

The works will take place as required in response to requests from TestSafe to treat waters in the catchment ponds as required. General site hours are 0700-1600 Monday-Friday with out of hours access allowed for treatment if required.

10.3 – Treatment Requirements

The liquid to be processed shall be retrieved from the existing on-site water retention and detention dams. The purpose of retrieval is to prevent dam overflow. Analytical results provided by TestSafe confirm the presence of per- and polyfluoroalkyl substances (PFAS), with perfluorooctane sulfonic acid (PFOS) and perfluorohexane sulfonic acid (PFHxS) identified as the primary contributors, alongside lower concentrations of shorter-chain PFAS compounds. Treatment requirements and have summarised below.

- The treatment must remove PFOS + PFHxS contamination in water to below the detection limit of analysis (0.002 µg/L);
- Release of treated water back into the environment up to 30m away from the treatment area where the areas to be irrigated will be selected by the vendor;
- Remove all plant and equipment and make good the land and surroundings at the end of the contract.
- The supplier must hold a current Environmental Protection Licence (EPL) for mobile waste processing for the entire term of the contract.
- The supplier will follow all site safety requirements including undergoing induction for each staff member present and wearing of appropriate Personnel Protective Equipment including High Visibility clothing when on site.
- Quality assurance programs in place.

10.4 - Water Treatment Licensing & Project Approvals

Synergy hold a *NSW EPA Environment Protection Licence (EPL) #21225* for Mobile Waste Processing to facilitate the Works.

Refer to Appendix 5 - Synergy NSW EPA Environment Protection Licence #21225.

The *Synergy NSW EPA EPL #21225* inlcudes 6 containerised mobile water treatment plants with a maximum processing capacity of 800m³ for each system per day, capable of treating contaminants for 15 different waste codes including PFAS, heavy metals, cyanide, nitriles, phenols, water containing petrochemical fuels, oils and lubricants.

In accordance with the *Synergy NSW EPA EPL #21225* conditions, Synergy approval for the Works on the Site are pending from the NSW EPA.

10.5 – Mobile Water Treatment Plant

The Mobile Water Treatment Plant (WTP) comprises modular infrastructure designed for the treatment of PFAS-contaminated water on-site. All WTP infrastructure will be provided by Synergy. The layout and configuration of the plant are detailed in the following supporting documents:

Refer to Appendix 6 - Mobile Water Treatment Plant Process Flow Diagram.

Refer to Appendix 7 - Mobile Water Treatment Plant Layout.

The key plant and equipment that make up the Mobile WTP include:

- 1 × 30 kVA generator and fuel cell;
- 4 × 22.5 kL HDPE storage tanks;
- Lamella plate separator;
- Chemical storage tanks (10 ft containers housing IBCs with 4,000 L capacity for chemical storage);
- Carbon and AIX resin filtration units; and
- Thick-walled lay flat hose for intake and discharge.

10.6 – Mobile Water Treatment Plant Location

The proposed location of the Mobile WTP and the associated infrastructure on the Site is identified on the WTP & Discharge Point Location Plan.

Refer to Appendix 8 – WTP & Discharge Point Location Plan.

10.7 – Mobile Water Treatment Plant Installation

Synergy will be installing the WTP on a pre exisiting hardstand. The hardstand is 45m wide x l35m long. Synergy's WTP will take up a small portion of this. The base is suitably compacted and isolated with a chainwire fence around the perimeter.

Synergy shall utilise a 25t franna crane to install the Mobile WTP in order to position the required infrastructure. Once installed the maximum height of the Mobile WTP infrastructure is less than 3m.

Durable transfer pipes shall be used to connect the Mobile WTP infrastructure which will be suitably protected from accidental damage in locations involving mobile plant operations and vehicular activity.

10.8 – Water Treatment

General

From previous experience and the evaluation of analytical results provided by TestSafe, Synergy have designed the Mobile WTP to treat PFAS to non-detect at low-level limit of reporting (LOR) in accordance with the Synergy NSW EPA EPL #21225. The Mobile WTP shall consist of the following components:

- Pre-Treatment: To reduce alkalinity and remove competing contaminants / low-level hydrocarbons;
- Media Filtration Treatment 1: Media filtration of coal based PFAS-specific granular activated carbon (GAC) which will incorporate physical adsorption;
- Media Filtration Treatment 2: Media filtration of Anion Exchange (AIX) resin to further reduce PFAS concentrations prior to discharge; and
- Media Filtration Treatment 3: Media filtration using coconut based GAC which will target any remaining short-chain PFAS.

Media Filtration 1 – Coal-Based Granular Activated Carbon

Granular Activated Carbon (GAC) shall be utilised for its proven ability to reduce a wide variety of contaminant concentrations, including large chain PFAS. Synergy shall utilise coal-based and coconut-based GAC as previous treatment operations have found using two types of GAC increases contaminant removal and utilises the advantages of each type of GAC.

PFAS specific coal based GAC has been specially designed for PFAS removal, which has proven to be superior to competitor products with 80% greater adsorption capacity, 50-70% longer column life, 25% less weight to fill column, and 35% less water flow rate required for backwashing. Compared to the other coal and coconut based GACs, this product has a pore structure with a substantially lower tendency to be fouled by other impurities within the treatment water. The treatment water will be preconditioned with pre-treatment and physical filtration which will increase the efficiency of the GAC greatly.

Media Filtration 2 – Anion Exchange Resin

Synergy shall utilise Macroporous AIX resin with tertiary amino groups (monofunctional) which has a special bead size distribution, outstanding mechanical stability and high operating capacity making it particularly suitable for PFAS recovery. Macroporous resin greatly suits high volume removal of large molecules that have negatively charged sites as the majority of PFAS fall in this category.

Media Filtration 3 – Coconut-Based Granular Activated Carbon

Coconut-based GAC has an adsorptive capacity much higher than the coal-based varieties with the distribution of micro-, meso- and macro-pores meaning any trace amounts of short-chain PFAS will be captured. Synergy shall therefore utilise coconut based GAC at the polishing stage of the WTP system for improved contaminant recovery.

10.9 – Water Treatment Plant Commissioning

Synergy shall implement a commissioning period using batch treatment. Commissioning sampling will be undertaken for the initial batch of water with samples taken of both the untreated and treated water.

Treated water will be returned to the influnet ponds and not discharged offsite prior to receiving the relevant approvals. Samples will be sent to National Association of Testing Authorities (NATA) accredited laboratories for PFAS analytical testing and results for the treated water will be compared against the *Synergy NSW EPA EPL #21225* (Each individual PFAS analyte and the sum of PFAS = <0.0002 ug/L). Following confirmation that the treated water is below discharge criteria, and approval from NSW EPA and TestSafe, the initial batch will be discharged. The treatment regime will then move into the operational treatment phase.

10.10 – Water Treatment Plant Operation

The water treatment operations shall be performed by experienced technicians. The technicians will monitor the incoming water quality and volume, filter sediment / contaminant loadings and water sample results as part of the ongoing operation and maintenance activities.

Synergy shall perform regular inspection and monitoring activities during operations to enable the overall effectiveness of the system to be assessed, and allow areas of underperformance to be identified so corrective actions can be taken to strengthen safeguards or improve outcomes.

During the operational phase water will be treated at approximately 2L/s with sampling undertaken on the untreated and treated water for PFAS

10.11 – Discharge of Treated Water

Synergy shall discharge to environment at the previously nominated discharge point as set out in the WTP & Discharge Location Plan and as described in the Discharge Impact Assessment.

Refer to Appendix 8 – WTP & Discharge Point Location Plan.

Refer to Appendix 9 – Discharge Impact Assessment.

The Mobile WTP discharge pump shall be governed using a variable frequency drive to ensure that the treated water is discharged at a flowrate of between 1-3L/s. The flow meter on the discharge line shall be monitored during discharge operations to ensure the permitted discharge rate is not exceeded.

Potential for erosion at the discharge point shall be minimised through the low discharge rate and discharging the treated water into a previously used location.

10.12 - Potential Non-Standard Operating Conditions

The Synergy Mobile WTP Mobile shall only be operated by Synergy WTP technicians between the hours of 7.00am to 4.00pm Monday to Friday, with no work on Saturdays, Sundays, Public Holidays or Rostered Days Off unless agreed with TestSafe.

Synergy WTP technicians shall be in attendance during all periods of operation to identify potential issues and non-standard operating conditions.

Synergy WTP technicians shall perform regular documented monitoring activities during periods of operation to ensure the system is working effectively and within standard operation. Specific infrastructure, plant and equipment for inspection are documented on the Mobile WTP Inspection Record. Should non-standard operating conditions be identified the Mobile WTP shall be tuned-off immediately and the Synergy Project Manager notified. Once the necessary corrective action has been implemented, and standard operating conditions restored, the Mobile WTP operation may resume following approval from the Synergy Project Manager.

The Mobile WTP has been designed with built in redundancy as a contingency in the event that non-standard influent is encountered.

11 – SAMPLING, TESTING, ANALYSIS & REPORTING

11.1 Overview

Sampling, monitoring and analysis of influent and treated water is undertaken to verify the performance of the Mobile Water Treatment Plant (WTP), demonstrate compliance with all relevant criteria, and ensure treated water discharged to the environment meets required limits.

Sampling is conducted in accordance with:

- Synergy's Sampling, Analysis & Quality Plan (SAQP);
- NATA-accredited laboratory requirements;
- Applicable licence and regulatory conditions; and
- Recognised environmental sampling standards.

The following subsections describe the sampling requirements specific to the TestSafe Londonderry WTP.

11.2 Sampling Regime

Monitoring of treated water is undertaken through a combination of composite sampling across the treatment period and a discrete grab sample at the end of each treatment interval.

a) Composite Sample (Three-Day Collection)

- One discrete treated-water sample is collected each operating day.
- Three consecutive daily discrete samples are combined to form a single composite sample, representing approximately 300 kL of treated water (based on the plant's typical daily throughput).
- The composite sample provides a representative profile of treated-water quality across the treatment period.

b) End-of-Period Grab Sample

- At the conclusion of each treatment period, defined as weekly or every 300 kL treated, whichever occurs first, a grab sample is collected from the treated-water outlet.
- This sample provides confirmation of polishing performance and supports ongoing verification of system stability.

11.3 Sampling Locations

Sampling is completed at the following points unless otherwise agreed:

- Influent (Feed) Water—collected from feed/balance tanks if influent characterisation is required.
- Treated Water (Discharge Point)—collected at the designated treated-water sampling valve prior to discharge.

Sampling locations are shown in Appendices 6 and 7 (Process Flow Diagram and WTP Layout).

11.4 Sampling Methodology

Field sampling is carried out by trained Synergy Water Services personnel and includes:

- Use of PFAS-appropriate fittings, tubing, and PPE (no fluoropolymer materials).
- Pre-rinsing of sample containers where required.
- Low-disturbance sample collection from dedicated taps or valved ports.
- Documentation of sampler, date, time, weather, operational conditions and flow rates.
- Completion of Chain-of-Custody (COC) forms.
- Storage and transport of samples on ice at ≤6°C until delivered to the NATA-accredited laboratory.

11.5 Analytical Requirements

All PFAS analysis is undertaken by a NATA-accredited laboratory using validated LC-MS/MS methods. The Required analyses includes:

- Sum of PFHxS + PFOS.
- Sum of PFAS (WA DER List).
- Total PFAS regulatory sums (EP231P).

Laboratory QA/QC (surrogates, spikes, blanks and internal checks) is managed by the laboratory in accordance with accreditation requirements.

11.6 Compliance Criteria

Treated water must comply with the discharge criteria specified in:

- The current Environment Protection Licence for the mobile treatment system; and
- Any project-specific performance requirements applicable to the site.

No treated water is discharged until laboratory results confirm full compliance with the relevant criteria.

11.7 Reporting Requirements

Routine Reporting

For each sampling period, Synergy compiles and maintains:

- Laboratory Certificates of Analysis (COAs).
- Treatment logs correlating sample timing with treated volumes.
- A summary of results against compliance criteria.

Quarterly Performance Reporting

A quarterly summary of operational performance is prepared, documenting:

- Treated volumes
- All PFAS analytical results
- Any deviations, maintenance events, or corrective actions
- Observations related to WTP stability and ongoing compliance

Incident Reporting

Any exceedance, anomaly, or operational issue with environmental consequence is reported and managed in accordance with Section 15 – Environmental Incident Management of this WTMP.

11.8 Record Keeping

All sampling and analysis records, including field notes, COCs, COAs, calibration logs and operational data, are maintained in accordance with:

- Synergy Records Management Procedure (WTMP Section 1.4), and
- Applicable regulatory documentation retention requirements (minimum five years).

12 – POTENTIAL ENVIRONMENTAL ASPECTS & IMPACTS

12.1 – Flora & Fauna

The Site is located adjacent to bush land, and therefore the following control measures shall be implemented to prevent potential flora and / or fauna disturbance as a result of the Works.

- Water treatment to be conducted in designated areas to prevent untreated water escaping site;
- Treatment operations to be supervised at all times by a suitably qualified operator; and
- Preserve vegetation on the Site or adjacent to the works, and use every precaution necessary to prevent damage.

12.2 – Pollution Prevention

The following control measures shall be implemented to prevent recovered contaminated water from cross-contaminating clean areas and / or being unlawfully discharged.

- Recovered waste water to be transferred to the WTP feed tanks using thick walled HDPE hoses and monitored during operation;
- All equipment is self contained/lidded to contain potential splashes, and direct them back into the receptacle, during the decanting process;
- Durable pipe used to connect water transfer and water treatment infrastructure;
- Water transfer pipe to be suitably protected from accidental damage in high traffic areas;
- Weatherproof warning labels affixed to Mobile WTP infrastructure valves to identify correct positioning (i.e. open / closed);
- Mobile WTP infrastructure inspection events to be performed daily during commissioning and operation;
- Potential erosion minimised at the discharge point through low discharge rate and discharging into a previously used area;
- Experienced personnel to operate the Mobile WTP;
- Commissioning period to be implemented followed by batch phase treatment;
- Sampling and analysis of the untreated and treated water to be performed for PFAS;
- Ensure that the recovered water is treated sufficiently to meet the approved criteria prior to discharge;
- Release of treated water is only permitted in accordance with the Synergy NSW EPA EPL #21225;
- Release of treated water is only permitted via the designated discharge point;
- Implement the requirements of the *Synergy – Sampling, Analysis and Quality Plan;*
- Ensure that a suitable spill kits remain readily available; and
- Ensure that the spill kits are regularly checked and kept fully supplied.

12.3 – Hazardous Substances & Dangerous Goods

The following control measures shall be implemented to prevent potential incidents involving the transportation, handling and storage of Hazardous Substances and Dangerous Goods causing environmental impacts such as groundwater or soil contamination on the Site as a result of the Works.

- Hazardous Substances and Dangerous Goods stored or used on site shall be recorded on the Chemical Register;
- Current SDS shall be kept readily available for all Hazardous Substances and Dangerous Goods;
- A risk assessment shall be completed for all Hazardous Substances and Dangerous Goods;
- Workers are to be trained and competent in the safe use, handling and storage of the Hazardous Substances and Dangerous Goods;
- Hazardous Substances and Dangerous Goods are to be transported, handled or stored in accordance with the applicable legislation, Standards and SDS;
- Hazardous Substances and Dangerous Goods must be stored in suitable containers;
- Hazardous Substances and Dangerous Goods containers must be clearly labeled;
- Hazardous Substances and Dangerous Goods to be stored in bunded chemical storage containers;
- Minimise Hazardous Substances and Dangerous Goods stored on the site through precise estimating, ordering and checking of stock / quantities;
- Ensure that a suitable spill kits remain readily available; and
- Ensure that the spill kits are regularly checked and kept fully supplied.

Synergy shall ensure that all Hazardous Substances / Dangerous Goods stored, transported, or used on the Site are recorded on the *Chemical Register* and that a current *Safety Data Sheet* from the product manufacturer / supplier is provided.

The *Chemical Register* and *Safety Data Sheets* are provided in the *Synergy – Construction Safety Management Plan.*

12.4 – Noise & Vibration

Treatment works will take place between 7.00am to 5.00pm Monday to Friday only unless otherwise agreed with TestSafe. The works location is in a rural area away from housing.

The following control measures shall be implemented during the Works to minimise potential noise and vibration impacts to sensitive receivers in the vicinity of the Site:

- Noise restricting devices to be fitted and functioning correctly on all vehicles and plant;
- Vehicles and plant to be turned off when not in use;
- Vehicles and plant to be maintained regularly and serviced as per manufacturer's specifications; and
- All WTP operations are electric utilising a silenced 30Kva generator

12.5 – Air Quality

The following control measures shall be implemented to prevent potential adverse impacts on air quality as a result of the Works.

- Plan works to prevent the unnecessary use of vehicles and plant;
- Drivers / operators instructed to operate vehicles and plant in a manner to avoid excessive engine revving etc.;
- Restricting vehicles to the designated traffic routes within the Site;
- Limiting vehicles speeds on the Site to 20km/h;
- Vehicles and plant to be turned off when not in use; and
- Vehicles and plant to be maintained regularly and serviced as per manufacturer's specifications; and
- The burning of any material is not permitted on the Site.

Any fires discovered on the Site shall be extinguished immediately is safe to do so, otherwise the emergency services will be contacted without delay.

12.6 - Non-Standard Operating Conditions

The following control measures shall be implemented to minimise potential for non-standard Mobile WTP operating conditions:

- The Synergy Mobile WTP Mobile shall only be operated by Synergy WTP technicians between the hours of 7.00am to 5.00pm Monday to Friday, with no work on Saturdays, Sundays, Public Holidays or Rostered Days Off unless agreed with TestSafe;
- Synergy WTP technicians shall be in attendance during all periods of operation to identify potential issues and non-standard operating conditions;
- Synergy WTP technicians shall perform regular documented monitoring activities during periods of operation to ensure the system is working effectively and within standard operation;
- Specific infrastructure, plant and equipment for inspection are documented on the Mobile WTP Inspection Record;
- Should non-standard operating conditions be identified the Mobile WTP shall be tuned-off immediately and the Synergy Project Manager notified. Once the necessary corrective action has been implemented, and standard operating conditions restored, the Mobile WTP operation may resume following approval from the Synergy Project Manager;
- Mobile WTP to be designed with built in redundancy as a contingency in the event that non-standard influent is encountered; and
- Regular sampling and reporting is undertaken to ensure discharge compliance.

13 – WASTE DISPOSAL

13.1 – Waste Minimisation Hierarchy

Synergy shall adopt the following 'Waste Minimisation Hierarchy' for the Works on the Site:

- Avoidance;
- Reuse;
- Recycling;
- Energy Recovery; and
- Deposits to Landfill.

13.2 – Potential Waste Streams

The predominant waste streams associated with the water treatment operations are as follows:

- Worker refuse;
- Miscellaneous products and materials packaging;
- Sludge;
- Treated water;
- Spent filtration media; and

13.2.1 – Worker Refuse

Synergy shall provide appropriate waste disposal receptacles to contain worker refuse, which shall be transferred into TestSafe bins on the Site for disposal at a suitably licensed waste facility.

13.2.2 - Miscellaneous Products & Materials Packaging

Waste packaging generated through the delivery of miscellaneous products and materials associated with the Works shall be returned with the delivery vehicle where practicable. Where this is not practicable Synergy are permitted to utilise TestSafe bins on the Site for the disposal of a limited amount of waste for disposal at a suitably licensed waste facility. Chemical containers are to be triple rinsed to ensure that they are clean before being placed in the waste receptacles.

13.2.3 – Treated Water

Following confirmation that the treated water is below discharge criteria, and approval from TestSafe water will be discharged to the discharge location i*n Appendix 8 WTP Location.*

13.2.4 – Spent Filtration Media

Synergy anticipates that the Mobile WTP filter media will be regenerated off-site rather than requiring disposal.

13.3 – Waste Tracking

Synergy shall maintain a *Materials Tracking Register* to document the following information and assist with the tracking of materials disposal:

- Material classification;
- Date and time materials left the Site;
- Transport company;
- Vehicle registration number;
- Destination;
- Quantity; and
- Tracking number.

Refer to Appendix 10 – Materials Tracking Register (SYN47).

Synergy shall provide copies of completed Materials Tracking Registers to the TestSafe Representatives including the following supplementary documentation where applicable:

- Corresponding waste classification documents; and
- Transport records and disposal records (including weighbridge dockets).

14 – EMERGENCY PREPAREDNESS AND RESPONSE

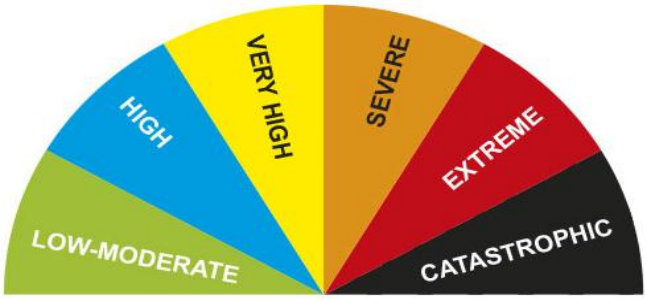
14.1 – Training for Emergency Preparedness and Response

Synergy shall deliver training in the site-specific emergency requirements to site personnel during the site induction process.

14.2 – Bushfire Hazards

The Fire Danger Rating (FDR) warns of the potential impact of a bushfire on any given day, based on forecast weather conditions. Synergy shall check the Fire Danger Rating, and for Bushfire Warnings and Alerts, prior to the commencement of work each day. Additional control measures may be required to be implemented or planned hot work activities temporarily suspended if conditions are considered too hazardous.

The FDR is as follows:



14.3 – Emergency Response Equipment

Synergy shall ensure that the following emergency response equipment is supplied, serviced and maintained in good working order, and remains easily accessible.

Details of Emergency Response Equipment:		
First aid kit: Type B Construction Kit	**Location:**	1 x WTP Storage Container
Fire Extinguishers: 4.5kg A:B:E Dry Powder	**Locations:**	1 x WTP Storage Container 1 x Generator 1 x Spare for Remote Activities
Spill kit: Multi-Purpose 240ltr	**Location:**	1 x WTP Storage Container 1 x Water Transfer Tanks

Fire

Synergy fire extinguishers shall be inspected every 6 months by a competent person to confirm that they are fit for use and display a current test tag.

First Aid

Synergy shall maintain a 'Type B' first aid kit, suitable for construction works at which less than 25 persons work, for immediate response. The kit contents shall be checked weekly to confirm the contents are correct and have not expired.

Spills & Leaks

Synergy spill kits shall be fully stocked with the appropriate spill response supplies which will include absorbent socks, pads and granules, and clay plugging compound. The kit contents shall be checked weekly to confirm the contents are correct and have not expired.

15 – ENVIRONMENTAL INCIDENT MANAGEMENT

15.1 – Emergency Action

Workers and subcontractor personnel who witness an environmental event or near miss incident should immediately notify the Synergy Project Manager and implement the Synergy Pollution Incident Response Management Plan to minimise the impact of the environmental incident where applicable. The Synergy Project Manager contact the emergency services if the incident presents an immediate threat to human health or property.

15.2 – Notifiable Pollution Incident

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in Section 147 of the *Protection of the Environment Operations Act* as:

- It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and
- Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Pollution incidents shall be reported immediately to the following agencies:

- NSW Environment Protection Authority.

000 shall be called if the incident presents and immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

15.3 – Non-Notifiable Environmental Incident

Synergy shall notify the TestSafe Representative of all other non-notifiable environmental incidents within 24 hours.

15.4 – Synergy Incident Reporting, Investigation & Corrective Action

Synergy shall complete an Incident Report for all environmental incidents and near miss events.

The Synergy Incident Report (Part A) shall be completed by the Synergy Project Manager, or by a witness to the event, which shall be submitted to the Synergy EHSQ Manager and the TestSafe Representative, as soon as practicable following the event.

The Synergy EHSQ Manager shall liaise with the Synergy Project Manager and others involved with the incident to determine the root cause and identify the corrective action required to prevent reoccurrence. The focus shall be on identifying system deficiencies rather than apportioning blame. The Synergy EHSQ Manager will record the corrective action required, nominate a person responsible for its implementation and specify an appropriate timescale on the Incident Report (Part B).

The Synergy EHSQ Manager shall allocate an 'Event Number' for tracking purposes and record the incident on the Corrective Action Register to monitor implementation of the corrective action.

The Incident Report with Parts A and B completed shall be issued to the nominated worker and / or subcontractor personnel responsible for its implementation. The nominated person is required to sign and date the Incident Report (Part C) once the corrective action has been implemented. The Synergy Project Manager shall confirm that the corrective action has been implemented by countersigning the Incident Report (Part C).

The Synergy Project Manager shall forward a copy of the Incident Report with Parts A, B and C completed to the Synergy EHSQ Manager and the TestSafe Representative for review. Once all parties are satisfied, the event will be closed-out on the Corrective Action Register.

The *Incident Report* form is provided in the *Synergy – EHSQ Management Plan*

16 – INSPECTION, MONITORING & REPORTING

16.1 – Inspection

Synergy shall ensure that inspection and monitoring activities are completed during the water treatment commissioning and operation to enable the overall effectiveness of the system to be assessed, and allow areas of underperformance to be identified, so corrective actions can be taken to strengthen safeguards or improve outcomes.

Specific infrastructure, plant and equipment for inspection are documented on the Mobile WTP Inspection Record.

Refer to Appendix 11 – Mobile WTP Inspection Record.

Synergy personnel shall record the results of the inspection and monitoring activities on the Mobile WTP Inspection Record, which shall be completed daily during the commissioning process and during periods of operation.

16.2 – Monitoring

The EHSQ Manager / Coordinator shall complete regular project audits, to evaluate the implementation of Synergy project documents in the workplace, which are to be documented on the *EHSQ Audit Report*. The audits shall involve a 'desk based' examination of the currency and completeness of project document with 'site based' investigations performed to appraise practical application.

16.3 – Stakeholder Inspections & Audits

Synergy shall facilitate inspections of the Works, the Site and project plan compliance audits by TfNSW representatives and other project stakeholders as required.

16.4 – Reporting

Synergy shall provide TestSafe with a Report on completion of the commissioning period, containing sample results and analytical data, to substantiate approval for the initial treatment batch to be discharged.

Synergy shall provide TestSafe with a Report on completion of treatment detailing each treatment batch thereafter, containing sample results, analytical data and discharge volumes.

Synergy shall provide TestSafe with an end of project Performance Report on completion of the Works.

Synergy shall provide the NSW EPA with the appropriate reporting where required.

Appendix B – Certificates of Analyses

SYNERGY RESOURCE MANAGEMENT PTY LIMITED SYNERGYRESOURCE.COM | INFO@SYNERGYRESOURCE.COM 1300 790 393 ABN 57 120 757 299 | ACN 120 757 299

AUSTRALIAN CAPITAL TERRITORY
6 BARRON STREET
DEAKIN ACT 2600

NEW SOUTH WALES
1/2 FORGE PLACE
NARELLAN NSW 2567

QUEENSLAND
LEVEL 8, 2 CORPORATE COURT
BUNDALL QLD 4217

TASMANIA
LEVEL 1, 99 LIVERPOOL STREET
HOBART TAS 7000

NORTHERN TERRITORY
4 GARDENIA STREET
NIGHTCLIFF NT 0810

CERTIFICATE OF ANALYSIS

Work Order	: **ES2529188**	Page	: 1 of 6
Amendment	: **1**		
Client	: **SYNERGY RESOURCE MANAGEMENT**	Laboratory	: Environmental Division Sydney
Contact	: MR JEREMY TOSSWILL	Contact	: Customer Services ES
Address	: 1/2 Forge Place Narellan 2567	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 1300 790 393	Telephone	: +61-2-8784 8555
Project	: SRM493	Date Samples Received	: 18-Sep-2025 16:20
Order number	: ----	Date Analysis Commenced	: 19-Sep-2025
C-O-C number	: ----	Issue Date	: 03-Oct-2025 13:58
Sampler	: ----		
Site	: ----		
Quote number	: ES25SYNRES0002		
No. of samples received	: 3		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP231X-SUT: Poor matrix spike recovery due to matrix interferences.
- Amendment (03/10/2025): This report has been amended as a result of a request to change sample identification numbers (IDs) received from Reece Gray on 03/10/2025, for samples ES2528783-001 and 002. All analysis results are as per the previous report.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW01	SRM493_WTP_DW02	----	----	----
				Sampling date / time	18-Sep-2025 00:00	18-Sep-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2529188-001	ES2529188-002	--------	--------	--------
					Result	Result	----	----	----
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit		**7.63**	**7.74**	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.0020	µg/L		<0.0020	<0.0020	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		**0.0009**	<0.0005	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	µg/L		**0.0010**	<0.0002	----	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		<0.0005	<0.0005	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.0020	µg/L		<0.0020	<0.0020	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW01	SRM493_WTP_DW02	----	----	----
				Sampling date / time	18-Sep-2025 00:00	18-Sep-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2529188-001	ES2529188-002	--------	--------	--------
					Result	Result	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		<0.0005	<0.0005	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		<0.001	<0.001	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	----	----	----
EP231P: PFAS Sums									
^ **Sum of PFHxS and PFOS**	355-46-4/1763-23-1	0.0002	µg/L		**0.0019**	<0.0002	----	----	----
^ **Sum of PFAS (WA DER List)**	----	0.0002	µg/L		**0.0019**	<0.0002	----	----	----
^ **Sum of PFAS**	----	0.0002	µg/L		**0.0019**	<0.0002	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW01	SRM493_WTP_DW02	----	----	----
				Sampling date / time	18-Sep-2025 00:00	18-Sep-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2529188-001	ES2529188-002	--------	--------	--------
					Result	Result	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**101**	**101**	**----**	**----**	**----**
13C8-PFOA	----	0.0005	%		**103**	**100**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

CERTIFICATE OF ANALYSIS

Work Order	: **ES2529365**	Page	: 1 of 6
Client	: **SYNERGY RESOURCE MANAGEMENT**	Laboratory	: Environmental Division Sydney
Contact	: MR JEREMY TOSSWILL	Contact	: Customer Services ES
Address	: 1/2 Forge Place Narellan 2567	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 1300 790 393	Telephone	: +61-2-8784 8555
Project	: SRM493	Date Samples Received	: 19-Sep-2025 16:05
Order number	: ----	Date Analysis Commenced	: 22-Sep-2025
C-O-C number	: ----	Issue Date	: 25-Sep-2025 10:55
Sampler	: Anu Ramaiah		
Site	: ----		
Quote number	: ES25SYNRES0002		
No. of samples received	: 2		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW03	SRM493_WTP_DW04	----	----	----
				Sampling date / time	19-Sep-2025 00:00	19-Sep-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2529365-001	ES2529365-002	--------	--------	--------
					Result	Result	----	----	----
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit		**7.53**	**7.78**	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.0020	µg/L		<0.0020	<0.0020	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	µg/L		<0.0002	<0.0002	----	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		<0.0005	<0.0005	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.0020	µg/L		<0.0020	<0.0020	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW03	SRM493_WTP_DW04	----	----	----
				Sampling date / time	19-Sep-2025 00:00	19-Sep-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2529365-001	ES2529365-002	--------	--------	--------
					Result	Result	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		<0.0005	<0.0005	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		<0.001	<0.001	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	----	----	----
EP231P: PFAS Sums									
^ **Sum of PFHxS and PFOS**	355-46-4/1763-23-1	0.0002	µg/L		<0.0002	<0.0002	----	----	----
^ **Sum of PFAS (WA DER List)**	----	0.0002	µg/L		<0.0002	<0.0002	----	----	----
^ **Sum of PFAS**	----	0.0002	µg/L		<0.0002	<0.0002	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW03	SRM493_WTP_DW04	----	----	----
				Sampling date / time	19-Sep-2025 00:00	19-Sep-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2529365-001	ES2529365-002	--------	--------	--------
					Result	Result	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**102**	**99.5**	**----**	**----**	**----**
13C8-PFOA	----	0.0005	%		**99.3**	**99.8**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

CERTIFICATE OF ANALYSIS

Work Order	: **ES2531046**	Page	: 1 of 5
Client	: **SYNERGY RESOURCE MANAGEMENT**	Laboratory	: Environmental Division Sydney
Contact	: MR JEREMY TOSSWILL	Contact	: Customer Services ES
Address	: 1/2 Forge Place Narellan 2567	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 1300 790 393	Telephone	: +61-2-8784 8555 :
Project	: SRM493	Date Samples Received	22-Sep-2025 18:25 :
Order number	: ----	Date Analysis Commenced	22-Sep-2025
C-O-C number	: ----	Issue Date	:25-Sep-2025 15:13
Sampler	: Anu Ramaiah		
Site	: ----		
Quote number	: ES25SYNRES0002		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

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Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW005	SRM493_WTP_DW006	SRM493_WTP_DW007	----	----
				Sampling date / time	22-Sep-2025 00:00	22-Sep-2025 00:00	22-Sep-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2531046-001	ES2531046-002	ES2531046-003	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.0020	µg/L		<0.0020	<0.0020	<0.0020	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.0020	µg/L		<0.0020	<0.0020	<0.0020	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231C: Perfluoroalkyl Sulfonamides									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW005	SRM493_WTP_DW006	SRM493_WTP_DW007	----	----
				Sampling date / time	22-Sep-2025 00:00	22-Sep-2025 00:00	22-Sep-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2531046-001	ES2531046-002	ES2531046-003	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	<0.001	----	----
EP231P: PFAS Sums									
^ **Sum of PFHxS and PFOS**	355-46-4/1763-23-1	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
^ **Sum of PFAS (WA DER List)**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
^ **Sum of PFAS**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**107**	**115**	**109**	----	----
13C8-PFOA	----	0.0005	%		**102**	**103**	**101**	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

CERTIFICATE OF ANALYSIS

Work Order	: **ES2531048**	Page	: 1 of 5
Client	: **SYNERGY RESOURCE MANAGEMENT**	Laboratory	: Environmental Division Sydney
Contact	: MR JEREMY TOSSWILL	Contact	: Customer Services ES
Address	: 1/2 Forge Place Narellan 2567	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 1300 790 393	Telephone	: +61-2-8784 8555
Project	: SRM493	Date Samples Received	: 23-Sep-2025 18:25
Order number	: ----	Date Analysis Commenced	: 24-Sep-2025
C-O-C number	: ----	Issue Date	: 24-Sep-202515:12
Sampler	: Anu Ramaiah		
Site	: ----		
Quote number	: ES25SYNRES0002		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- Analytical Results
- Surrogate Control Limits

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW

General Comments

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LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW008	SRM493_WTP_DW009	SRM493_WTP_DW010	----	----
				Sampling date / time	23-Sep-2025 00:00	23-Sep-2025 00:00	23-Sep-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2531048-001	ES2531048-002	ES2531048-003	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.0020	µg/L		<0.0020	<0.0020	<0.0020	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.0020	µg/L		<0.0020	<0.0020	<0.0020	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231C: Perfluoroalkyl Sulfonamides									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW008	SRM493_WTP_DW009	SRM493_WTP_DW010	----	----
				Sampling date / time	23-Sep-2025 00:00	23-Sep-2025 00:00	23-Sep-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2531048-001	ES2531048-002	ES2531048-003	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	<0.001	----	----
EP231P: PFAS Sums									
^ **Sum of PFHxS and PFOS**	355-46-4/1763-23-1	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
^ **Sum of PFAS (WA DER List)**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
^ **Sum of PFAS**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**111**	**111**	**106**	----	----
13C8-PFOA	----	0.0005	%		**101**	**103**	**102**	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

CERTIFICATE OF ANALYSIS

Work Order	: **ES2531049**	Page	: 1 of 5
Client	: **SYNERGY RESOURCE MANAGEMENT**	Laboratory	: Environmental Division Sydney
Contact	: MR JEREMY TOSSWILL	Contact	: Customer Services ES
Address	: 1/2 Forge Place Narellan 2567	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 1300 790 393	Telephone	: +61-2-8784 8555
Project	: SRM493	Date Samples Received	: 24-Sep-2025 18:25
Order number	: ----	Date Analysis Commenced	: 24-Sep-2025
C-O-C number	: ----	Issue Date	:29-Sep-2025 15:13
Sampler	: Anu Ramaiah		
Site	: ----		
Quote number	: ES25SYNRES0002		
No. of samples received	: 3		
No. of samples analysed	: 3		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SRM493_WTP_DW011	SRM493_WTP_DW012	SRM493_WTP_DW013	----	----
			Sampling date / time	24-Sep-2025 00:00	24-Sep-2025 00:00	24-Sep-2025 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2531049-001	ES2531049-002	ES2531049-003	--------	--------
				Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.0020	µg/L	<0.0020	<0.0020	<0.0020	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	µg/L	<0.0002	<0.0002	<0.0002	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.0020	µg/L	<0.0020	<0.0020	<0.0020	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	<0.0005	<0.0005	----	----
EP231C: Perfluoroalkyl Sulfonamides								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW011	SRM493_WTP_DW012	SRM493_WTP_DW013	----	----
				Sampling date / time	24-Sep-2025 00:00	24-Sep-2025 00:00	24-Sep-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2531049-001	ES2531049-002	ES2531049-003	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	<0.001	----	----
EP231P: PFAS Sums									
^ **Sum of PFHxS and PFOS**	355-46-4/1763-23-1	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
^ **Sum of PFAS (WA DER List)**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
^ **Sum of PFAS**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**107**	**106**	**108**	----	----
13C8-PFOA	----	0.0005	%		**102**	**99.2**	**101**	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

CERTIFICATE OF ANALYSIS

Work Order	: **ES2531052**	Page	: 1 of 5
Client	: **SYNERGY RESOURCE MANAGEMENT**	Laboratory	: Environmental Division Sydney
Contact	: MR JEREMY TOSSWILL	Contact	: Customer Services ES
Address	: 1/2 Forge Place Narellan 2567	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 1300 790 393	Telephone	: +61-2-8784 8555
Project	: SRM493	Date Samples Received	: 25-Sep-2025 18:25
Order number	: ----	Date Analysis Commenced	: 25-Sep-2025
C-O-C number	: ----	Issue Date	: 26-Sep-2025 15:12
Sampler	: Anu Ramaiah		
Site	: ----		
Quote number	: ES25SYNRES0002		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SRM493_WTP_DW014	SRM493_WTP_DW015	SRM493_WTP_DW016	SRM493_WTP_DW017	----
			Sampling date / time	25-Sep-2025 00:00	25-Sep-2025 00:00	25-Sep-2025 00:00	25-Sep-2025 00:00	----
Compound	CAS Number	LOR	Unit	ES2531052-001	ES2531052-002	ES2531052-003	ES2531052-004	--------
				Result	Result	Result	Result	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.0020	µg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	µg/L	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.0020	µg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	----
EP231C: Perfluoroalkyl Sulfonamides								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SRM493_WTP_DW014	SRM493_WTP_DW015	SRM493_WTP_DW016	SRM493_WTP_DW017	----
				Sampling date / time	25-Sep-2025 00:00	25-Sep-2025 00:00	25-Sep-2025 00:00	25-Sep-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2531052-001	ES2531052-002	ES2531052-003	ES2531052-004	--------
					Result	Result	Result	Result	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	<0.0005	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	<0.001	<0.001	----
EP231P: PFAS Sums									
^ **Sum of PFHxS and PFOS**	355-46-4/1763-23-1	0.0002	µg/L		<0.0002	<0.0002	<0.0002	<0.0002	----
^ **Sum of PFAS (WA DER List)**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	<0.0002	----
^ **Sum of PFAS**	----	0.0002	µg/L		<0.0002	<0.0002	<0.0002	<0.0002	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**103**	**110**	**104**	**108**	----
13C8-PFOA	----	0.0005	%		**100**	**99.1**	**99.1**	**99.6**	----

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120