



Reinventing Fire Suppression

CERTIFICATE OF COMPLETION & CONFORMITY

Rev 22.1

I, Phil Morris of Fire Safety Equipment Pty Limited hereby certify that we have completed a FirePro Condensed Aerosol Fire Suppression system in accordance with AS5062-2022, in accordance with the manufacturers design documentation.

Name of Client : Penske Australia
Location of Equipment : Penske – Chipping Norton
Description of Protected Area : AUSGRID BESS 2 – SN.97261601029

Protected Area	Agent Quantity	Number of Containers	Agent Application Density	Applicable Drawing(s)
Battery Enclosure	2000	4	130g/m ³	

Maximum Leakage Area – per Design Calculation 0.10m²

Shutdown installed YES with delay period for shutdown 0 Seconds

Variations from this Standard previously agreed to by the authority having jurisdiction are attached (clause references and related variations included).

Completed by:

Name: P Morris

Signature:

Company: Fire Safety Equipment Pty Ltd

Date

April 24, 2024

Completed:



FirePro System Commissioning Mobile Plant

Rev 22.1

Risk: **Battery Compartments**

Reference: **AUSGRIS BESS 2 SN.97261601029**

This system has been installed in accordance with manufacturer's design documentation and AS5062

INSPECTION		
	Tasks	Completed
1.	Location of FirePro Aerosol Generators <ul style="list-style-type: none"> Ensure units are mounted in appropriate location(s). Are the brackets securely mounted. 	YES
2.	Detection Systems <ul style="list-style-type: none"> Installation of Detection is appropriate for the machine. Detection is securely mounted. <p><i>NOTE : Detection may initiate fire suppression automatically.</i></p>	YES YES
3.	Cabling requirements <ul style="list-style-type: none"> Has fire rated and shielded cable used. Cable separated from hydraulic hoses and electrical cables. Cable fixings and cable path suitable (Conduit where necessary). 	YES YES YES
4.	Control Panel <ul style="list-style-type: none"> Panel located in an appropriate location and is it securely mounted. Power connection to the panel is suitable dedicated supply. Backup battery installed. 	YES YES YES
5.	Signage and Alarms <ul style="list-style-type: none"> Are appropriate signs / sounder strobes installed. 	YES
6.	Equipment Shutdown <ul style="list-style-type: none"> Shutdown installed. Shutdown delay in accordance with requirements. 	YES YES
COMMISSIONING		
1.	FIP Programming <ul style="list-style-type: none"> Programming of Panel meets client/site requirements. Check Panel for fault(s). 	YES YES
2.	Activation Testing <ul style="list-style-type: none"> Activation testing to be performed in accordance with the procedures specific to the FIP installed. Ensure FirePro Test Simulator Modules have activated Ensure and Alarms have activated. Ensure shut down have activated. 	YES YES YES YES
3.	Fault Monitoring <ul style="list-style-type: none"> Disconnect cable from FirePro generator - fault should register on the FIP. Where multiple FirePro units are installed, this should done separately to test each unit. Remove detector head from base - fault must register on FIP. 	YES YES
4.	Detection Testing <ul style="list-style-type: none"> ENSURE the FirePro Test Simulator Modules installed for all FirePro Aerosol Generators. Place detectors into alarm. Ensure Visual/Aural Alarms have activated. Where multiple detectors are installed, each detector should be individually tested.. 	YES

Inspections all found to be compliant - Tests all completed.

Completed by :

Name: P Morris

Signature: 

Company: Fire Safety Equipment Pty Ltd

Date Completed: April 24, 2024

Vehicle Hazard Analysis			Page ..1.... of ..1.....
Job Description:	Job Address:	Job Area:	Date:
AUSGRID BESS 2 SN. 97261601029	Penske – Chipping Norton	Battery Compartments	April 24, 2024

IMPORTANT : The requirements of Standards do not override the regulatory authorities or OH & S Legislation

Risk Assessment shall be carried out by competent personnel, such people include the Owner, Operator, Maintenance Personnel, Supplier, Insurer and other persons where applicable. The hazard analysis should be updated continuously at intervals (within 5 years) or when any changes are made to the equipment, the operating environment, the operator or if an incident, such as a fire or collision, occurs.

Type of Hazard	Class A	X	Class B	X	Class E	X	Class D	X
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Determine the possible fire scenarios. This includes: What can happen? When and where can it happen? Why and how can it happen? Examples of information that should be included in this section is fuel sources, ignition sources, normal operational conditions, foreseeable misuse and the effects of possible fires. In vehicles, areas in which possible fire scenarios can occur include but are not limited to;

Risk Area	Addressed by System
Turbo chargers	NA
Fuel systems (Incl. piping, hoses, pumps valves & injectors close to ignition sources)	NA
Cooling systems (including hydraulics, engine and transmission),	NA
Exhaust systems	NA
Hydraulics systems (including piping, hoses, pump and valves)	NA
Lubrication systems (including engine and transmission systems and grease systems)	NA
Braking systems (including retarders, park brakes and service brakes)	NA
Electrical systems (including alternators, generators, batteries, wiring and switch gear)	YES
Conveyor belts	NA
Areas where combustible materials can accumulate (including belly plates, engine valleys and wheel arches)	NA

Quantify the risk exposure by determining the likelihood and consequences of the fire scenarios. This shall take into account normal operating conditions as compared to intended operating conditions. This includes, poor maintenance practices, operator use/misuse, inexperienced operators, use of oils and greases, equipment interaction, wear and tear of components and the operating environment (for example; road conditions, equipment speeds or time of day). The analysis should include the following, where applicable;

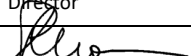
- Health and safety of the operator / passengers
- Production loss,
- Property loss
- Health and safety of people in the vicinity
- Environmental damage.

Prioritize the possible fire risks based upon the likelihood of a fire event occurring and the potential damage caused. This should take into account factors including; the availability of firefighting equipment and personnel, egress points, means of fire detection and the availability and response time of external support. If the results of the evaluation indicate an unacceptable level of risk exists, then fire risk reduction measures should be undertaken.

What Can Happen? Determine the possible fire scenarios. Include When, Where and How it can happen. Include drawings/schematics.	How likely is this to happen? Quantify the risk exposure by determining the likelihood and consequences of the fire scenarios.	Prioritise the possible fire risks. What risk needs to be addressed first, and how? What existing controls are in place?
Ignition of Lithium Batteries during operation.	Unlikely – electrical safety control in place. Battery management System controls.	Ensure proper maintenance cycle. Complete machine shutdown for any fire event
Environmental fire involving the machine	Unlikely	Site risk assessment to be performed on placement of machine and specific use.

Fire System Design Specification

Fire Fighting Agent	FirePro Condensed Aerosol
Detection System	Linear Heat Detection Cable 185degC
Control System	FP-08451
Shutdown Protocols	Shutdown on Alarm with 0 Sec Delay
Operating Limitations	Site risk assessment to be conducted by operators

Hazard Analyst:	P Morris	Hazard Analyst:		Site Supervisor:	
Position:	Director	Position:		Position:	
Signature:		Signature:		Signature:	