**INSPECTION, TEST, VERIFICATION & STATUS REPORT**

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| **ITP Description:** | Diesel Fire Pumpsets Installation and Commissioning | **Revision** |  | **SYMBOLS FOR OPERATION**  A-APPROVAL / W-WITNESSED / T-TEST / C- CERTIFICATE / H-HELD / G-GENERAL / I-INSPECTED  GM Fire: Onsite Representative (GMR) Principle Contractor: (PC)  Consultant: (CS) Client: (CL) |
| **ITP Number:** | GMF-ITPS-016 | **Prepared By** | Drew Brooks |
| **Trade:** | Fire Services | **Signature** |  |
| **Project Number:** |  | **Approved By** | James Pretty |
| **Project Name:** |  | **Signature** |  |
| **Project Address:** |  | **Date** |  |

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| **Hold Point Details** | | | | | |
| Hold Point Required:  Yes | | |  No |  Other: |  |
| GM Sign Off | | Name: | | | Signature: |
| PC Sign Off | | Name: | | | Signature: |
| CS Sign Off | | Name: | | | Signature: |
| **Site Specific Details** | | | | | |
| Frequency of inspection and testing: | | |  Level |  Area |  Other: |
| Building: |  | | | | |
| Level: |  | | | | |
| Area: |  | | | | |

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| **ITEM** | **DESCRIPTION OF ACTIVITIES** | **ACCEPTANCE CRITERIA SPECIFIED** | **COMMISSIONNIG CODES AND REQUIRED DOCUEMNTATION** | **DRAWING**  **REFERENCE**  **NUMBER** | **QUALITY CONTROL** | **PERFORMED AND/OR WITNESSED BY:** | | | | **DATE** |
| **GM** | **PC** | **CS** | **CL** |
| 1 | Check location of pumpset - in a  position that is protected from falling debris, and vehicular and mechanical damage | AS2941.1-2013 – Section 11 Installation | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 2 | Check clearance of pumpsets - For ongoing inspection and testing, a clearance of not less than 1.0 m shall be provided  around the perimeter of a complete pump assembly; | AS2941.1-2013 – Section 11 Installation | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 3 | Check clearence of pumpset - for multiple pumpset installations, a  clearance of not less than 600 mm between each of the installed pumps shall be provided | AS2941.1-2013 – Section 11 Installation | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 4 | Check elevations - Multiple pumpsets shall be installed with the centre-line of all suction pipes at the same elevation. If the pumps are to be installed at different elevations, the elevated pump shall be installed on a properly constructed mezzanine floor with head clearance of minimum 2.1 m  to the underside on both levels | AS2941.1-2013 – Section 11 Installation | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 5 | Check Plinth - Pumpset baseplates shall be mounted on concrete plinths with a height not less than  150 mm above the floor.  For fixing purposes, the concrete plinth shall extend 150 mm past the edge of the baseplate  on all four sides. | AS2941.1-2013 – Section 11 Installation | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| **PRE COMMISSIONING CHECK LIST** | | | | | | | | | | |
| 6a | Check the –  Check the cooling supply system | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 6b | Check the –  Check engine fuel supply | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 6c | Check the –  coupling alignment to ensure that the unit is aligned within the manufacturer’s specified tolerance | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 6d | Check the - direction of rotation. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 6e | Check –  Engine lubricating oil is at the correct level.  Check –  the battery electrolyte level and the battery leads and connections.  Check – exhaust system is intact | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 6f | Ensure –  pump is primed and that lines are clear, valves correctly set (open, closed, or adjusted to required pressure), and that water is available. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 6g | Isolate –  all other water supplies to the fire protection systems, such as the automatic pressure maintenance pump and any other compression-ignition engine driven pumps in the system. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | i |  |  |  |  |  |
| **PUMP COMMISSIONING CHECKLIST** | | | | | | | | | | |
| 7a | Record –  For automatic starting pumpsets, record the pressure in the system at which the pump starts automatically. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | T |  |  |  |  |  |
| 7b | Record –  Engine Oil Pressure | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | T |  |  |  |  |  |
| 7c | Check –  Coolant Flow is correct | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 7d | Check –  That the fan is rotating and all fan belts are intact | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | I |  |  |  |  |  |
| 7e | Record –  pump shut-off pressure. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | T |  |  |  |  |  |
| 7f | Isolate –  the flow meter, partially open the test valve, and flush to remove any debris or foreign matter; open any meter-isolating valves, open the test valve, and record pump delivery gauge pressure when approximately full load flow is indicated on the flow meter. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | T |  |  |  |  |  |
| 8 | Run the pump for 30 min at maximum flow and record the following:  (i) Suction and delivery pressures.  (ii) Engine running temperature, which shall be within the engine manufacturer’s recommended limits.  (iii) Engine oil pressure, which shall be within the engine manufacturer’s limits.  (iv) Air temperature at pumpset.  (v) Discharge pressure at three other flow rates between shut-off and maximum flow, one of which shall be at the duty flow rate.  (vi) Check that the requirements of Clause 9.3.6.2 are complied with by holding the engine shutdown mechanism closed and simulating an automatic start signal until the engine has attempted to start for five automatic starting cycles. On the sixth starting cycle, return the engine shutdown mechanism to its normal starting position and check if the engine starts immediately. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | T |  |  |  |  |  |
| 8a | During the operations in Item (h)—  (A) periodically check temperature of the bearings and stuffing box leakage  and note any abnormality;  (B) check that all alarms and indicators, both visual and aural, have been  activated; and  (C) check that alarms and indicators, both visual and aural, revert to normal  stand-by status when pump is stopped  If the pump failed to start alarms that are fitted on the pump fire pump controller and  at the remote station, check that these alarms operate both aurally and visually.  (j) Shut down and restore starting mechanism to stand-by status.  (k) Restore power supply to the electric pumps and check correct status of indicators. | AS2941.1-2013 – Section 12 | W5.2 State of the System   Pass |  | T |  |  |  |  |  |