

2024

Inspection of Automatic Sprinkler System

ASIB



Inspection of Automatic Sprinkler System

East London Industrial Development
Zone - Estate Pump House

Complete

Client/Site Name

East London Industrial Development Zone - Estate Pump House

Billing Address

East London Industrial Development Zone SOC Ltd P O Box 5458
GREENFIELDS
5208

Attention:

Mteteleli Zantsi
Camagwini Ngxokolo-Nomatye

Document No

UNC.9004

Prepared by

Keith van Onselen

Conducted on

08.05.2024 09:22 SAST

Site Location

East London Industrial
Development Zone (ELIDZ) East
London

Disclaimer

We have pleasure in attaching our inspector's report.

Whilst every care is taken in the preparation of the report which describes the conditions as found, such report is not a guarantee carrying responsibility for results and neither this Company nor any of its employees or agents shall be liable for any loss or damage of whatsoever nature and howsoever caused, (whether by actual or alleged negligence or otherwise), in any way arising out of the acts or omissions of the Company and/or its employees or agents aforesaid.

The report is based upon the visual inspection of the external condition of the equipment where accessible without having to provide scaffolding, ladders, staging, lighting and not requiring the removal or displacement of any temporary or permanent structure, fitting or fixture.

If there are any points arising on which you require clarification, kindly communicate with the undersigned. Assuring you of our best attention at all times.

Confidentiality

In order to maintain the integrity and credibility of the inspection processes and to protect the parties involved, it is understood that the inspectors will not divulge to unauthorized persons any information obtained during this inspection unless legally obligated to do so.

Yours faithfully,

THE AUTOMATIC SPRINKLER INSPECTION BUREAU (PTY) LIMITED

A handwritten signature in black ink, appearing to read 'Nico van Loggerenberg', written in a cursive style.

Nico van Loggerenberg
Managing Director

1. Report Summary

THE AUTOMATIC SPRINKLER INSPECTION BUREAU (PTY) LIMITED



REGISTRATION NUMBER: 1970/010833/07

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INDEPENDENT
THIRD PARTY
INSPECTION AND
ADVISORY
SERVICE SINCE
1970

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Code

B - Full Protection, Clearance
Certificate Issued

Please Note:

The Clearance Certificate is issued subject to the items in the report being attended to.

Standard

12th Edition

ASIB Contract No

UNC.9004

Client Order No

PO-004203

Was the sprinkler system design in order

Yes

Report forces response to this. Ignore it as this aspect of the report is not applicable. Design details (Hydraulics, Block Plans etc.) are not contemplated herein.

Was the water supplies in order

Yes

Was the pump room in order

Yes

Refer to Pump Room - Section 6.

Was the installation control valves in order

Not Inspected

Was the storage in order

Yes

Report forces response to this. Ignore it as this aspect of the report is not applicable. Design details (Hydraulics, Block Plans etc.) are not contemplated herein.

2. Hand Fire Appliances

Hand Fire Appliances - One unit per 100 m² of floor area.

Clear access to the hand fire appliances must be maintained at all times.

3. Occupancy & Storage Guidance

Percentage Hazard.

% Ordinary Hazard	0 From 0 to 100
-------------------	--------------------

% High Hazard	100 From 0 to 100
---------------	----------------------

Stack height signs not less than 500 mm by 500 mm in size must be prominently displayed at the maximum level of the allowable storage height in all storage and process risk areas.

5. Water Supplies

Town Main - Flow Test Results

Town Main Diameter (mm)

100

Street / Road

Umsimbithi Road
East London

Flow Recorded in Flow Test (l/min)

In excess of 1100 l/min

► Water Stored on Site.

Yes



Photo 1



Photo 2

Add Water Storage Tanks

Storage Tanks

Storage Tanks 1

Water Storage Tanks (Specify)

Pumped Water Supply - Suction
Tanks

5.1 Inspection Hatches Accessible

Yes

5.2 Tank Infill

Recorded



Photo 3

Infill Rate (l/min)

In excess of 1100 l/min

5.3 Tank Information Plate Installed

Yes



Photo 4

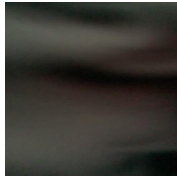


Photo 5

Tank Detail

Name of Supplier

SBS Tanks

Name of Installer

SBS Tanks

► 50% or 100% Sub-Divided

50% Sub-Divided

► Tank Type

Bladder

Dimensions Circular

9,86m x 8,34m high

Vortex Inhibitor

Yes

Dedicated or Combined Tank

Dedicated

5.4 Foundation Type

Separate

Flexible Coupling Installed on Suction Line

Yes

5.6 Suction Isolating Valves Secured in the Open Position

Yes

5.7 Tank Suction Piping Correctly Supported

Yes

5.8 Infill Isolating Valves Secured in the Open Position.

Yes

5.9 Drain valves secured in the Closed Position.

Yes

5.10 Flanges / Equipment Short Bolted

Yes



Photo 6

We recommend that the bolts for these flanges be removed and replaced with the correctly sized bolts so as to ensure that at least two full thread pitches past the chamfer protrude beyond the nut.

5.11 Loose / Missing Bolts, Nuts & Washers

No

Non - Compliance

Recommendation

6. Pump Room

Pump Installed on Site

Yes



Photo 7



Photo 8



Photo 9



Photo 10

Add Pump House

Pump House

Pump House 1

Pump House Location

Umsimbithi Road

6.1 Pump House Signage

6.1.1 Pump House External Signage

Yes

6.1.2 Electrical DB Labeled

Yes

6.1.3 Jockey Control Panel Labeled

Yes

6.1.4 Diesel / Electric Pump Control Panel Labeled

Yes

6.1.5 Annunciator Panel Labeled

Yes

6.1.6 Pump House Remote Test Labeled

Yes

6.1.7 Auto Start Test Arrangement Instruction Chart Installed

Yes

6.1.8 Block Plan Installed - Correct Details

No

It is recommended that a block plan be provided with the following indicated thereon:

Particulars of the water supplies.

The occupancy of each building.

The hazard class of the system.

The extent of the protection.

The calculated flow and pressure requirements (remote and favorable areas) of the system.

A cross-section of the full height of the building or buildings indicating the height of the highest sprinkler with respect to a stated datum level.

12th Edition Requirement

The flows and pressures for the remote and favorable areas of operation recorded on the block plans must reflect the maximum pressure (Pmax) and the maximum flow (Qmax) respectively.

6.1.9 Diesel Engine Stop Lever Labeled	Yes
6.1.10 Isolating Valves Correctly Labeled	Yes
6.2 Pump House Equipment	
6.2.1 Electric Light Installed	Yes
6.2.2 Natural Light Installed	Recommendation

Sufficient natural lighting is recommended, where the pump house is located above ground. Access doors are not acceptable for providing natural lighting.

6.2.3 Mechanical Ventilation Installed	Yes
6.2.4 Hour Meters Installed	Yes
6.2.5 Correct Pressure Gauges Installed	Yes
6.2.6 Correct Suction Pressure Gauge Installed.	Yes
6.2.7 Correct Gauge Cocks Installed	Yes
6.2.8 Specify Flow Measuring Device.	Direct Reading Flow Meter
6.2.9 Flanges / Equipment Short Bolted	Yes

Various



Photo 11



Photo 12



Photo 13

We recommend that the bolts for these flanges be removed and replaced with the correctly sized bolts so as to ensure that at least two full thread pitches past the chamfer protrude beyond the nut.

6.2.10 Loose / Missing Bolts, Nuts & Washers	No
6.2.11 Electrical cables positioned 300mm above the finished floor level.	Yes
6.2.12 Correct operating temperature sprinklers installed	Yes

within the pump house.

6.3 Auto Start Test Arrangement

6.3.1 Auto Start Correctly Piped and Supported

Yes

6.3.2 Auto Start Diaphragm Valves Operational

Yes

6.3.3 Pressure Switch 1 - Jockey Pump (90% of Churn Pressure)

Cut-In Pressure (kPa)

700

Cut-Out Pressure (kPa)

800

6.3.4 Pressure Switch

Switch

Switch 1

► Primary or Secondary Pump

Primary Pump

► Specify Diesel or Electric

Electric

Pressure Switch - Electric Motor

Cut-In Pressure (kPa)

580

Switch 2

► Primary or Secondary Pump

Secondary Pump

► Specify Diesel or Electric

Diesel

Pressure Switch - Diesel Primary

Cut-In Pressure (kPa)

480

Pressure Switch - Diesel Backup (Not \leq 50 kPa Below Switch 1 - Not \geq 20 Below Switch 1)

Cut-In Pressure (kPa)

500

The pressure switch settings are incorrect and must be set in accordance with the churn pressure.

**6.4 Pumped Water Supply - Jockey Pump****Hour Meter**

1849:85

6.4.1 Jockey Pump Correctly Piped

Yes

6.4.2 Jockey Pump Test

Passed

Add Pump

Pump

Pump 1

► Pump Type

Electric

6.8 Pumped Water Supply - Electric Motor Driven Pump**► Primary or Secondary Pump**

Primary Pump

6.8.1 ASIB Approval No

Yes

ASIB Approval Number Motor

2516

ASIB Approval Number Pump

2516

Flow Q (m³)

9000 l/min

Head (m)





1000 kPa

Impeller Diameter (mm)

543

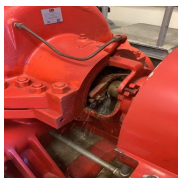



6.8.2 Electric Motor Make and Model

6.8.3 ASIB Prime Mover Date Tag No	Yes
6.8.3.1 ASIB Prime Mover Overhaul Date Tag No	
0166955	
6.8.3.2 Last Service Date	
16/02/2024	
6.8.3.3 Next Service Date	
16/02/2025	
Service Overdue	No
6.8.4 Pump Make and Model	
SPP Thrustream 200/58 B	
6.8.5 ASIB Pump Overhaul Date Tag No	Yes
6.8.5.1 ASIB Pump Overhaul Date Tag No	
0166755	
6.8.5.2 Last Overhaul Date	
16/02/2024	
6.8.5.3 Next Overhaul Date	
16/02/2025	
Service Overdue	No
6.8.6 Suction Pressure (kPa)	
70	
6.8.7 Base Grouted In	Yes
6.8.8 Base Painted	Yes
6.8.9 Delivery Piping Correctly Supported	Yes
6.8.10 Suction Piping Correctly Supported	Yes
6.8.11 Eccentric Reducer Piped Correctly	Yes
6.8.12 Cooling Line Correctly Aligned and Supported	Yes

6.8.13 Sight Glass Clean	Yes
6.8.14 Flexible Coupling Correctly Installed	Yes
6.8.15 Glands Condition	O.K.
6.9 Electric Motor Driven Pump - Test	
6.9.1 Panel Lamp Test	O.K.
6.9.2 Hour Meter Before Test.	
71:50	
6.9.3 Emergency Start - Button Depressed	Motor Started
6.9.4 Test - Button Depressed	Motor Started
6.9.5 Churn Pressure (kPa)	
1140	
6.9.6 Flow Test Recorded	
9000 l/min @ 980 kPa	
   	
<div>Photo 14</div> <div>Photo 15</div> <div>Photo 16</div> <div>Photo 17</div>	
6.9.7 Pump Flow Test	Passed
6.9.8 Hour Meter After Test	
71:59	
The Electric motor driven pump must be tested for at least 10 minutes every week in accordance with the minimum requirements.	
6.10 Electric Motor Driven Pump Alarms	
6.10.1 Siren Alarm	Sounded
6.10. 2 Flashing Light	Operated
Pump 2	
► Pump Type	Diesel

6.5 Pumped Water Supply - Diesel Engine Driven Pump	
► Primary or Secondary Pump	Secondary Pump
6.5.1 ASIB Approval No	Yes
ASIB Pump Set Approval Number	
2515	
6.5.2 Diesel Tank Level	Full
6.5.3 Diesel Tank Bunded	Yes
6.5.4 Spare Fuel Kept on Site	Yes
This tank must be kept full at all times and sufficient fuel for an additional six hours running time, (on full load) must be kept within on site.	
6.5.5 ASIB Prime Mover Date Tag No	Yes
6.5.5.1 ASIB Prime Mover Overhaul Date Tag No	
0166956	
6.5.5.2 Last Service Date	
16/02/2024	
6.5.5.3 Next Service Date	
16/02/2025	
Service Overdue	No
6.5.6 Pump Make and Model	
SPP Thrustream 200/48	
6.5.7 ASIB Pump Overhaul Date Tag No	Yes
6.5.7.1 ASIB Pump Overhaul Date Tag No	
0166756	
6.5.7.2 Last Overhaul Date	
16/02/2024	
6.5.7.3 Next Overhaul Date	
16/02/2025	

Service Overdue	No
6.5.8 Flow	
9000 l/min	
6.5.9 Diesel Engine Make and Model	
Kirloskar 6SL8800TA	
6.5.10 Head / Pressure	
1000	
6.5.11 Impeller Diameter (mm)	
461	
6.5.12 Suction Pressure (kPa)	
45	
6.5.13 Base Grouted In	Yes
6.5.14 Base Plate Grouting Painted	Yes
6.5.15 Delivery Piping Correctly Supported	Yes
6.5.16 Suction Piping Correctly Supported	Yes
6.5.17 Eccentric Reducer Piped Correctly	Yes
6.5.18 Correct Fuel Lines	Yes
6.5.19 Oil Level	O.K.
6.5.20 Batteries Installed on Stillage	Yes
6.5.21 Batteries Locked	Yes
6.5.22 Water Level (Heat Exchanger)	O.K.
6.5.23 Exhaust Correctly Supported	Yes
6.5.24 Exhaust Alignment	Horizontal
6.5.25 Exhaust Lagged	Yes
6.5.26 Sprinkler Protection \geq 800mm From Exhaust	Yes
6.5.27 Cooling Line Correctly Aligned and Supported	Yes

6.5.28 Sight Glass Clean	Yes
6.5.29 Flexible Coupling Correctly Installed	Yes
6.5.30 Glands Condition	Requires Attention
Excessive flow	
	
Photo 18	
6.6 Diesel Engine Driven Pump - Test	
6.6.1 Panel Lamp Test	O.K.
6.6.2 Hour Meter Before Test	
25:7	
6.6.3 Test - Button Depressed	Engine Started
6.6.4 Battery 1 - Button Depressed	Engine Started
6.6.5 Battery 2 - Button Depressed	Engine Started
6.6.6 Battery 1 & 2 - Button Depressed	Engine Started
6.6.7 RPM Recorded	
2000	
6.6.8 Churn Pressure (kPa)	
1160	
6.6.9 Flow Test Recorded	
9000 l/min @ 1000 kPa	
  	
Photo 19 Photo 20 Photo 21	
6.6.10 Pump Flow Test	Passed
6.6.11 Hour Meter After Test	

The diesel engine driven pump must be tested for at least 30 minutes every week in accordance with the minimum requirements.

6.7 Diesel Engine Driven Pump - Alarms

6.7.1 Siren Alarm

Sounded

6.7.2 Flashing Light

Operated

6.7.3 Abortive Start Test Successful

Passed

6.7.4 Abortive Start - Number of Cranks

6
From 0 to 9

6.7.5 Abortive Start - Intermittent Siren

Sounded

6.7.6 Abortive Start - Flashing Light

Operated

6.11 Pump House Alarms

6.11.1 Power Failure - Electrical Isolator - Alarm Bell

Failed - See Report

6.11.2 Power Failure - Electrical Isolator - Flashing Light

Operated

6.11.3 Pump House Protection - Terminal Test Valve Opened

Operated

Needs additional supports

Non - Compliance Items.

Recommendations

7. Installation Control Valve(s)

7.1 Sprinkler control valves accessible

No

Pumps and tanks inspection only

8. Storage

No storage was taking place at the time of inspection.



Pumps and tanks inspection only

9. Sprinkler System

Sprinkler System

Area

Area 1

Specified Area.

Other

Pumps and tanks inspection only

System Issue

10. Proof of Inspection

Proof of inspection.

For and on behalf of client:



Camagwini Ngxokolo-Nomatye
20.06.2024 12:40 SAST

Proof of inspection.

ASIB Inspector:



Keith van Onselen
20.06.2024 12:40 SAST

WARNING

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The primary function of the ASIB is to protect the interests of the end user and as a result, we constantly update the list of registered suppliers and installing companies.

These companies have proven that they are capable of installing, extending and servicing fire sprinkler systems to the correct standards.

We have had occasion to remove companies for valid reasons which are not confidential and include, but are not limited to, poor workmanship, design, fabrication, incorrect advice, lack of skilled staff, fraudulent quotations and financial instability.

It is important to note that if a company is not listed with the ASIB and carries out work on a sprinkler system we will not be in a position to issue a Clearance Certificate for the premises which, in turn, may place you at risk.

In selecting your service provider, it is important to appreciate that the ASIB is not seeking to infer that a non-listed service provider is necessarily not capable of offering the required service to an appropriate standard. What the ASIB is saying, is that the ASIB is not in a position to give you the assurance that a non-listed provider concerned has demonstrated that it complies with the ASIB standards. In addition, because the ASIB is unable to fully inspect an installation (which by its nature has many inaccessible components), you will appreciate that the ASIB is also unfortunately not in a position to issue a Clearance Certificate in relation to an installation done by a non-listed company.

We advise you to check the listing status of the service provider you choose especially if there is any uncertainty.

You can access our website at <http://www.asib.co.za> which is current or phone our offices at 011 642 1703 for verification.

Email:

Email: 1

Recipient

Mteteleli@elidz.co.za

Email: 2

Recipient

camagwini@elidz.co.za

Media summary



Photo 1



Photo 2



Photo 3



Photo 4

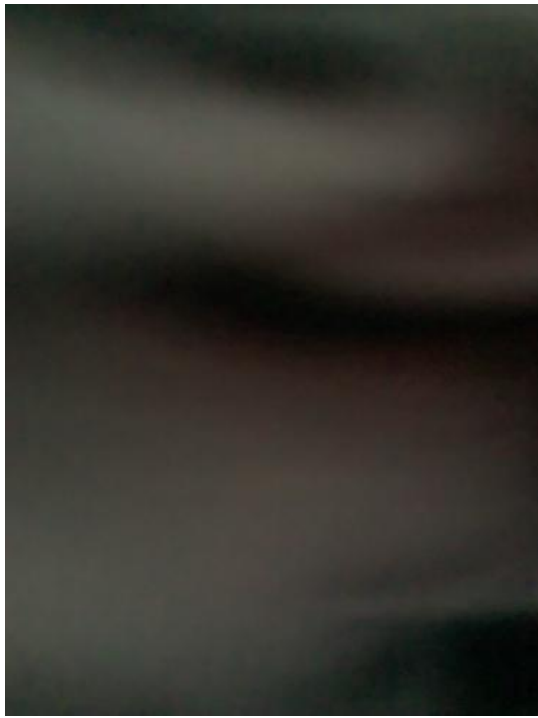


Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18

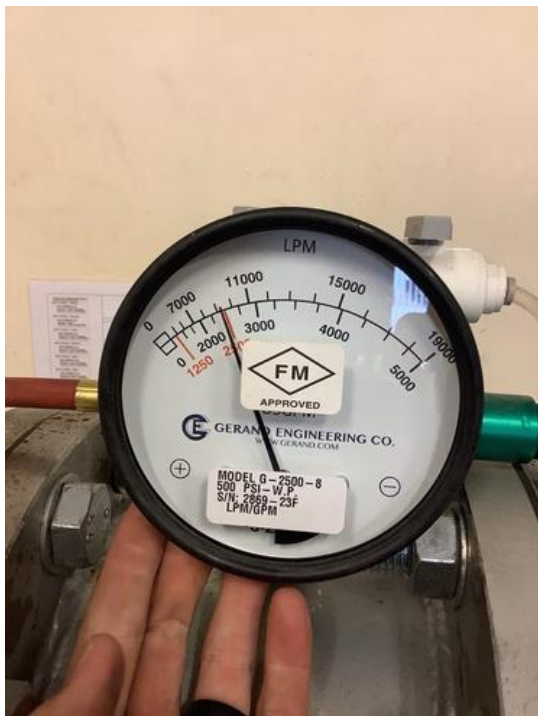


Photo 19



Photo 20

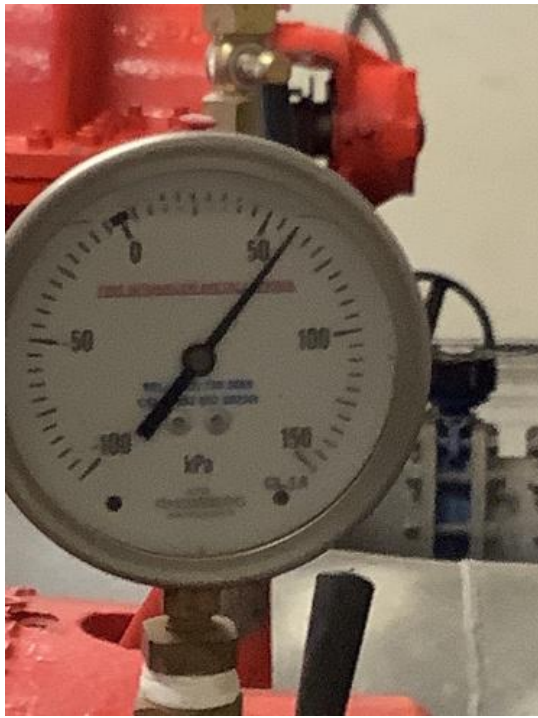


Photo 21