

2024

Inspection of Automatic Sprinkler System

ASIB



Inspection of Automatic Sprinkler System

East London Industrial Development
Zone - Draeger

Complete

Client/Site Name

East London Industrial Development Zone - Draeger

Billing Address

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

Attention:

Mteteleli Zantsi
Camagwini Ngxokolo-Nomatye

Document No

UNC.9918

Prepared by

Keith van Onselen

Conducted on

18.06.2024 14:44 SAST

Site Location

Draeger ERF 60952 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



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

The clearance certificate is issued with the understanding that the storage issued as highlighted in sections 8&9 of this report are addressed immediately. As discussed on site the rack sprinkler spacing must suit either standard pallets or Euro pallets. If this is not possible then each rack must be converted to shelving as long as the sprinkler spacing allows this.

Please Note:

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

Standard

12th Edition

ASIB Contract No

UNC.9918

Client Order No

004203

Was the sprinkler system design in order

Yes

Was the water supplies in order

Yes

Refer to report UNC9004 Estate Pump House conducted on 08/05/2024

Was the pump room in order

Yes

Refer to report UNC9004 Estate Pump House conducted on 08/05/2024

Was the installation control valves in order

Yes

Was the storage in order

No

The clearance certificate is issued with the understanding that the storage issued as highlighted in sections 8&9 of this report are addressed immediately. As discussed on site the rack sprinkler spacing must suit

either standard pallets or Euro pallets. If this is not possible then each rack must be converted to shelving as long as the sprinkler spacing allows this.

2. Hand Fire Appliances

Hose Reels - 30 metres ☒

Number:

9

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

DCP 9 kg ☒

Number:

7

CO² Gas 5 kg ☒

Number:

72

Hand fire appliances date of the last service:

05/2022

Are the hand fire appliances due for their service. ☒ No

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

3. Occupancy & Storage Guidance

Percentage Hazard.

% Ordinary Hazard	10 From 0 to 100
--------------------------	---------------------

% High Hazard	90 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.

Occupancy / Process Risk

Occupancy/Risk

Occupancy/Risk 1

► Ordinary Hazard / High Hazard	Ordinary Hazard
--	-----------------

► Select Occupancy / Process Risk	Life Safety
--	-------------

Specify Occupancy

Offices

Specify Occupancy / Process

Offices

Category	CAT I
-----------------	-------

Design Density (mm/min)	5 mm/min
--------------------------------	----------

Occupancy/Risk 2

► Ordinary Hazard / High Hazard	High Hazard
--	-------------

► Select Occupancy / Process Risk	
	Process Risk
	Storage Risk

Specify Process

Protection breathing apparatus manufacturer

Category	CAT III
-----------------	---------

Design Density (mm/min)	17,5 mm/min
--------------------------------	-------------

Where goods of differing categories are stored within the same area, it is the stack height limitations of the goods with the highest category that will apply.

► **Product Stored**

Material rolls stored vertically for manufacture of face masks

Category	CAT III
Storage	
Method	
Method 1	
Storage Method	Free Standing / Block Storage
Design Density (mm)	17,5 mm/min
Roof Height (m)	13
Storage Height (m)	
5,2	
Method 2	
Storage Method	Beam Pallet Racking
Design Density (mm)	17,5 mm/min
Roof Height (m)	13
Storage Height (m)	
4,1	
The foregoing stack height limitations for racks and/or shelves refer to those areas where intermediate sprinkler protection has not been installed.	<input checked="" type="checkbox"/>

4. Sprinkler System Design

Building

Building 1

Building Name

Draeger

Date of First Inspection

20 July 2022

Original Installer

Fire Sprinkler Installations

Extension By

NA

Building Area m²

4024

Height of Building in meters

13

Sprinkler Detail

Area

Area 1

► Area & Type of Sprinklers

Roof Sprinklers

Ceiling Sprinklers

Void Sprinklers

In - Rack Sprinklers

Canopy Sprinklers

Number of Sprinklers

973

Calculations

Hydraulic Calculations

Area of Operation

Area of Operation 1	
► Area of Operation	Pump Duty
Flows & Pressures 9000 l/min @ 1000 kPa	
Area of Operation 2	
► Area of Operation	P - Max
Flows & Pressures 8801,3 l/min @ 1003,4 kPa	
Area of Operation 3	
► Area of Operation	Q - Max
Flows & Pressures 8968 l/min @ 999,3 kPa	
Area of Operation 4	
► Area of Operation	Roof Most Remote Area of Operation
Flows & Pressures 5182 l/min @ 511 kPa	
Area of Operation 5	
► Area of Operation	Roof Most Favourable Area of Operation
Flows & Pressures 5183,5 l/min @ 491,5 kPa	
Area of Operation 6	
► Area of Operation	Rack Most Remote Area of Operation
Flows & Pressures 1070 l/min @ 335 kPa	
Area of Operation 7	
► Area of Operation	Rack Most Favourable Area of Operation

Flows & Pressures

1078 l/min @ 318 kPa

Area of Operation 8

► **Area of Operation**

Roof & Rack Most Remote Area
of Operation

Flows & Pressures

6523,6 l/min @ 519 kPa

Area of Operation 9

► **Area of Operation**

Roof & Rack Most Favourable
Area of Operation

Flows & Pressures

6545 l/min @ 500 kPa

Additional Sprinkler System Designs Required

No

5. Water Supplies

► Water Stored on Site.

Yes

Refer to report UNC9004 Estate Pump House conducted on 08/05/2024

Add Water Storage Tanks

6. Pump Room

Pump Installed on Site

Yes

Refer to report UNC9004 Estate Pump House conducted on 08/05/2024

Add Pump House

7. Installation Control Valve(s)

7.1 Sprinkler control valves accessible

Yes

Valve Cabinet

Valve Cabinet 1

Location:

Right of loading canopy



Photo 1

Number of Alarm Valves Installed

1 x 100mm 1 x 200mm

7.2 Sprinkler Valve Location Plate Installed

Yes

7.3 Fire Brigade Booster Pressure Limitation Plate

Yes

7.4 Block Plan Installed

Yes

7.4.1 Is the block plan labelled in accordance with the areas fed by the sprinkler control valve assemblies

Yes

7.4.2 Are the correct installation details recorded on the block plan

Yes



Photo 2

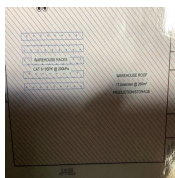


Photo 3



Photo 4

7.5 Sprinkler Valve Instruction Chart

Yes

7.6 Is a sprinkler spares box present

Yes

7.6.1 Was the spares box contents accessible

Yes

7.6.2 Are the spares quantities correct

Yes

7.7 By Pass Arrangement Installed

Yes

7.8 Fire Brigade Booster Connections Installed Correctly and Accessible	Yes
7.9 Are the Installation Control Valves Housed within an Approved Valve Cabinet	Yes
7.10 Flow Switch Installed Correctly	Yes
7.11 Manifold Correctly Supported	Yes
7.12 Riser Mains Correctly Supported	Yes
7.13 Riser Mains Externally Located	No
7.14 Flow Measuring Device Installed.	Yes
Flow Test Results	Pass



Photo 5



Photo 6

Recorded Flow and Pressure	10000 l/min @ 760 l/min
7.15 Correct Pressure Gauges Installed	Yes
7.16 Correct Gauge Cocks Installed	Yes
7.17 Flanges Short Bolted	No
7.18 Loose / Missing Bolts, Nuts & Washers	No
7.19 False Alarm Prevention Pump Installed	N/A
7.20 Drain & Test Pipes Installed Correctly	Yes

7.21 Weekly tests of the installation control valves alarm bell must be carried out with the alarms sounding for at least thirty seconds.

All water pressure gauge readings must be checked and recorded.

The testing and records should be carried out by a member of staff delegated to do this.

7.22 Trunk Main Pressure (kPa)
1040
7.23 Installation Pressure (kPa)

7.24 ASIB Overhaul Date Tag No

New Installation

The installation control valves must be overhauled three years after date of installation by an ASIB approved and registered installer, and once every 3 years thereafter. An ASIB valve overhaul date tag must be attached to the valve set after completion of the overhaul.

7.25 Alarm Motor & Gong Test

Passed

7.26 Are All Valves in the Correct Positions

Yes

7.27 Are All Valves Secured

Yes

Non Compliance - Items

Recommendation Items

8. Storage

High Hazard



In all High Hazard areas a clear space of not less than 1,0 metre must be maintained between top of stored goods and sprinkler deflector.

Are the required clearances being maintained.

Yes

Are the storage heights exceeded.

No

At the time of inspection the storage heights were being adhered to and found to be in order.

The longitudinal and/or transverse flue spaces are not being maintained



The minimum longitudinal and transverse flue spaces shall not be less than 150 mm.

Location:

Various racks



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13

9. Sprinkler System

Sprinkler System

Area

Area 1

Specified Area.

Warehouse

System Issue

Issue

Issue 1

Finding

Intermediate Sprinkler Protection

Sprinklers do not line up with the transverse flue spaces, the system must be redesigned to accommodate the stacking arrangements.



Location of Finding.

1. Various

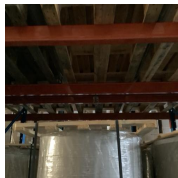


Photo 14



Photo 15



Photo 16

10. Proof of Inspection

Proof of inspection.

For and on behalf of client:



Camagwini Ngxokolo-Nomatye
20.06.2024 12:30 SAST

Proof of inspection.

ASIB Inspector:



Keith van Onselen
20.06.2024 12:30 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

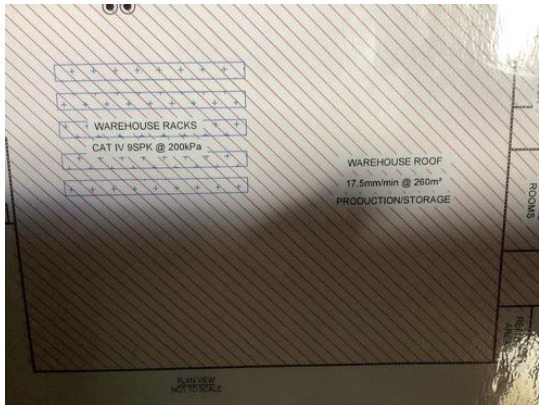


Photo 3

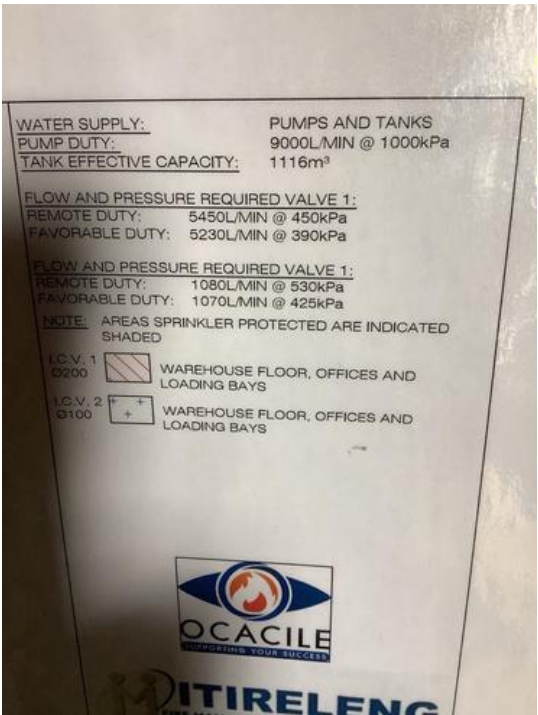


Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16