

2024

# Inspection of Automatic Sprinkler System

**ASIB**



## Inspection of Automatic Sprinkler System

BE 4 - Linde & Wiemann East London  
Industrial Development Zone

Complete

**Client/Site Name**

BE 4 - Linde & Wiemann East London Industrial Development Zone

**Billing Address**

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

**Attention:**

Mteteleli Zantsi  
Camagwini Ngxokolo-Nomatye

**Document No**

UNC.10623

**Prepared by**

Keith van Onselen

**Conducted on**

09.05.2024 12:21 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

1407 IMBALI  
CNR LOUIS BOTHA AND  
TUDHOPE AVENUES  
BEREA  
JOHANNESBURG  
2198

TELEPHONE: +27 11 642 1703  
FACSIMILE: +27 11 642 1019  
E-MAIL: [asib@asib.co.za](mailto:asib@asib.co.za)  
WEB SITE: [www.asib.co.za](http://www.asib.co.za)

P O BOX 3139  
HOUGHTON  
2041

INDEPENDENT  
THIRD PARTY  
INSPECTION AND  
ADVISORY  
SERVICE SINCE  
1970

© 1970 - 2023 AUTOMATIC SPRINKLER INSPECTION BUREAU ALL RIGHTS RESERVED

#### 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

10th Edition

#### ASIB Contract No

UNC.10623

#### Client Order No

PO-004203

#### Was the sprinkler system design in order

Yes

#### Was the water supplies in order

No

Refer to report UNC.9478 conducted on 08/05/2024

#### Was the pump room in order

Yes

Refer to report UNC.9478 conducted on 08/05/2024

#### Was the installation control valves in order

Yes

Refer to Installation Control Valves - Section 7.

#### Was the storage in order

Yes

2. Hand Fire Appliances

Hose Reels - 30 metres ☒

Number:

14

Hand Fire Appliances - One unit per 100 m<sup>2</sup> of floor area.

DCP 9 kg ☒

Number:

52

DCP 4,5 kg ☒

Number:

3

Other ☒

Specify

Hydrant

Number:

11

Hand fire appliances date of the last service:

06/2023

Are the hand fire appliances due for their service. 

No



Photo 1

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

### 3. Occupancy & Storage Guidance

Percentage Hazard.

<b>% Ordinary Hazard</b>	10 From 0 to 100
--------------------------	---------------------

<b>% High Hazard</b>	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**

High Hazard

► **Select Occupancy / Process Risk**

Storage Risk

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**

Automotive Steel Components in plastic crates and, cardboard boxes on wooden pallets

#### **Category**

CAT I

CAT II

Storage

Method

Method 1

**Storage Method**

Free Standing / Block Storage

**Design Density (mm)**

10,0 mm/min

**Roof Height (m)**

10

**Storage Height (m)**

Cat 1 10,0 mm 6,5 m

Cat 2 10,0 mm 5,0 m

Method 2

Storage Method

Shelving

Design Density (mm)

10,0 mm/min

Roof Height (m)

10

Storage Height (m)

Cat 1 10,0 mm 5,7 m

Cat 2 10,0 mm 4,2 m

4. Sprinkler System Design

Building

Building 1

Building Name

BE 4 - Linde & Wiemann East London Industrial Development Zone

Date of First Inspection

Unknown

Original Installer

Unknown

Extension By

NA

Building Area m<sup>2</sup>

Approximately 6000

Height of Building in meters

12,3 m

Sprinkler Detail

Area

Area 1

► Area & Type of Sprinklers

Roof Sprinklers

Ceiling Sprinklers

Canopy Sprinklers

Number of Sprinklers

Approximately 1000

Calculations

Hydraulic Calculations

Area of Operation

Area of Operation 1



► **Area of Operation**

Pump Duty

**Flows & Pressures**

7500 l/min @960 kPa

Area of Operation 2

► **Area of Operation**

Design Flow & Pressure

**Flows & Pressures**

V1

3050 l/min @ 565 kPa

As taken from previous report

Area of Operation 3

► **Area of Operation**

Design Flow & Pressure

**Flows & Pressures**

V2

3050 l/min @ 580 kPa

Area of Operation 4

► **Area of Operation**

Design Flow & Pressure

**Flows & Pressures**

V3

3050 l/min @ 605 kPa

5. Water Supplies

► Water Stored on Site.

Yes

Refer to report UNC.9478 conducted on 14.07.2023

Add Water Storage Tanks

6. Pump Room

Pump Installed on Site

Yes

Refer to report UNC.9478 conducted on 14.07.2023

Add Pump House

## 7. Installation Control Valve(s)

### 7.1 Sprinkler control valves accessible

Yes

Valve Cabinet

Valve Cabinet 1

#### Location:

East wall BE5 DSV and opposite ASP pump house



Photo 2



Photo 3

### Number of Alarm Valves Installed

2 x 1 x 100 mm

### 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 4

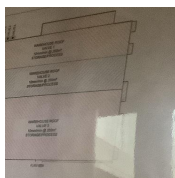


Photo 5

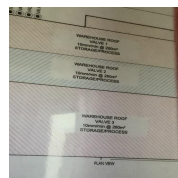


Photo 6

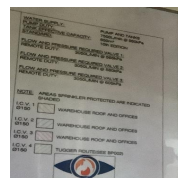


Photo 7

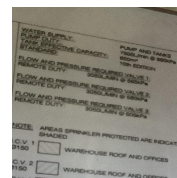


Photo 8

### 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

No

It is recommended a valve bypass assembly be provided at each installation control valve. This allows the alarm valve to be overhauled without isolating the system and prevents wastage of water.

#### 7.8 Fire Brigade Booster Connections Installed Correctly and Accessible

No

Installations must be fitted with fire brigade booster connections which will enable the fire brigade to pump water into the installation using their own equipment.

**It appears that the booster connection piping to the main distribution riser is too long, which may restrict the opening of the booster plunger into the main distribution riser, this will prevent effective boosting of the sprinkler system and must be revised.**

☒

#### 7.9 Are the Installation Control Valves Housed within an Approved Valve Cabinet

Yes

Sprinkler protection is required within the valve cabinet

☒

#### 7.10 Flow Switch Installed Correctly

Yes

#### 7.11 Manifold Correctly Supported

Yes

#### 7.12 Riser Mains Correctly Supported

No

The riser main must be properly supported in accordance with the rules.

#### 7.13 Riser Mains Externally Located

No

#### 7.14 Flow Measuring Device Installed.

Yes

#### Flow Test Results

Pass

#### Recorded Flow and Pressure

4400 l/min @ 1050 kPa

#### 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)**

1100

**7.23 Installation Pressure (kPa)**

1140

**7.24 ASIB Overhaul Date Tag No**

Yes

**Last Overhaul Date**

11/2021

**Next Overhaul Date**

11/2024

**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.

## 9. Sprinkler System

Sprinkler System

Area

Area 1

**Specified Area.**

Warehouse

BE 4

System Issue

Issue

Issue 1

**Finding**

Exposure Hazards

**Storage too close to building.**



Drencher heads required which are purpose made sprinklers designed to spray water over a surface to provide protection against fire exposure. It is not acceptable to use standard sprinkler heads with the fusible elements removed for the purpose of providing wall or face wetting. The drencher system must extend along the walls of the protected building to a distance of 15.0 metres beyond each end of the stored goods. The feed for the drenchers must be taken from the underside of the valves and not from the downstream side of the installation. The stop valve controlling the drencher installation shall be located near to the sprinkler control valves, but must be at least 10,0 metres from the goods stored or from the area where they are expected to operate.

**Location of Finding.**

Loading area



Photo 9

Issue 2

**Finding**

Other

**Specify Other.**





Corrosion is evident on the sprinkler pipe work and must be addressed by your installer.

---

### **Location of Finding.**

Canopies

---



Photo 10

---

## 10. Proof of Inspection

Proof of inspection.

For and on behalf of client:

---



Camagwini Ngxokolo-Nomatye  
20.06.2024 12:42 SAST

---

Proof of inspection.

ASIB Inspector:

---



Keith van Onselen  
20.06.2024 12:44 SAST

---

### WARNING

© The Automatic Sprinkler Inspection Bureau (Pty) Ltd 1970-2022 All rights reserved.

Copyright subsists in this work. All information contained in this report is the property of The Automatic Sprinkler Inspection Bureau (Pty) Ltd. No part of this report may be reproduced, published, performed, broadcast, transmitted or adapted in any form or by any electronic, mechanical or other means without the written permission of the copyright holder. Any unauthorised reproduction, publishing, performance, broadcasting, transmission or adaption of this work will constitute copyright infringement and render the doer liable under both civil and criminal law.

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

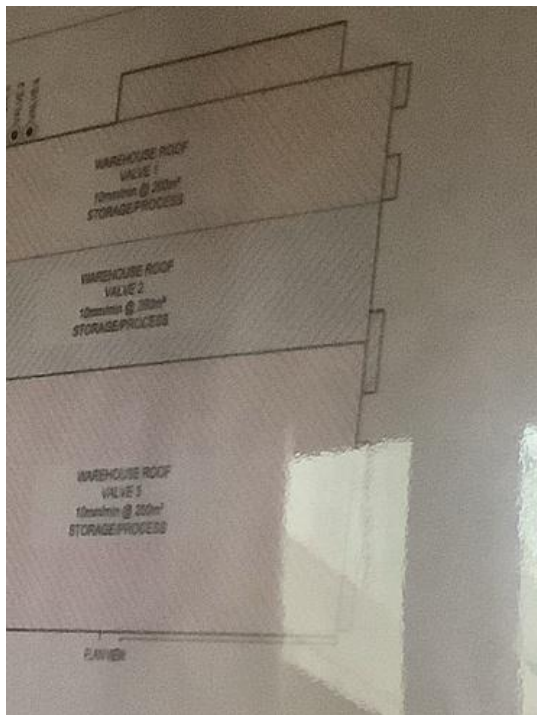


Photo 5

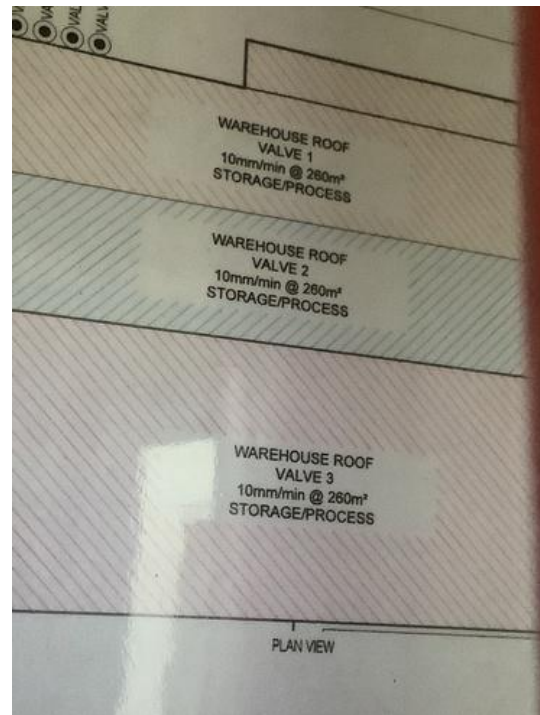


Photo 6

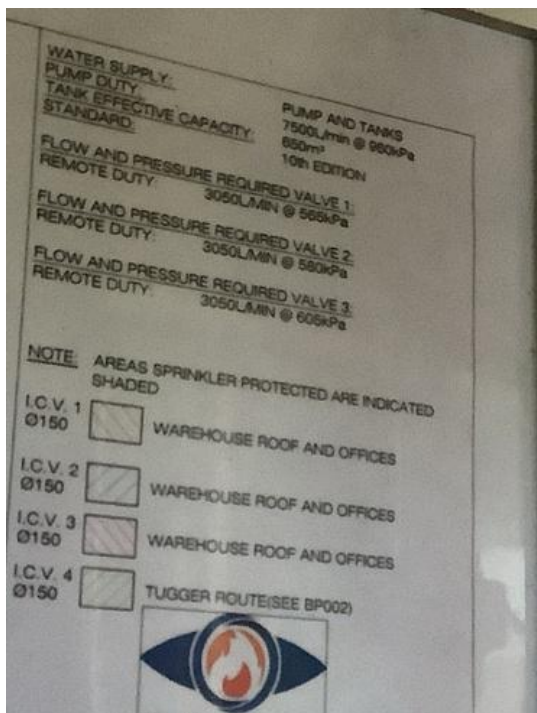


Photo 7

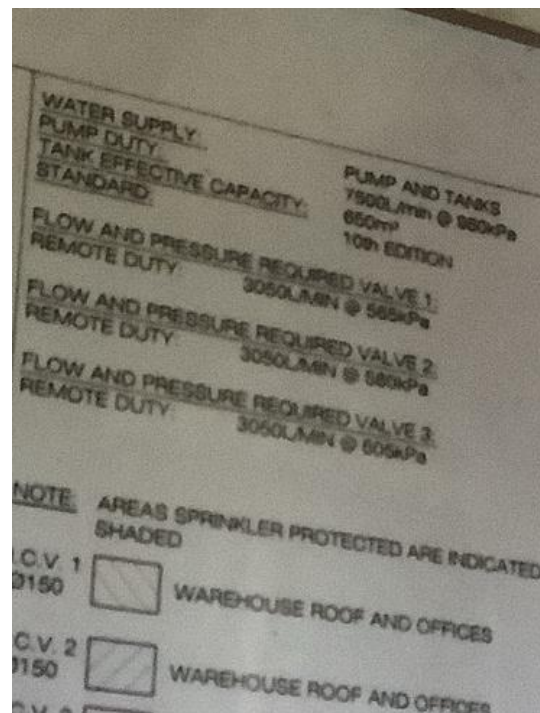


Photo 8



Photo 9



Photo 10