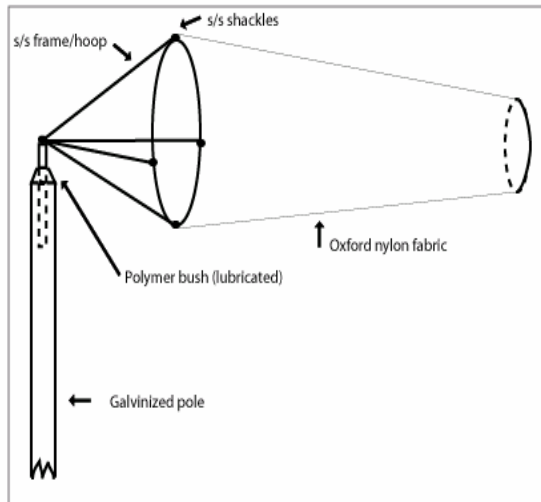


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|---------------------------------------|--|--|
| <b>Doc ID</b><br>58573792             | <b>Custodian</b><br>Senior Principal Engineer, WT, Engineering               | <b>Approved</b><br>Head of Engineering |
| <b>Version Date</b><br>22/11/2021     | <b>Accountabilities Framework</b><br>Level 1 – Acquire Infrastructure Assets | <b>Stakeholders</b><br>Operations      |
| <b>Next Review Date</b><br>22/11/2023 | Level 2 – Design Assets  |  |



## 1 Purpose

The purpose of this specification is to describe the requirements for windsock assemblies used at Water Corporation sites that store chlorine and/or ammonia.

Note: Windvane assemblies can be used instead of windsocks – refer to:

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/58574823>

## 2 Scope

This specification applies to all Water Corporation chlorine and/or ammonia facilities that use windsocks to determine the direction of wind in the event of a leak.

## 3 Definitions

N/A

## 4 References

AS 2927 - The Storage & Handling of Liquefied Chlorine

AS 2022 - Anhydrous ammonia - Storage and handling

Dangerous Goods Safety (Storage and Handling of Non-explosive) Regulations 2007 WA

## 5 Specification

- The designer / specifier shall determine the required pole diameter and thickness. Consideration shall be given to the highest wind speed expected for the site, the size and weight of the windsock and the length of the pole. An absolute minimum diameter of 53mm shall apply. The pole shall be fabricated from galvanised steel with a machined “Delrin” polymer bush attached to the top.
- The frame and shackles that hold the “sock” shall be fabricated from marine grade 316 stainless steel.
- The “sock” can be either white, yellow, or orange in colour -
  - Dimensions: standard size 300mm x 900mm
  - White and Yellow socks are made from “Weather Max LT” fabric
  - Orange socks are made from a heavier “Sunbrella” colour fast fabric
  - A minimum lifespan of 36 months is required

Note: this will depend on fabric choice, site location and weather conditions etc.  
For areas that are subject to extreme heat and/or windy conditions it is recommended the installation use the orange windsock due to its greater robustness.
- The Windsock Assembly must be installed at chlorine liquid withdrawal facilities, and chlorine and/or ammonia gas withdrawal facilities whose off-site risk potential is significant (i.e. facilities that have multiple drums or cylinders, or that are within close proximity of public or protected places).
- The Windsock Assembly must be located within the site, able to be seen from the main entry gate and placed in a position that is clear of buildings and trees that may interfere with the normal wind patterns.
- For ground level installations the Windsock Assembly may utilise a Break Back Pole for ease of maintenance.
- For an elevated installation the Windsock Assembly may utilise a Safe Swivel Light Pole for ease of maintenance.

**Note:** This complete Windsock Assembly is available through the following suppliers:

- Taskers <http://taskers.com.au> - (08) 9437 9222
- Glenview <http://www.glenviewproducts.com.au> - (02) 9449 9892
- Windsocks Australia <https://www.windsocksaustralia.com.au/> – 0468 474 656

## 6 Records

| Document Revision History |   |
|---------------------------|---|
| 26 Feb 2002               | Document developed by RB & reviewed by NH                     |
| 7 May 2007                | Document reviewed by RB & NH                                  |
| 17 Sept 2008              | Document placed in Aqua PM# 1087390                           |
| 3 Aug 2010                | Document placed in Cordoc format by SZ                        |
| 25 Aug 2010               | Document reviewed by RB & NH                                  |
| 22 May 2013               | Document reviewed by SZ & NH                                  |
| 4 Mar 2014                | Document updated by SZ and reviewed by NH                     |
| 07 Sep 2017               | Document updated by SZ and reviewed by NH                     |
| 14 Sept 2017              | Revision table update to remove names                         |
| 21 Nov 2018               | Supplier list amended to remove Adware who aren't being used. |
| 16 Nov 2021               | Colour yellow added as option, supplier list updated          |