



## **EXAMPLE – Completed Hose/Assembly Incident Report**

This form is intended to serve as a template to capture information where the distributor is notified that a hose assembly has not met end-user expectations and/or performed as anticipated in the application.

**Customer:** Wastewater Treatment Co    **Location:** Bayfield

**Incident Date** (00/00/0000): 3/3/2023

**Report Date** (00/00/0000): 3/7/2023

**Customer Number:** WWT0331    **Order Number:** WLD12221238  
**PO Number:** NA

**Return Goods Authorization (RGA) #:** RGA12221238

**Date of Installation** (00/00/0000): 1/9/2023

**Hose Assembly Manufacturer:** Southland

**Hose Assembly Provided by:** Westland Distributor

### **Issue Being Reported**

Hose assembly leaked in service while attached to a water pump.

### **Description of Incident**

**Reported Property Damage:**  
High water pressure damage to equipment and electric motor

**Reported Environmental Damage:**  
NA

**Reported Personal Injury:**  
No personal injury but operator was soaked with water on a day where the temp was below zero.

### **Hose Assembly**

Hose Manufacturer: Westland Hose Part Number: PVC2022

Hose Manufacture Date/Lot Code: DEC 1222

Assembly Part number: WHWW2022 Assembly Serial number: WW2022

Last date hose assembly was pressure tested (00/00/0000): 12/19/2022

## STAMPED DETAIL

### Application

Suction Application

Pressure Application

Size: 2" hose

Type of Fluid, Brand & Number: Wastewater

### Type of Equipment

Pressure:500 psi Flow Rate (GPM): 250 GPM Relief Valve (psi): NA System Spikes  
(psi): NA

Operating Temp (°F): 34 Ambient Temp (°F): 0

Time in Service: 6 months Bend Radius (in): 6-8" Cycles/Min: Constant pressure

### Coupling/Fitting Description

Port Connection (Female JIC, NPT, O-Ring...): Cam Lock

Part #: AO23-AL Manufacturer: Southland

Coupling/Fitting Material:

Brass

Stainless

Aluminum

Plastic/PVC

Carbon Steel

Other

Sealing Method/Material (Where applicable):

- NBR
- EPDM
- Fluoroelastomer/Viton®
- PTFE
- CR (Neoprene)
- Other

Attachment Method:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Banded | Manufacturer: Southland Manufacturing                          |
| <input type="checkbox"/> Crimped           | Manufacturer: <a href="#">Click or tap here to enter text.</a> |
| <input type="checkbox"/> Clamped           | Manufacturer: <a href="#">Click or tap here to enter text.</a> |
| <input type="checkbox"/> Reusable/Push-on  | Manufacturer: <a href="#">Click or tap here to enter text.</a> |

**Additional Application Notes:**

Arrived at job site early in the morning to drain retention pond. When the pump was turned on, it ran for a few minutes as usual when the hose started to leak from the coupling and the leak turned into a spray that damaged the pump itself. Operator was soaked by spray while he tried to shut the pump down.

**Risk Management**

Images Captured (Add images below): Yes  No

Damaged hose secured and quarantined? Yes  No

If yes, hose assembly stored here:

Site: Northland Storage

Site Address: 2023 Main St, Bayfield

Safety Team was alerted: Yes  No

Date Sent (00/00/0000): [Click or tap here to enter text.](#)

Name of Contact: [Click or tap here to enter text.](#)

Phone: [Click or tap here to enter text.](#) Email: [Click or tap here to enter text.](#)

**Observations & Assessment of Problem** (*causes, contributing factors, etc.*):  
Hose was rated for 500 psi but the cam locks are only rated for 250 psi. We also noticed that two bands were used instead of the three recommended by the manufacturer for this application/psi.

### **Corrective Action**

Hose taken out of service. New hose assembly with the proper fittings for this application was provided following recommended fabrication requirements and tested for this application/psi.

**Date Report Completed & Filed:** 3/7/2023

**Completed By:** Ash Westland, Westland Distributors

### **Diagrams/Pictures – Attach Here**

For illustrative use only. Source: [Image 1](#); [Image 2](#)



## POINTS FOR OBSERVATION

**S = SIZE;** I.D. and length; any O.D. constraints

- overall length should be specified to include fittings
- tolerances need to be specified if special requirements exist
- *I.D., O.D. and overall length of the assembly*
- To determine the replacement hose I.D., read the layline printing on the side of the original hose. If the original hose layline is painted over or worn off, the original hose must be cut and inside diameter measured for size.
- The inside diameter of the hose must be adequate to keep pressure loss to a minimum, maintain adequate flow, and avoid damage to the hose due to heat generation or excessive turbulence. The hose should be sized according to the nomographic chart in appendix D of the *Handbook*.
- Length tolerances should be considered for all types of hose assemblies. See individual hose sections for specifics.
- **Flow Rate / Fluid Velocity** - The flow rate of the system in conjunction with the inside diameter of the hose will dictate the fluid velocity through the hose. Typical fluid velocities can be seen in the nomographic chart in Appendix D. Please consult your hose supplier for specific recommended velocity ranges. Please note that suction line recommendations are different than pressure lines.

**T = TEMPERATURE** of the material conveyed and environmental conditions

- Are there factors such as heat sources in the environment in which the hose will be used
- Continuous (average) and minimum and maximum temperatures must be specified for both the environment and material conveyed
- Note if flame resistance or flammability will be an issue
- Sub-zero exposure
- Care must be taken when routing near hot manifolds and in extreme cases a heat shield may be advisable.
- Other things to consider maximum intermittent ambient temperature, fluid temperature, ambient temperature, and maximum temperature.
- Temperature cycling – exposure of the assembly to changing temperatures over time

**A = APPLICATION,** the conditions of use

- Configuration/routing (add a sketch or drawing if applicable)
  - is the hose hanging, laying horizontally, supported, unsupported (orientation and aspect of the hose)
  - what else is attached to the hose, any external load on the hose
  - bend radius requirements, flexibility
  - elongation considerations with working pressure
- Quantify anticipated movement and geometry of use requirements
- Intermittent or continuous service
- Indoor and outdoor use
- Unusual mechanical loads
- Excessive abrasion
- Electrical conductivity requirements
- Equipment type
- External conditions – abrasion, oil (specify type), solvents (specify type), acid (specify type and concentration), ozone, salt water
- Hose now in use
  - Type of hose
  - Service life being obtained and description of failure or source of customer dissatisfaction
- strength and frequency of impulsing or pressure spikes
- non-flexing applications (static), flexing applications (dynamic)
- vacuum requirements

**M = MATERIAL or MEDIA** being conveyed, type and concentration

- Are there special requirements for this hose tube

- Any special specifications (or agency requirements) that need to be considered (e.g., FDA, API)
- Will the material be continuously flowing, or sit in the hose for long periods of time (specify)
- Media velocity, flow rate
- Chemical name/concentration (MSDS)
- Solids, description, and size
- Fluid Compatibility - Some applications require specialized oils or chemicals to be conveyed through the system. Hose selection must assure compatibility of the hose tube. In addition to the hose materials, all other components, which make up the hose assembly (hose ends, O-rings, etc...), must also be compatible with fluid being used. Depending on the fluid, your hose supplier may lower the maximum temperature or pressure rating of the assembly. When selecting any hose assembly, always consult your hose supplier's recommendations.
- Can also refer to Motion when working with Metal Hose

**P = PRESSURE** to which the assembly will be exposed

- System pressure, including pressure spikes. Hose assembly working pressures must be equal to or greater than the system pressure. Pressure spikes greater than the maximum working pressure will shorten hose life and must be taken into consideration.
- Temperature implications
- Vacuum considerations
- **Maximum Operating Pressure** - This is the maximum pressure that the system should be exposed to in normal operating conditions. For hydraulic hose assemblies, this pressure should be dictated by the relief setting of the system. Both the hose and hose end should not be rated to a pressure less than the maximum operating pressure of the system.
- **Pressure Spikes** - When a hydraulic system is subjected to a large load in a short period of time, the system pressure can overshoot the relief setting and exceed the maximum operating pressure. Frequent pressure spikes can reduce the life of hydraulic hose assemblies. In general, spiral hose constructions are better suited to high impulse applications, which involve flexing and large pressure spikes. However, there are specialized braided hoses available from various manufacturers. Please consult your hose supplier if there are multiple constructions which meet your application needs.
- Impulsing – exposure of the assembly to changing pressures over time

**E = ENDS;** style, type, orientation, attachment methods, etc.

- Uncoupled or coupled hose, hose with built-in fittings
- Specify end style (see charts and pictures in Section 5)
- Materials and dimensions (steel, stainless, etc.)
- Conductivity requirements

**D = DELIVERY**

- Specific to customer requirements
- Testing requirements
  - certification requirements (e.g., Coast Guard)
- any special packaging requirements
- any special shipping requirements
- tagging requirements
- can also refer to Determined Overall Length when working with Metal Hose