# Usage and Storage Suggestions

### **CARE AND MAINTENANCE**

#### When Using Your Hose

- The hose's lifespan is greatly influenced by surrounding temperature, fluid temperature, and exposure time.
  Select the proper hose according to the fluid used.
- For PVC hoses, if the fluid temperature reaches or exceeds 120°F, do not exceed half the rated working pressure of the hose.
- In pressure applications, open and close the valve slowly to avoid impact pressure. Sudden valve closure could cause the hose to burst.
- Avoid using the hose with high-grade chemicals, high toxicity, hazardous materials, high concentrations of acids or alkalis, and flammable or explosive gasses.
- Set pump pressure below the working pressure when using the hose in the upright part of an underwater pump to avoid a water hammer when the pump is turned off.
- Do not use the hose for compressed air to prevent bursting.
- Do not use the hose for food or pharmaceutical products unless indicated.
- Exposure to weather will increase the hose's deterioration rate.
- Hoses are replaceable items. Replacement rate depends on usage conditions and deterioration.

#### Installation

- Prior to installation, consider the impact on human health and surrounding facilities in case of hose failure.
- Provide sufficient slack at installation to accommodate hose expansion and contraction due to internal pressure.
- Avoid twisting the hose. Use a joint if twisting arises from rocking or rotation.
- Prevent sharp bends at the fitting to avoid hose damage. Use appropriate elbows and fittings to support the hose and allow extra length to avoid sharp bends.
- Protect the hose from external impacts (e.g., falling rocks or vehicle traffic). For installations requiring 150 feet or more of continuous hose, the resulting head or loss of pressure may disrupt flow.
- The hose will deteriorate with age. Replace the hose if defects are found during periodic inspections.

#### Storage — As Stock

- Temperature, humidity, ozone, sunlight, oils, solvents, corrosive liquids, fumes, insects, rodents, and radioactive materials can adversely affect stored hoses.
- Avoid exposure to direct or reflected sunlight.
- Store the hose in:
  - 1. A dark location out of direct sunlight.
  - 2. A cool location.
  - 3. Low humidity.
  - 4. Free of dust and dirt.
  - 5. On a first-in, first-out basis.
  - 6. An ideal temperature range of 50 to 70 degrees F.
- Do not stack hoses to the extent that the weight creates distortions on the lengths stored at the bottom.

## Storage — After Use

- Follow the above recommendations.
- After use, remove residual substances by washing the hose in cold water.
- Store the hose with good ventilation so that air passes freely through the inside. For rubber hoses, cap the ends

#### **Transport**

- Do not drag the hose on the ground when moving it.
- Handle carefully to protect the hose from impact during loading and unloading.
- If lifting the hose with a crane, use multiple points of support rather than lifting from a single point.

#### **Exterior Inspection**

- Stop using the hose immediately and replace it if the following abnormalities are discovered:
- Swelling or leakage near fittings.
- Exterior cracking that allows fluid loss or creates a safety hazard.
- Collapsing or kinking.
- Inside swelling and exfoliation.
- Other issues such as hardening, swelling, or cracking.