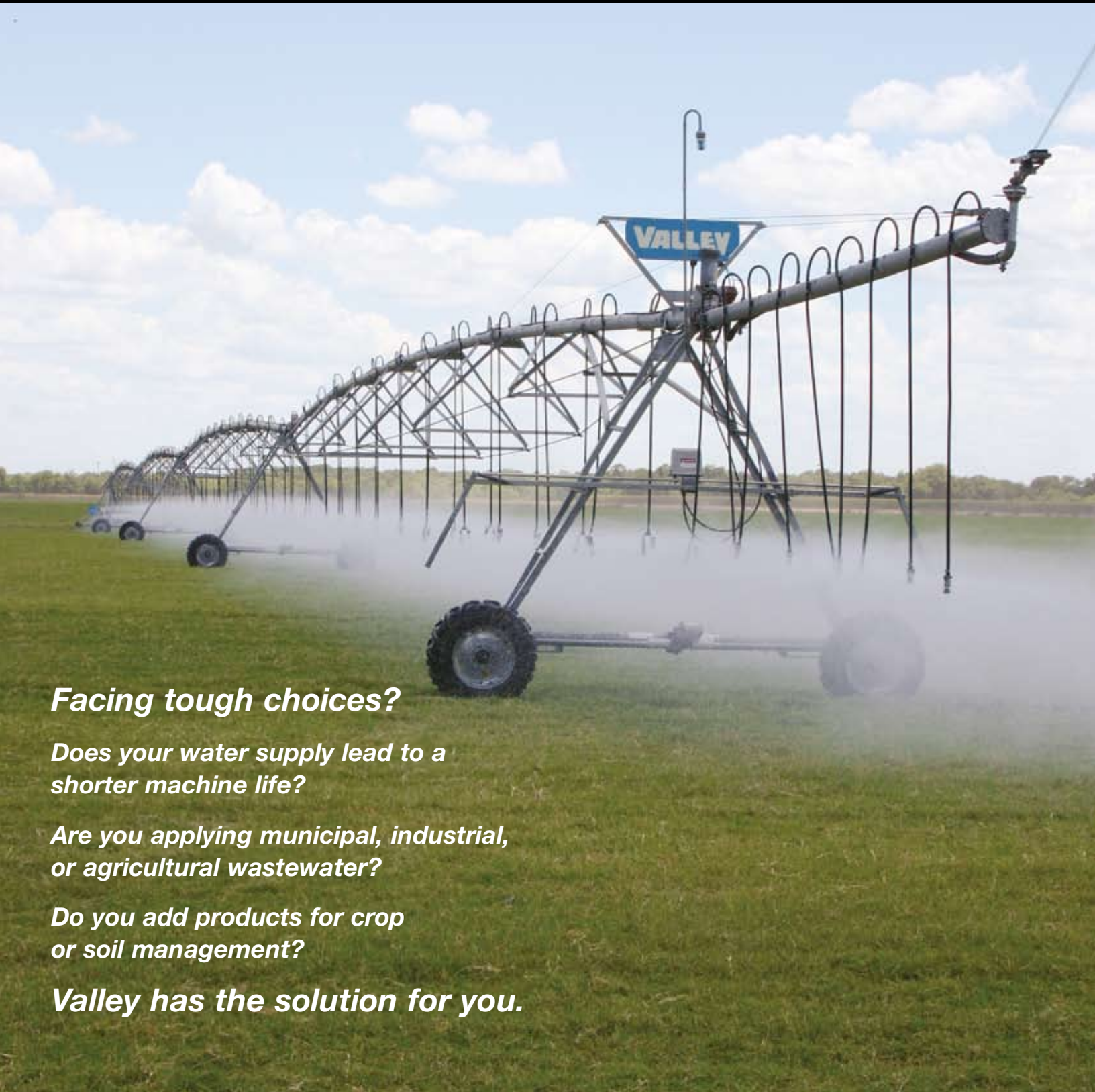


# Corrosive Water Solutions



**Choosing the best pipeline for your field.**



***Facing tough choices?***

***Does your water supply lead to a shorter machine life?***

***Are you applying municipal, industrial, or agricultural wastewater?***

***Do you add products for crop or soil management?***

***Valley has the solution for you.***

# Unique Conditions Require Specific Solutions

## Supply and Demand

In certain areas, water that was once known to be clean and non-corrosive is increasingly becoming more corrosive. Some producers are using less desirable sources - waste water, process water and corrosive water. In those areas of degrading water quality, corrosion of standard galvanized steel can occur at varying rates.

## Corrosive Factors

There are several characteristics that may lead to water being corrosive:

- Acidic (low pH)
- Alkaline (high pH)
- Corrosive chemicals (chlorides, sulfates, other salts)
- Soft water (low mineral content)
- Some chemical additives for crop management



## Valley® Expertise

All materials except POLY-SPAN™ are susceptible to corrosion failure. With time, depending upon the water quality, corrosion failure can occur in a few years or it may take several decades. The industry standard galvanized pipe pioneered by Valmont is still acceptable for most applications but will not always meet expectations under certain water conditions. Even in areas where galvanized products have been successful in the past, changes in water quality or management practices can lead to reduced life. **The only method to determine water quality as it relates to the pipeline is to have your Valley dealer obtain a water sample for analysis and provide you with an estimate of your pipeline life.**



At Valmont, we are committed to help you find solutions, not just sell you equipment. Our application experts work with Valley dealers to identify the best solution for your needs. Choosing the correct Valley product will provide the best long-term value. We continuously study and test new products and processes, increasing our knowledge and improving our products.

Type of Water	POLY-SPAN™*	Stainless Steel	Weathering Steel	Cathodic Anode	Galvanized Steel
<b>Soft Water</b> (low in carbonate, bicarbonate, calcium and magnesium)	★★★★★	★★★	★★★	★	★
<b>Salty Water</b> (high in total dissolved solids and electroconductivity)	★★★★★	★★★★	★	★★★★	★
<b>Acidic or Alkaline Water</b> (pH less than 6.2 or higher than 8.5)	★★★★★	★★★★			
<b>High concentrations of chlorides and/or sulfates</b>	★★★★★	★★★		★★★	

\* Patented

# Corrosion Solutions



POLY-SPAN™

**POLY-SPAN™ - High Density Polyethylene (HDPE) Liner** - Introduced by Valmont in 1992 to help resist the effects of acidic, alkaline, corrosive, and saline water. Extends pipeline life in all water conditions.

**Versatility** - Available with Valley pivots, towables, and linears (8 5/8" & 6 5/8" pipe sizes). Eight span length choices up to a maximum of 205'. Also available in model 6000 series spans.

**INDUSTRY BEST! 20/10 Year Pipeline Corrosion Warranty** - 20 year prorated warranty with unconditional pipeline replacement during the first ten years.



WEATHERING STEEL

**Weathering Steel** - Extends pipeline life in soft water conditions.

**Versatility** - Available with Valley pivots and corner machines (6 5/8" pipe size).

**Galvanized Coating and Stainless Steel Couplers** - Added corrosion protection for longer life.

**20 Year Pipeline Corrosion Warranty\*\*** - Prorated warranty.



STAINLESS STEEL

**304 Stainless Steel** - Extends pipeline life for a limited range of corrosive conditions. (Not recommended for water with chlorides.)

**Versatility** - Available with Valley pivots and towables (8 5/8" & 6 5/8" pipe sizes). Eight span length choices up to a maximum of 205'.

**20/7 Year Pipeline Corrosion Warranty\*\*** - 20 year prorated warranty with complete pipeline replacement during the first seven years.



CATHODIC ANODE

**Sacrificial Magnesium Anode in Galvanized Pipeline** - Extends pipeline life in salty water conditions.

**Versatility** - Available with all Valley equipment; pivots, towables, linears, and corners. Anodes can be replaced.

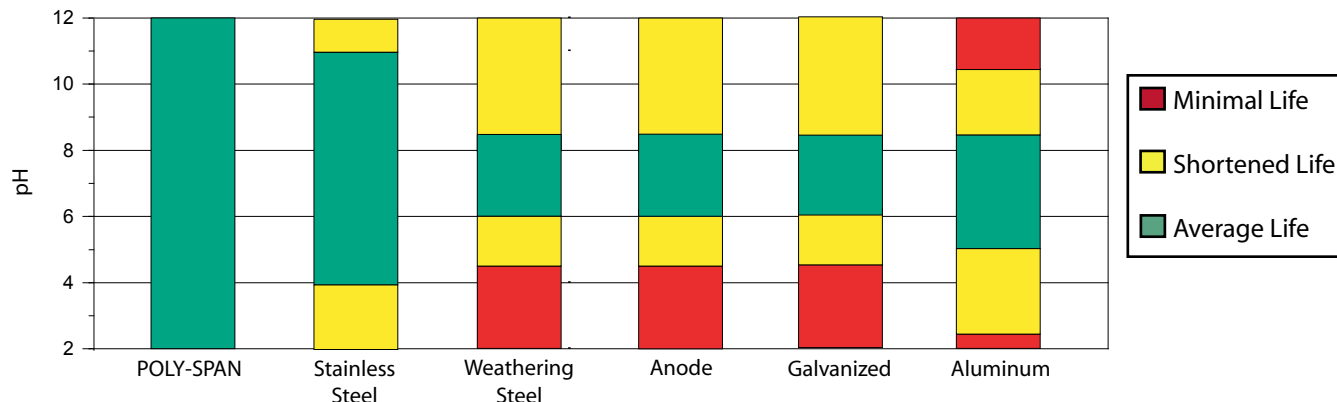
**Adaptable** - Amount of protection (number of anodes) can be customized for your installation.

**20 Year Pipeline Corrosion Warranty\*\*** - Prorated warranty.

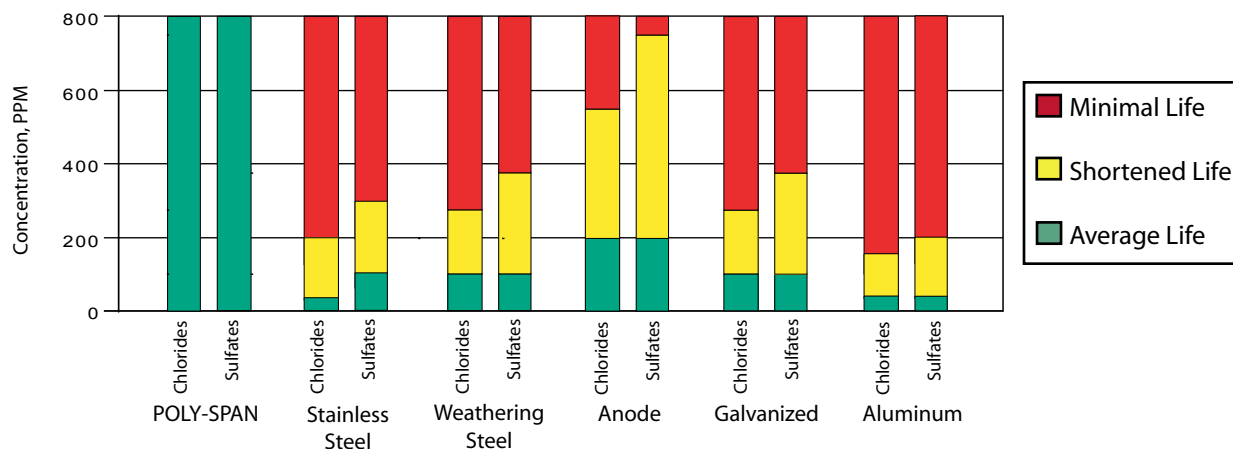
\*\* Subject to approved water sample.

# Material Selection Guidelines

### pH Guidelines for Pipeline Life



### Chloride & Sulfate Concentration Guidelines for Pipeline Life



pH, chlorides, and sulfates are not a complete indication of corrosion potential. Other corrosive elements may affect the life of all materials listed. Your dealer will provide a water analysis to determine the best solution for your particular situation.



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See your local authorized Valley Dealer:

Valmont Irrigation has a policy of continuous product improvement and development. As a result, certain changes in standard equipment, options, price, etc., may have occurred after the publication of this brochure. Some photographs and specifications may not be identical to current production. Your local Valley dealer is your best source for up-to-date information. Valmont Irrigation reserves the right to change product design and specification at any time without incurring obligations.

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