

# APPENDIX S

## Facility Useful Life

Appendix S summarizes industry standard useful life for treatment facility components that can be used for life cycle costing, and asset management.

## Land

- permanent (if owned outright)
- easements (the life of the easement)

## Structures

- 50 years plus or minus – 10 years
- plant buildings, concrete process tankage pump stations, etc

## Process Equipment

- Mechanical equipment (pumps, bar screen, etc.) – 15 to 25 years

## Electrical Equipment

- MCC, substations, etc. – 15 to 25 years
- Variable frequency drives – 10 to 15 years

## Auxiliary Equipment

- Small pump (e.g., seal water pumps) – 10 to 15 years

## Conveyance Structures

### Sewers

- |                                   |                 |
|-----------------------------------|-----------------|
| • Vitrified clay pipe sewers      | 50 to 100 years |
| • Reinforced concrete sewers      | 50 to 100 years |
| • Cement lined ductile iron sewer | 50 to 100 years |

### Force Mains

- |                                     |                |
|-------------------------------------|----------------|
| • Coated steel                      | 30 to 50 years |
| • Reinforced concrete               | 30 to 50 years |
| • Reinforced concrete cylinder pipe | 30 to 50 years |

### Outfalls

- |                                  |                 |
|----------------------------------|-----------------|
| • Cement lined ductile iron pipe | 50 to 100 years |
| • Reinforced concrete pipe       | 50 to 100 years |

## References

1. Code of Federal Register: 40 CFR Chapter 1 (7-1-00 Edition) foot 35, subpart E, Appendix A