**Section 373.205 Useful Life**

Applicants wishing to qualify for an exemption under Section 373.103(c) must complete a Useful Life evaluation. This evaluation must demonstrate that the existing facility has exceeded its useful life. Useful life is considered to be the time span over which a wastewater treatment facility can be expected to be economically operated and maintained. Useful life is distinctly different from design life. Publicly owned treatment works constructed with the assistance of a federal or state construction grant must, at the minimum, be operated and maintained for the design life of the project (typically 20 years). The Useful Life requirement is intended to prevent the premature retirement of facilities capable of meeting the more stringent effluent limits of 10mg/1 BOD5 and 12mg/1 total suspended solids. The evaluation is also intended to assess the Useful Life of individual components of the existing facility, so that any salvageable components are incorporated into the proposed facility for which an exemption is requested should it prove to be cost-prohibitive to continue to meet the more stringent limits. This ensures that the highest degree of treatment possible is provided, in the most cost-effective manner. Applicants will provide the following information:

a) Determine the structural integrity of the individual units in the existing facility.

b) Review the operations and maintenance record for past performance.

c) Relate Subsections (a) and (b) to the expected life cycle for the individual units. USEPA provides the following general guidelines for life cycle: conveyance structures (piping) – 50 years; process equipment – 15 to 20 years; buildings and concrete tanks – 30 to 50 years; auxiliary equipment – 10 to 15 years.

d) Determine the present worth cost to continue use of the existing facility over a 5, 10 and 20 year planning period using standard engineering economic analysis. Sunk costs are not included in this analysis. Relate this cost to user charges.

e) Describe alternatives to using the existing facility, ranging from addition of one or more lagoon cells in conjunction with upgrading of existing facilities to the construction of an entirely new lagoon system. Determine the present worth costs of these alternatives over the same planning horizons. Relate these costs to user charges.

(Source: Added at 12 Ill. Reg. 3472, effective January 22, 1988)