AMDTreat is a computer application for estimating the cost to clean-up polluted mine drainage. AMDTreat works by using a variety of passive and active treatment types including vertical flow ponds, anoxic limestone beds, oxic limestone channels, caustic soda, hydrated lime, pebble quicklime, ammonia, oxidation chemicals, and soda ash treatment systems. AMDTreat provides over 400 user-modifiable variables in modeling costs for treatment facility construction, excavation, revegetation, piping, road construction, land acquisition, system maintenance, labor, water sampling, design, surveying, pumping, sludge removal, chemical consumption, clearing and grubbing, mechanical aeration, and ditching. AMDTreat also contains several financial and scientific tools to help select and plan treatment systems. These tools include a long-term financial forecasting module, an acidity calculator, a sulfate reduction calculator, a Langelier saturation index calculator, a mass-balance calculator, and iron oxidation tools.

**Selected Features:**

- Comprehensive suite of solutions for estimating the size and cost of treatment systems
- Financial Forecasting tools to aid in calculating and evaluating long-term treatment costs
- Solutions available for various treatment scenarios including:
  - Limestone-based Passive Systems
  - Alkaline Neutralization Active Treatment Systems
  - Oxidation Active Treatment Systems
- Provides the ability to compare different treatment systems
- Perform forward cost modeling (treatment system needs constructed)
- Performs reverse cost modeling (treatment system is constructed)

**AMDTREAT**

**Obtaining Software**

This software is FREE at [http://amdtreat.osmre.gov](http://amdtreat.osmre.gov)

**SMCRA Benefits and Uses**

* Estimating costs and treatment scenarios for AML mine drainage treatment projects
* Estimating long-term treatment costs on regulated mine sites

**TIPS Training Classes**

Training classes are offered on a yearly schedule

**Need Help????**

Contact AMDTreat Software Manager
Brent Means, [bmeans@osmre.gov](mailto:bmeans@osmre.gov)
(717) 782-4080 ext. 18

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**U.S. Department of the Interior, Office of Surface Mining**