

## Scrap Metal Recycling

Integrated Engineers provided treatability services for the facility for three areas onsite: the oil water separator, tin baler effluent water, and aluminum shavings/cutting oil runoff. The facility processes and bales scrap metal for recycling. The three different waters were treated with Floccin J.

### Oil Separator

The oil separator water is used to remove any free oil that is floating on top of the water. Most of the oil is actually emulsified and carries through to the effluent side of the system. Jar tests with Floccin-J showed a good removal of these oils from the water.



### Tin Baler

The baler is used on the nonferrous metal and compacts the metal into bales. The process generates some water that exists in the material or becomes entrained from rainwater. Similarly, jar tests with Floccin-J showed a good removal of these oils from the water.



### Aluminum Shavings

The facility accepts aluminum shavings and components machined with an emulsified cutting oil solution. When the cutting oil solution is exposed to water, it turns a whitish color and is difficult to contain with the current bermed system. Treatability with the Floccin-J showed an easy liquid solid separation and removed of the emulsified oils in a strong flock. The dosage of the Floccin J was proportional to the amount of solids in the sample. The sampling scooped up a lot of oily dirt as well as the white cutting oil mixture.

