Oil sands tailings - The sediment and water mixture remaining after oil sands have been processed. When oil sands are processed the bitumen (heavy oil) and sand mixture is combined with hot water, steam and sodium hydroxide. The bitumen separates from the sand, floats to the top of the mixture and is removed. The water and remaining sediment, or tailings, are pumped into dyked ponds. The presence of the sodium hydroxide prevents the finer particles from settling and the long term handling of this material and of the sludge at the bottom of the tailings ponds are cause for environmental concern.