

Lapel WWTP Lapel, Indiana



The town of Lapel, Indiana installed a two roll off dewatering pad with a polymer mixing and injection building located right at the end of the pad. Sludge is pumped over to the pad. Sludge is pumped over to the building from the plant, where polymer is injected to cause the sludge to coagulate. The sludge then flows over to the overhead piping arrangement. The overhead distribution pipe has two valves that can be used to divert the flocculated sludge to either of the two roll offs. Sludge is pumped over to the building thru underground lines. Inside the building is a hard piped sludge mixing manifold and a polymer mixing and injection package.



Sludge is pumped into the building and into the mixing manifold. The manifold is hard piped between the inlet of the sludge line and the discharge that runs over to the distribution header.



This plant uses the Port-A-Poly to mix the emulsion polymer with the dilution water. From the mixer the solution is stored in a 165 gallon rectangular storage/aging tank. A variable speed progressive cavity injection pump is used to pump the polymer solution into the mixing manifold. This arrangement gives the operator maximum control of solution concentration and dosage rate. The additional aging time makes this process the most efficient system for mixing and injecting polymer. The entire process is inside the heated building. At the back of the dewatering pad is a drain trough that takes the filtered effluent back to the head works.

