Separators Reduce Backflushing of Sand Filters

Two massive sand media filters at Pyrenex in Sever-sur Adour, France have gone from backflushing at least seven times a day to no more than twice a day since the installation of a Lakos I-TSB Manifold Separator. The tremendous difference dramatically reduces the need for make-up water and directly improves the efficiency of the overall recycled wash water system, used to clean goose down (feathers) for the manufacture of clothing.

Required by local water authorities to eliminate the practice of discharging backwash water into neighboring rivers, Pyrenex faced excessive sewage costs had they not reduced the frequency of backwashing. Crediting the Lakos Separators, plant spokesmen subsequently report a significant reduction in operating costs.

Overall, the recirculation system begins with an inclined sieve, which removes the larger solids (+100 mesh). The Lakos Separators then handle the system’s flow of 110-130 U.S. gpm (25-30 m³/hr) prior to the final-stage sand filtration at 20 microns. Clean water is then discharged into a pit for eventual return to plant use. The purging of solids from the separators is accomplished via continuous bleed into a drum, allowing excess liquid to decant for easy solids handling.

Installed above a drum to bleed separated solids (below, left), the Lakos I-2508-TSB Separator then discharges directly to the sand filters (see overall system below — note inclined sieve at far left and discharge into pit at far right).