Ostara’s Nutrient Recovery Process

1 WASSTRIP®

The waste activated sludge stripping to recover internal phosphate (WASSTRIP) process is designed to release phosphate from waste activated sludge (WAS) produced in an enhanced biological phosphorus removal (EBPR) process. Subsequent sludge thickening diverts released phosphate into thickening liquor, which is then recovered in the Pearl process.

2 PEARL®

The Pearl process recovers phosphorus and ammonia from high strength nutrient streams such as sludge dewatering liquor and WAS thickening liquors after phosphate release using the WASSTRIP process. Pearl recovers nutrients by growing high purity crystalline granules of struvite under controlled reaction conditions in a fluidized bed crystallizer.

3 CRYSTAL GREEN®

Crystal Green is produced using the Pearl process by combining phosphorus, nitrogen and magnesium into a high value, market-ready fertilizer. Ostara’s process, dries, sorts and bags the fertilizer, and Crystal Green is ready for distribution and sale, directly from your facility.

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