

SOP: DRAWING SUPERNATANT INVENTORY TANK (AEROBIC DIGESTER)

Scope: This procedure is used to get as much water as possible out of digested sludge (thicken) before dewatering with belt press.

Procedure:

- Drawing the supernatant off of aerobic digester or (inventory tank) is done on as needed basis, based on volume in tank.
- Turn off blowers and allow sludge to settle.
- After a clear supernatant is visible, lower pump down into clear supernatant using winch, turn pump on, make sure pumping clear water. As pumping out clear water, pump will need to be lowered as needed until sludge level is reached, once sludge level is reached, DO NOT PUMP SLUDGE. Turn pump off.
- After clear supernatant is drawn off digester. Pump can be pulled up
- Clean pump of any rags or debris and dispose of.
- Turn blowers back on.
- Record in plant operations computer logbook.

SOP: TAKING DEPTH OF BLANKET - SECONDARY CLARIFIERS (DOB's)

Scope: Measurement of settled sludge in secondary clarifiers aids in the process of MLSS's in aeration basins.

DOB's are taken once on every shift, and taken more often as needed, i.e. high flows

Primary Method is using Cerlic Multitracker solids meter for DOB's;

Procedure for using solids meter:

- Turn unit on and let warm up.
- Take measurements from center of walkway, when arms/manifold are 90 degrees of walkway.
- Lower solids probe into water lowering slowly, unit starts at 16 ft., once meter reaches fluff of blanket 300-500 mg/l solids it will beep/vibrate; continue to lower to reach top of blanket, when solids reach 2000-3000+, this is level of blanket.
- Record levels on record sheet.

Procedure for using 15 ft. sludge judge:

- Before using, check sludge judge for cracks, or breaks.
- Take measurement halfway on walkway.
- Take measurement when scum arms are at north and south position on clarifier.
- Lower sludge judge in water slowly until touches bottom, slowly and holding sludge as straight as possible raise out of water until end of sludge judge can be seen. Note depth of sludge in tube. Holding sludge as straight as possible and slowly walk over to weir and release water of tube by bumping the bottom of sludge judge on edge of weir. Once empty, place sludge back in cover tube on walkway.
- Record depth on record sheet.