Attachment C
Flow Schematic
NPDES Permit No. MA0103284
Boston, MA

About 850,000 homes and 6,000 businesses in Greater Boston produce 480 million gallons of sewage each day — enough to fill the 750-foot Prudential Building three times each day.

1. BAR SCREENS
   Large debris is removed and trucked to landfill before sewage is pumped to lagoon.

2. GRIT REMOVAL
   Smoke and grit removed before sewage is pumped to lagoon.

3. ODOR CONTROL
   Sludge settles to the bottom, scum floats to top.

4. PRIMARY SETTLING TANKS
   Sludge settles to the bottom, scum floats to top.

5. SECONDARY SETTLING TANKS
   Secondary treatment employs naturally occurring bacteria to eat contaminants.

6. REAERATION TANKS
   Help provide oxygen.

7. DISINFECTION BASIN
   Sodium hypochlorite (bleach) is added.

8. OUTFALL TUNNEL
   9.5-mile long, 24-foot diameter tunnel
   55 outfall diffusers

9. CENTRIFUGE THICKENER
   Water returned to treatment system.

10. GRAVITY THICKENER
    Water returned to treatment system.

11. SLUDGE DIGESTERS
    Heat and mixing reduces sludge volume.

12. GAS/SLUDGE TANKS
    Methane gas used to fire boilers.

13. POWER PLANT
    Sludge, still 94 percent water, is shipped by barge to Quincy.

14. PELLENTZING PLANT
    Fertilizer pellets produced at FRSA plant.

(Graphic reprinted courtesy of the Boston Globe)