

**ATTACHMENT B**

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Pollutant                    | Limit (mg/l)    | SBC              | Federal Regulation | State Regulation |
|------------------------------|-----------------|------------------|--------------------|------------------|
| CBOD <sub>5</sub>            | 25              | Average Monthly  | 133.102(a)(4)(i)   | 92a.47(a)(1)     |
|                              | 38              | Average Weekly   | 133.102(a)(4)(ii)  | 92a.47(a)(2)     |
| Total Suspended Solids       | 30              | Average Monthly  | 133.102(b)(1)      | 92a.47(a)(1)     |
|                              | 45              | Average Weekly   | 133.102(b)(2)      | 92a.47(a)(2)     |
| pH                           | 6.0 – 9.0 S.U.  | IMin – IMax      | 133.102(c)         | 95.2(1)          |
| Fecal Coliform (5/1 – 9/30)  | 200 / 100 ml    | Geo Mean         | -                  | 92a.47(a)(4)     |
| Fecal Coliform (5/1 – 9/30)  | 1,000 / 100 ml  | IMAX             | -                  | 92a.47(a)(4)     |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml  | Geo Mean         | -                  | 92a.47(a)(5)     |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX             | -                  | 92a.47(a)(5)     |
| UV                           | Report          | Daily Minimum    | -                  | SOP              |
| Dissolved Oxygen             | 4.0             | Instant. Minimum | -                  | SOP              |

**Total Nitrogen and Total Phosphorus**

Nutrient monitoring is required for all sewage wastewater treatment facilities with design flows greater than 2,000gpd. Discharges greater than 2,000 GPD but less than 1.0MGD require monitoring, at a minimum, for Total Nitrogen and Total Phosphorus at a frequency of 1/year. This requirement will be re-imposed.

**Raw Sewage Influent Monitoring**

For POTWs with design flows greater than 2,000 GPD, influent BOD<sub>5</sub> and TSS monitoring must be established in the permit. The monitoring for influent parameters will be consistent with the same frequency and sample type as is used for the effluent parameters. Raw sewage monitoring will be re-imposed.

**NH3-N (BPJ)**

For new discharges, if WQM modeling results for summer indicates that an average monthly limit of 25 mg/L (default in model) is acceptable, a technology-based limit of 25 mg/L should be established as a BPJ limit. The following BPJ NH3-N limits will be incorporated into this renewal:

| Pollutant | Limit (mg/l) | SBC               | Basis   |
|-----------|--------------|-------------------|---------|
| NH3-N     | 25           | Average Monthly   | DEP SOP |
| NH3-N     | 50           | Instantaneous Max | DEP SOP |

**Water Quality-Based Limitations**

Water quality analysis revealed no need for water quality based effluent limits. Dilution ratio is 301 river flow to 1 waste flow.

Dilution Ratio

River flow = 494 cfs

STP Discharge Flow = 1.64 cfs

**DR = 494/1.64 = 301 to 1**

Further modeling not required DR is greater than 25 to 1