Johnson County Wastewater Public Pool Form

1. Project Name: ________________________________________________________________

2. Project Address: ____________________________________________________________

3. City: ____________________________________________________________________

4. Filter System Type (circle one): Regenerative i.e. requires backwash (ex. Sand, DE, etc.) OR Non-regenerative i.e. does not require backwash (ex. Cartridge)

5. Disinfection System Type (circle one): Chlorine (or Bromine) or Salt Water or Other

6. Pools shall not be connected to, or otherwise be drained to, the sanitary sewer system with exception for the following in accordance with the Johnson County Environmental Sanitary Code or applicable City storm water codes for public pools:
   - Backwash on all pools with regenerative filters.
   - Salt water disposal for pool winterization or maintenance where the City will not allow the pool salt water to be drained to grade or the storm sewer system.

   Required discharges to the sanitary sewer system shall be limited to 50 gpm (max.) by an orificed discharge. JCW may reduce the allowed discharge rate based on location in the collection system. Discharge to the sanitary sewer shall not be continuous.

7. Orifice Design:
   a. The orifice shall limit flow to 50 gpm (max.). Use the following calculation:
      Area (A, sf) = [0.11 cfs / (0.61)][(64.4 fps²)(H,ft)]¹/²
      Head (H, ft) _____ = Finish Grade Elevation _____ ft – Orifice Centerline Elevation _____ ft – 1 ft freeboard allowance
      Orifice Diameter: _________ inches
   b. The orifice basin shall be located outside of the building and accessible by JCW at all times.
   c. Provide and reference the orifice and basin details on the JCW Permit Page. The details are available at www.jcw.org on the Commercial Permitting page under Permitting in the Development and Permitting section.

8. Regenerative Filter Backwash:
   a. Backwash Cycle Frequency: _________ times per week. Discharge shall not be continuous.
   b. Filter Pump Rate: _________ gpm. Attach the pool system pump curve with the operating point clearly shown and labeled.
   c. Backwash Cycle Duration: _________ minutes
   d. Required Orifice Basin Volume: _________ gal = Pump Rate x Backwash Cycle Duration
e. Provided Orifice Basin Volume: (Inlet Pipe F/L Elevation ________ ft – Outlet Pipe F/L Elevation ________ ft) x Basin Area (foot print) ________ sf = ________ cubic ft = ________ gallons

9. Salt Water Disposal: For disposal of salt water from pool winterization or maintenance where the City does not allow salt water to be drained to grade or the storm sewer system:
a. Volume shall be included in the orifice basin to accommodate the draining rate. Provide calculations showing the required orifice basin volume.
i. Volume Drained: ___________ gallons
   ii. Duration of Discharge at 50 gpm: ___________ minutes
   iii. Salinity Concentration of Drained Water: ___________ mg/l

b. Included the following note on the pool plans and JCW Permit Plan: Pool salt water disposal shall be halted if a significant rainfall event is experienced. Discharge may resume three days following the significant rainfall event. Contact Johnson County Wastewater at (913)715-8500 if there is doubt concerning what constitutes a significant rainfall event.

10. Pool Winterization and Maintenance: Describe method for draining the pool for winterization or maintenance:

_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________

REMINDER: Chlorine (or Bromine) treated pools shall not be drained to the sanitary sewer.

11. Pool Chemicals:
a. Show and label all chemical use and storage areas on the project plans.

b. List types and volumes of chemicals to be used and stored:

_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________

   c. Describe the method to prevent discharge of chemicals to the sanitary sewer system when applicable.

_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________

12. All calculations shall be sealed by a Kansas licensed professional engineer.