IDAPA 58.01.17 RECYCLED WATER RULES REVIEW COMMENTS

J-U-B Engineers, Inc. (J-U-B) has prepared comments regarding IDAPA 58.01.17 Recycled Water Rules that has been modified in accordance with Executive Order No. 2020-01, Zero-Based Regulation. We appreciate the opportunity to comment on revised standards and look forward to working with the Idaho Department of Environmental Quality (DEQ) on future projects.

GENERAL COMMENTS

The following comments cover clarifications and recommendations J-U-B has identified:

**IDAPA 58.01.17.300.03.iii:** Federal Emergency Management Agency (FEMA) Floodplain Designation for Permit Application

**Discussion:**

IDAPA 58.01.17.300.03.iii currently requires the identification of floodplain as available through FEMA. Some rural communities of Idaho do not have identified flood elevations. For purposes of example, in some locations of Idaho County, flood elevations are not available and Idaho County has jurisdiction over construction in floodplains. Please outline procedures to identify floodplains or acceptance criteria for supporting documents when adequate FEMA information is not available. If a rural community must establish floodplain or equivalent to apply for permit, this could set a higher cost burden on smaller communities which could be spent elsewhere for necessary improvements.

Further, it is noted that many FEMA floodplain maps lack sufficient detail in topography to accurately reflect the floodplain elevation at some sites. Please add language to accept a survey that locates the floodplain elevation.

**IDAPA 58.01.17.601.06:** Point of Compliance

**Discussion:**

IDAPA 58.01.17.601.06 allows DEQ to move the point of compliance for reuse after storage for coliform limits. Moving the point of compliance after storage could force municipalities to move disinfection or install additional disinfection equipment. Moving the POC after storage could also require additional treatment unit processes to ensure the reuse water can be disinfected. These additional requirements could be cost inhibitive and decrease cost effectiveness of reuse systems for future applications. Additionally, meeting permit limits and disinfection requirements before
storage has historically achieved human health and safety criteria. Setting coliform limits after storage seems to be an attempt to manage water quality impacts from wild animals that may use the lagoon. The issue is not identified by the State as a concern in similar situations within irrigation ditches, especially those with return flow. Post storage disinfection would only incur additional costs and treat animal pathogens that would already be present in locations that use reuse applications. Further, the sizing of post storage disinfection systems sized to apply reuse during the growing season can be significantly greater than the sizing of post treatment/pre storage disinfection systems which convey the same volume of flow year-round to storage.

Please provide clarification regarding “evaluation on a case-by-case basis”. What is the evaluation criteria to determine whether the point of compliance is after or before storage? Please clarify what design parameters or other factors that can be used to maintain a point of compliance following treatment rather than after storage (for purposes of example, reuse in a rural area with limited potential for human contact)? Case-by-case language creates potential for inconsistent enforcement through DEQ. Clear criteria should be in place for communities to be able to plan, fund, design and construct cost effective reuse systems.

**IDAPA 58.01.17.615:  Subsurface Distribution System**

Discussion:

IDAPA 58.01.17.615 removed subsurface distribution systems in revisions without a replacement with the reason that subsurface would be covered under rapid infiltration. Subsurface distribution for irrigation purposes has practical applications for areas that use reuse in proximity to human facilities. Specifically, subsurface drip irrigation of Class C effluent could be utilized in residential green belts with no buffer due to distribution technique’s limited potential for human contact. Subsurface drip irrigation reuse systems should be bolstered in the rules and guidance to encourage use of reuse systems in these areas rather than eliminated.

**IDAPA 58.01.16 –58.01.17:  Lagoon Underdrain**

Discussion:

IDAPA 58.01.16 and 58.01.17 – The Wastewater and Reuse rules not directly address lagoon underdrain standards or testing, however specific codes within each section have been enforced at the reuse permit level to require testing or additional permitting from waters collected within lagoon underdrains. In locations where lagoons are constructed with a liner below potential groundwater levels, an underdrain must be constructed to prevent the liner from floating.

IDAPA 58.01.16.493.03 inherently recognizes that some level of wastewater leakage does not negatively impact surface water or groundwater, specifying an acceptable volume of leakage that
is established through lagoon leakage testing. Regardless of the presence of an underdrain, lagoons with and without underdrain systems lose an acceptable volume of stored water to waters beneath the lagoon due to seepage. Lagoons with underdrain systems collect groundwater from beneath the lagoon and discharge the water to an adjacent water body or drainage area.

Although not specifically discussed within the Reuse rules, DEQ’s interpretation of waters collected from underdrains has a significant impact on design and implementation of Reuse systems. In some situations, DEQ has interpreted the underdrain as a point source and upon detection of wastewater, required additional testing and recirculation back to the lagoon, even under conditions when lagoon leakage was within the acceptable rates of IDAPA 58.01.16.493.03. It is unclear which rules govern the underdrain and any measurable pollution within it, which could come from the lagoon or an upgradient source. Idaho cities would benefit from clarification regarding acceptable amounts of lagoon leakage and how collection of this leakage within underdrains will be regulated.