

Flint Drinking Water Task Force (FTF 15-5)

Task Force Recommendations Regarding Flint Drinking Water Treatment Performance Evaluation

For protection of public health, Flint must avoid significant distribution system issues similar to those experienced following the source water switch to the Flint River and subsequent operation of Flint's water treatment plant.

The EPA Flint Safe Drinking Water Task Force recommends that Flint develop and implement a Performance Assessment Plan prior to distribution of water from the Karegnondi Water Authority (KWA) source. The plan must address how the treatment plant will be brought on-line, and how finished drinking water will be introduced to the distribution system. This plan is particularly important given the City has no experience treating the KWA-supplied water, and is operating a distribution system that is still recovering from the past upset.

Flint should work with its consultant and MDEQ to establish objective water quality and plant performance criteria. The plan must include operation of Flint's drinking water treatment plant for a reasonable period of time to treat KWA-supplied water until:

- (1) the treated water meets finished water quality goals;
- (2) the finished water quality is consistently maintained;
- (3) potential plant operational and mechanical start-up issues are identified and addressed; and
- (4) water plant operations staff are proficient in treating the new source.

KWA water should not be distributed to the public until these conditions are satisfied.

During this performance evaluation period, Flint must distribute to the public water from an alternate source. As water is already received from Detroit (Great Lakes Water Authority), that is an obvious and appropriate choice for that interim period. The length of the performance evaluation period will be dependent on the amount of time it takes for the treatment plant to consistently and reliably meet the performance criteria.

Because of similarities in source water and in treatment processes with Detroit's Huron plant, the Flint water plant will likely be configured to produce treated water with similar quality to that of the water currently being received from Detroit. Continued use of Detroit water during the performance evaluation period will minimize the risk of distribution system upsets.

We encourage Flint and the City's consultant to perform a number of assessments prior to the completion of the KWA pipeline and availability of the Lake Huron source water to expedite the plant transition period. For example, the planned bench-scale jar tests will be helpful in establishing full-scale treatment plant operating parameters. Assessment of corrosion control treatment using Detroit source water with lead pipe loop rigs in advance of switching to the KWA source may also be transferrable to the KWA source water. Pipe loops rigs operated during the performance assessment period will help predict whether lead release will be an issue when the new plant goes on line. EPA will work with the City to set up pipe loops at the Flint treatment plant.