

**Orinda Water Treatment Plant Disinfection Improvements Project**  
**Community Meeting #2 (October 21, 2019)**  
**Questions and Answers**

**Project Description and Need**

- **Why do you need to do these improvements at Orinda Water Treatment Plant (WTP)? Are these improvements being done at other East Bay Municipal Utility District (EBMUD) water treatment plants?**

The Orinda WTP Disinfection Improvements Project (Project) will improve current water treatment processes by adding ultraviolet (UV) disinfection and a chlorine contact basin (CCB). The chlorine contact disinfection basin is an essential feature of modern water treatment plants (WTPs) since it provides both a location for disinfection downstream of filtration, which limits formation of disinfection byproducts such as trihalomethanes (THMs), and storage capacity for treated water before it is sent to the distribution system. Adding these disinfection improvements will reduce the formation of disinfection byproducts which form when chlorine reacts with naturally-occurring organic matter in water. The Project will provide reliable water treatment infrastructure that meets long-term operational needs and will continue to meet drinking water and environmental regulations to achieve EBMUD's internal long-term water quality goals.

EBMUD's other WTPs have either a CCB or a clearwell (a water storage feature for disinfection control and on site storage) or a combination of the two.

**Chlorine Contact Basin**

- **What is the chlorine contact basin (CCB), and how will the CCB be designed for earthquake safety?**

The CCB would be a 1.4-million gallon underground structure that would provide disinfection contact time between free chlorine (sodium hypochlorite) and water for disinfection. Directing water through a basin after filtration allows for the removal of naturally-occurring organics through sedimentation and filtration prior to chlorination, which reduces the formation of disinfection byproducts. The CCB would be designed in accordance with seismic design standards from the California Building Code.

## **Orinda Water Treatment Plant (WTP) Staffing and Operations**

- **Will the Project result in more workers at the Orinda WTP?**

Once complete, the Project will not require additional staffing at the Orinda WTP site. Existing mechanical, electrical and grounds maintenance staff, and water treatment plant operators, will serve the new facilities. Currently, approximately 23 EBMUD staff report for work at the Orinda WTP during the weekdays (daytime hours of 7:00 a.m. to 5:00 p.m.). On weekends and during the nighttime, one water treatment plant operator works at the Orinda WTP.

## **Construction Duration & Hours**

- **What is the Project construction schedule and when would construction activity would be more concentrated?**

Project construction is scheduled to begin in mid-2021, and would take approximately 4.5 years to complete. Project construction would involve a multitude of construction activities including, but not limited to, tree removal, utility relocation, demolition, soil excavation and concrete pours for the multi-level below-ground and above-ground portions of the UV/CCB/Maintenance and UV Electrical Building (MAUVE) facility, installation of two new electrical buildings, the new generator building and associated fuel storage, the new grounds maintenance building, below-ground installation of large-diameter pipelines, fencing installation and landscaping, and startup testing for each new facility, which are all included in the estimated construction duration. It is estimated that more concentrated construction activity for the concrete pours for the MAUVE/UV/CCB Structure would occur during years 2023 and 2024. The total construction duration includes periods of time where there is no significant construction activity at the site (for example, when concrete is curing or startup testing), and also includes winter time periods when the Orinda WTP will be taken off-line to connect the Project components to the existing treatment infrastructure.

## **South Standby Generator and Fuel Tanks**

- **How big is the South Standby Generator?**

The South Standby Generator is approximately 55 feet long by 20 feet wide, and 14 feet above existing grade level. Two rectangular 5,200-gallon, aboveground, double-walled fuel tanks would be installed adjacent to the generator structure. The fuel tanks would be approximately 16 feet long by 8 feet wide, stand approximately 9 feet high, and have concrete walls with steel reinforcement. The tanks will be designed to meet California Fire Code compliance.

- **Could the fuel tanks be located further away from Camino Pablo?**

The fuel tanks need to be located adjacent to the South Standby Generator and at a location that is accessible for fuel delivery. The South Standby Generator location was selected because its location next to the EBMUD access road leading from the South Gate of the Orinda WTP ensures “pull-up” fueling access without requiring trucks to turn-around or back up. The location selected for the South Standby Generator also is on the most direct route through the Orinda WTP from the South Gate entrance to the North Gate exit which is the route used by the chemical delivery trucks that make daily trips to the Orinda WTP.

### **Construction Staging**

- **How many parking spaces will be kept for public use at the North Orinda Sports Field?**

The existing staging area south of the current ballfields parking would be used to temporarily locate EBMUD Grounds and Mechanical Maintenance staff, equipment, and fleet vehicles during construction because their existing buildings would be demolished as part of the Project. All currently available parking for the ballfields would remain and would be kept for public use.

- **Construction staging areas should be kept neat and clean.**

EBMUD requires their contractors to ensure that construction-related activity is as clean and inconspicuous as practical by storing building materials and equipment within the proposed construction staging areas or in areas that are generally away from public view and by removing construction debris promptly at regular intervals and placing black fabric fence screening on fences, where feasible.

- **Stormwater runoff flows onto the proposed Manzanita East staging area (located on EBMUD property east of Manzanita Drive and south of Acacia Lane) and this area becomes a “mudpit” in the wintertime.**

Stormwater runoff has been observed flowing from Acacia Lane to San Pablo Creek in the area east of and beyond the area proposed for use for staging during construction of the Project. The staging area will be restricted to the drier, flatter portion of the property closer to Manzanita Drive. Potential impacts related to Hydrology and Water Quality and will be analyzed and addressed in the Draft Supplemental Environmental Impact Report (EIR).

- **The Manzanita East staging area should not become a parking or equipment storage area for the Orinda WTP.**

Following construction of the Project, all proposed staging areas would be restored to their existing uses.

## **Environmental Documentation**

- **Will comments from the community meeting be incorporated into the Project Supplemental Environmental Impact Report (EIR)?**

Comments related to the Project from the community meetings will be addressed in the Draft Supplemental EIR. The Draft Supplemental EIR process also includes a public review period of 45 days for receipt of formal comments after release of the Draft Supplemental EIR which is anticipated to be in July 2020.

- **Please explain how environmental impacts are evaluated.**

The California Environmental Quality Act (CEQA) requires that all state and local government agencies consider the environmental consequences over which they have discretionary authority before taking an action that has the potential to affect the environment. Impact assessments apply the significant criteria detailed in Appendix G, Environmental Checklist, of the *2020 CEQA Statutes and Guidelines* (CEQA Guidelines), which is produced by the California Office of Planning and Research (OPR). EBMUD analyzes project impacts to up to 18 different environmental resource factors detailed in Appendix G during CEQA review.

EBMUD is preparing a Draft Supplemental EIR consistent with the CEQA Guidelines to inform agencies and the public about the proposed Project, to evaluate the environmental impacts associated with the Project, and to identify measures to reduce such impacts.

The Draft Supplemental EIR will supplement the analysis presented in the Water Treatment and Transmission Improvements Program (WTTIP) EIR by describing the proposed modifications to the Project and evaluating the modifications potential to: (1) generate significant impacts not disclosed in the WTTIP EIR, and (2) change the severity of significant impacts disclosed in the WTTIP EIR.

The resource areas to be evaluated in the Draft Supplemental EIR include the following: aesthetic resources; air quality; biological resources; cultural resources; energy; geology, soils, seismicity, and paleontological resources; greenhouse gases; hazards and hazardous materials; hydrology and water quality; noise and vibration; recreation; transportation; tribal cultural resources; and wildfire. The Project is evaluated according to the significance criteria in the CEQA Guidelines for all the resource areas listed above.

- **How do you mitigate an impact to a less than significant level?**

If the Project is found to exceed the significance threshold of significance criteria in the CEQA Guidelines, Project-specific mitigation measures would be implemented to reduce the impact to a less than significant level.

For example, in resource area V, Cultural Resources, of Appendix G of the CEQA Guidelines, one significance criteria asks “Would the project cause a substantial adverse change in the significance of an archaeological resource?” A substantial adverse change in the significance of an archaeological resource could be an accidental excavation of a buried archaeological resource during construction of a project. Mitigation of this impact to a less than significant level would require implementation of a project-specific mitigation measure that would require the halting of all construction work within a required distance from any unanticipated discovery of a potential archaeological resource until a qualified archaeologist could evaluate the potential resource, and would also require implementing the recommendations of the archaeologist for reporting the discovery and/or monitoring further construction activities in the vicinity of the discovery. In this way, with implementation of the mitigation measure, the potential impact to the significance of an archaeological resource would be reduced to a less than significant level.

- **What would an example be when you cannot mitigate a significant environmental impact?**

When an environmental impact cannot be mitigated, it is labeled significant and unavoidable. An example of a significant and unavoidable impact is, for example, a construction activity that exceeds the local noise ordinance thresholds within a specified set of work hours required by the local regulatory agency, such as a city or county where there is no feasible mitigation measure to reduce the impact to a less than significant level.

### **Environmental Resource Impacts**

#### **Air Quality**

- **Concerned about the impacts on air quality from constructions, particularly increasing fine particulates near kids at Wagner Ranch Elementary.**
- **The Project should consider when kids are going to be outdoors during school hours and should reduce diesel particulates by limiting trucks from driving by the school during these times.**

The potential impacts of the Project on air quality will be analyzed and addressed in the Draft Supplemental EIR.

#### **Biological Resources**

- **Are you removing a lot of riparian trees and vegetation?**

Approximately 53 trees that are wholly within the Project footprint would be removed to accommodate Project construction. An additional 29 trees are adjacent to or near the Project footprint and could be adversely affected by construction activities, potentially

resulting in the need for removal. The potential impacts of the Project on biological resources, including riparian habitat, will be analyzed and addressed in the Draft Supplemental EIR.

## Noise

- **Could “white noise” backup beepers on construction vehicles be used instead of the standard back-up beepers?**

The potential impacts of the Project on noise will be analyzed and addressed in the Draft Supplemental EIR.

## Hazards and Hazardous Materials

- **Would chlorine be released in a major earthquake?**

No, the chlorine that is stored on site is not gaseous chlorine but is instead sodium hypochlorite, which has the same active ingredient as household bleach. All of EBMUD’s facilities have moved away from the use of gaseous chlorine for safer and more stable liquid disinfectants such as sodium hypochlorite.

- **Do the chemical storage tanks contain chlorine gas or chloramine?**

The chemical storage tanks do not contain chlorine gas nor chloramines. Chloramination, which is the practice of sequentially adding chlorine and ammonia to form a relatively stable disinfectant residual to maintain good water quality in the distribution system, is performed “in-situ” in the pipelines just before the treated water leaves the Orinda WTP.

- **Would the local fire agency have to sign off on the Project?**

While the Project does not require the approval of the Moraga Orinda Fire District (MOFD), EBMUD will coordinate with the MOFD on code compliance and overall Project safety requirements.

## Transportation (Traffic, Pedestrians, and Bicyclists)

- **Concerned about pedestrian safety and construction truck traffic, particularly when kids are walking to school or catching the school bus.**
- **EBMUD should communicate with the Orinda Unified School District about the Project and should consider a crossing guard partnership during school hours.**
- **Crossing guards should be located at the North Orinda Sports Field staging area. EBMUD should build a new walking path/biking path at the WTP site along Camino Pablo.**
- **EBMUD should building a new path on EBMUD property between Manzanita Lane and Wagner Ranch Elementary School.**

- **Construction contractors continue to blow through red lights. If they can't slow down, they need to go slower.**
- **What will happen to the bus route on Manzanita?**

The potential impacts of the Project on transportation, including pedestrian safety and transit, will be analyzed and addressed in the Draft SEIR.