

US EPA ARCHIVE DOCUMENT

# FINDING OF NO SIGNIFICANT IMPACT

## Drinking Water Quality Improvements for the Pomerene Domestic Water Improvement District, Pomerene, Arizona

October 31, 2014

The U.S. Environmental Protection Agency (EPA) Region 9 intends to authorize the award of Border Environment Infrastructure Funds (BEIF) to the Pomerene Domestic Water Improvement District (PDWID). EPA Region 9's authorization of a grant award for the proposed project is a federal action requiring compliance with the National Environmental Policy Act (NEPA), 42 USC §§4321-4370(f). In accordance with NEPA; Council of Environmental Quality Regulations, 40 CFR §§1500.1-1508.28; and EPA NEPA regulations, 40 CFR Part 6, EPA Region 9 has prepared an environmental assessment (EA) describing the environmental impacts associated with the proposed project, and which is available upon request. Based upon the analysis in the EA, EPA has prepared this finding of no significant impact (FONSI) which documents EPA Region 9's decision that the proposed project will not have a significant effect on the environment.

### Purpose and Need for the Project

The purpose and need for water quality improvements to the PDWID system relate mainly to consistently and reliably achieving long-term compliance with arsenic and fluoride drinking water quality standards. Since 2009, PDWID has installed and operated arsenic treatment systems at existing wells in an effort to meet the new EPA standard for arsenic in drinking water at 10 parts per billion (ppb), published in the Federal Register on January 22, 2001 (66 FR 6976), and under Arizona Department of Environmental Quality (ADEQ)'s delegated authority to enforce this rule.

The history of arsenic compliance indicates certain instances of arsenic primary maximum contaminant level (MCL) standard violations. In addition, no treatment or systematic blending is currently implemented for fluoride. Historically, fluoride has been "incidentally" blended in the storage tanks with water from the other wells delivered via the distribution system. This is not an effective blending and compliance strategy, due to the possibility of exceeding secondary MCL fluoride levels if well sources with high fluoride concentrations are in operation for an extended period of time. Given the historic water quality challenges in this system, drinking water quality compliance is a key concern for the PDWID system. All existing wells comprising the PDWID system, except one (Well No. 6), currently exceed the arsenic maximum containment level (MCL) and two wells (Well Nos. 2 and 6) exceed the fluoride secondary MCL and are above 80% of the fluoride primary MCL. Well No. 6 is a new well drilled by PDWID. It would be developed as a water supply well and connected to the PDWID water system as part of the proposed project.

## Project Location and Description

PDWID provides water service for approximately 370 connections within the unincorporated community of Pomerene in Cochise County, Arizona. Pomerene is located approximately two miles north of Benson, Arizona.

The proposed project is the construction of new well transmission pipelines to combine and deliver Well Nos. 3 and 4 to the storage tanks, and connect and blend Well No. 6 with treated water from Well No. 2 via a new transmission pipeline. Combined water from Well No. 6 and Well No. 2 will be delivered to the storage tank through the existing line from Well No. 2. As part of the proposed project, improved arsenic treatment systems will be provided within the previously-disturbed and fenced well sites. The well sites include the well, well head appurtenances and an existing small arsenic treatment unit housed within a built structure.

This project would allow for maximum flexibility in treating and blending high arsenic, low-fluoride water from Well Nos. 3 and 4 with low arsenic, high-fluoride water from Well Nos. 2 and 6. See *Figure 2* for the existing water system facilities and *Figure 10* for the proposed water system improvements. These figures are attached to this FONSI.

The following infrastructure will be required for this alternative:

- Well No. 6 pumping equipment including new power supply (existing three phase power is approximately 500 feet away from the well site), electrical, controls and civil site work;
- Approximately 7,300 lf of 6-inch water line from Well No. 6 to Well No. 2;
- Approximately 2,400 lf of 4-inch water line to deliver from Well No. 4 across Tumbleweed Lane to Old Pomerene Road and Whiskey Road;
- Approximately 700 lf of 4-inch water line to deliver from Well No. 3 to Old Pomerene Road and Whiskey Road;
- Approximately 3,000 lf of 4-inch water line to deliver from Old Pomerene Road and Whiskey Road across Whiskey Road and Sonora Verde Drive to the storage tank site;
- Arsenic treatment modifications at Well Nos. 2, 3, and 4 to allow for lead/lag operation of treatment vessels; and
- System-wide telemetry control system.

The following operational changes would be implemented under this alternative:

- Well Nos. 3 and 4 will no longer discharge directly into the water distribution system but will be combined with Well Nos. 2 and 6 and discharge to the distribution system at a single point of entry leaving the storage tank;
- All wells will feed the storage tanks, and the tanks will float on the system to meet water system demands; and
- An ADEQ-approved blending plan would be required which will be incorporated into the new telemetry control system to ensure operation of well combinations per the blending plan requirements.

In preparing the EA, EPA examined the No Action alternative, as well as six Action Alternatives to improve drinking water quality within the PDWID system. Action Alternatives were evaluated on the ability to: 1) meet system-wide compliance with the arsenic primary MCL of 10 ppb; 2) meet system-wide compliance with the fluoride primary MCL of 4.0 mg/L; 3) allow for system-wide blending and fluoride treatment alternatives to meet the fluoride secondary MCL of 2.0 mg/L; and 4) maintain consistency and reliability of long-term compliance.

### **Environmental Consequences and Conditions**

After carefully considering the regulatory, environmental (both natural and human) and socio-economic factors as described in the EA, EPA Region 9 has not identified any significant impacts to the environment that would result from the implementation of the proposed project.

In accordance with the provisions of the National Historic Preservation Act (NHPA), EPA notified ten Native American governments with cultural affiliation in southern Arizona concerning the potential for Traditional Cultural Places in the vicinity of the proposed project or other issues of concern that need to be addressed.

In addition, as required by Section 106 of the National Historic Preservation Act, 16 U.S.C.470, and the Arizona State Historic Preservation Act, A.R.S. §41-861 et seq., a Cultural Resources Inventory of the proposed project area was conducted. The inventory concluded that work within the project area would not impact historic properties. On October 30, 2014, EPA received official concurrence from the Arizona State Historic Preservation Office on the determination of no adverse effect on historic properties from the proposed project.

Finally, under the Endangered Species Act of 1973, an appraisal of the project site was conducted to determine if any threatened or endangered species were located on the site. No threatened or endangered species or critical habitat was identified.

### **Public Review**

Prior to taking action on the proposed project, EPA Region 9 is accepting comments from the public on the EA and unsigned FONSI. Notice of the public comment period will be published in the Arizona Daily Star and on EPA's website at:

<http://www.epa.gov/region9/nepa/epa-generated/#pomerene>

The public comment period will close at 5pm Pacific Time on December 8, 2014. EPA Region 9 will consider the comments received during the public comment period. If, after considering public comments, EPA Region 9 concludes the proposed project will not have significant environmental impacts, EPA Region 9 will revise this FONSI by adding a summary of the comments received and EPA Region 9's responses. The revised FONSI will be forwarded to the

Water Division Director for review and signature. EPA Region 9 will not recirculate the signed FONSI for public review, but will make it available to any individual upon request.

The EA and unsigned FONSI are also available for public review at the offices of EPA Region 9, (75 Hawthorne Street, San Francisco, CA 94015-3901). To make an appointment to review the documents at this location, contact Elizabeth Borowiec at 415-972-3419. Comments should be mailed to Elizabeth Borowiec at EPA Region 9 (mail code WTR-3-3) at the address included in the above paragraph or via email at [borowiec.elizabeth@epa.gov](mailto:borowiec.elizabeth@epa.gov).