

STATEMENT OF BASIS FOR MODIFICATION
OF ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO.
AZ0020231

Pursuant to A.C.C. R18-9-B906, on April 11, 2018, ADEQ received a letter from the Town of Gila Bend to modify AZPDES Permit No. AZ0020231 for the Gila Bend Wastewater Treatment Plant (WWTP) which became effective on March 5, 2015. The request is to remove the application of downstream designated uses for the Gila River.

The Gila Bend WWTP is a Publicly Owned Treatment Works (POTW). The receiving water for Outfall 001 is an unnamed wash, tributary to the Gila River in the Middle Gila River Basin, with the designated uses of Aquatic and Wildlife – effluent dependent water, and Partial Body Contact. When the current permit was issued for this facility in 2015, it was assumed that the discharge volume and frequency was sufficient to reach the Gila River, approximately 1.7 miles downstream of Outfall 001. As a result of this assumption, designated uses for that segment of the Gila River were applied when permit effluent limitations were considered. The designated uses for the downstream segment of the Gila River include: Aquatic and Wildlife – warm water, Full Body Contact, Fish Consumption, Agricultural Irrigation, and Agricultural Livestock Watering.

On December 11, 2017, ADEQ issued a Notice of Violation (NOV) to the Town for exceeding the monthly average permit effluent limit for boron. In response to the NOV, the Town initiated an investigation into the cause of the elevated level of boron in the WWTP discharge by sampling various water supply wells in December 2017 and January 2018. The results of the investigation indicated that five of nine intake water supply wells had boron levels that are above the effluent limits in the permit.

A site visit to the Gila Bend WWTP was conducted on February 22, 2018 to verify the flow of effluent from Outfall 001. During this site visit, it was confirmed that the discharge from this facility goes completely sub-surface approximately 0.4 stream miles from the confluence with the nearest bank of the Gila River. As a result of this observation, and this new information, ADEQ is hereby modifying the permit in accordance with 40 CFR 122.62.a.2 and removing the application of downstream designated uses for that segment of the Gila River, and applying the designated uses for the receiving water of Aquatic and Wildlife – effluent dependent water, and Partial Body Contact.

“Anti-backsliding” refers to statutory (Section 402(o) of the Clean Water Act) and regulatory (40 CFR 122.44(l)) requirements that prohibit the renewal, reissuance, or modification of an existing NPDES permit that contains effluent limits, permit conditions, or standards that are less stringent than those established in the previous permit. The rules and statutes do identify exceptions to these circumstances where backsliding is acceptable. This permit has been reviewed and drafted with consideration of anti-backsliding concerns. 40 CFR 122.44(l)(2)(i)(B)(1) allows a permit to be modified to contain a less stringent effluent limitation if information becomes available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

Removing the application of downstream designated uses for the Gila River, will result in the following changes to AZPDES Permit AZ0020231:

| Current Permit | Modification | Reason for Change |
|-----------------------|--------------------------------|---|
| Boron | Removed the WQBEL from Table 1 | With the removal of downstream designated use of Agricultural-Irrigation, there is no applicable numeric standard, and therefore no RP for an exceedance. |
| Bromodichloromethane | Removed the WQBEL from Table 1 | With the removal of downstream designated use of Fish Consumption, there is no applicable numeric standard, and therefore no RP for an exceedance. |
| Dibromochloromethane | Removed the WQBEL from Table 1 | With the removal of downstream designated use of Fish Consumption, there is no applicable numeric standard, and therefore no RP for an exceedance. |

Other modifications to the permit also include: inserting language into the permit regarding the new electronic reporting requirements; and changing the AIR Daily Maximum from 1 to 2 in Table 1. The acute standard for ammonia was developed using the “two-value steady state wasteload allocation” described on page 99 of the TSD.

The revised maximum daily permit limits for ammonia were established using a methodology developed by EPA. Long Term Averages (LTA) were calculated for each designated use and the lowest LTA was used to calculate the average monthly limit (AML) and maximum daily limit (MDL) necessary to protect all uses. This methodology takes into account criteria, effluent variability, and the number of observations taken to determine compliance with the limit and is described in Chapter 5 of the TSD. Limits based on A&W criteria were developed using the “two-value steady state wasteload allocation” described on page 99 of the TSD. When the limit is based on human health criteria, the monthly average was set at the level of the applicable standard and a daily maximum limit was determined as specified in Section 5.4.4 of the TSD.

These changes are considered a major modification. This proposed modification will be public noticed for a 30 day comment period prior to issuance of the final permit decision.