ATTACHMENT B

FACT SHEET

October 2, 2007

City of Phoenix
NPDES Permit No. AZ0024643

1. Introduction

The City of Phoenix is being issued a National Pollutant Discharge Elimination System (NPDES) Permit (AZ0024643) for its discharges from its Verde Infrastructure, Verde Water Main Line. The permit will become effective October 4, 2007 and expires at midnight October 3, 2012. The City of Phoenix submitted an application for coverage under the NPDES program on November 13, 2006.

Applicant address:	City of Phoenix Water Services Department 200 West Washington Street, 9th Floor Phoenix, AZ 85003
Facility Contact:	Robert A. Hollander, PE Compliance and Regulatory Affairs Administrator (602) 262-4992

II. Background

The City of Phoenix operates the Verde Water Treatment Plant to supply potable water to the City of Phoenix. Potable water is transported from the Verde Water Treatment Plant through the Verde Water Main. The raw water is drawn from the Salt River downstream from the confluence of the Salt and Verde Rivers and treated at the Verde Water Plant. The water is chlorinated before it enters the Verde Water Main Line for delivery to its customers. The Verde Water Main is a 15 mile pipeline that traverses the Salt River Pima Maricopa Indian Community. See attached map, Attachment A-1. The pipeline extends from above the confluence of the Verde River with the Salt River to the 64th Street Reservoir in southeast Scottsdale. See attached map, Attachment A-2. The water main is a pipe that ranges in size from 36" to 60" and includes valves, air reliefs, vaults and other connections. Discharges from this pipe may occur when maintenance or repair of the water line is needed. Flows are expected to be intermittent. The number and frequency of discharges is expected to be less than five per year but cannot be quantified in advance due to the uncertainty of when repairs will be needed. Discharge durations will normally not exceed 5 days. The discharges have the possibility of reaching the Verde or Salt River from its confluence to the I-10 bridge.

EPA has determined that there are no endangered species of concern in the discharge area. Therefore, there are no specific additional requirements for the protection of endangered

species in the permit. A copy of the proposed permit and fact sheet were sent to the U.S. Fish and Wildlife Service for review during the public comment period. No comments were received.

III. Salt and Verde Rivers

The water main line runs from the Verde Water Treatment Plant Water Main at 33° 32' 49.12"N, 111° 40' 01.35"W to end of pipe at Pima Road, 33° 29' 09.93"N , 111° 53' 30.89"W.

These receiving waters are not on the 303(d) list and there are no TMDL issues. The water main could discharge into the Verde River or to the Salt River, a tributary which discharges to the Gila River. The discharge would occur on the Salt River Pima Maricopa Indian Community (SRPMIC) tribal land. Currently SRPMIC does not have EPA-approved surface water quality standards. As there are no existing standards to apply and as the discharge may flow into the Verde or Salt Rivers, the discharge must meet those downstream standards established by the State of Arizona. The numeric criteria used in this federal permit are the same as the State of Arizona's as established in Title 18, Chapter 11, Appendix B of the Arizona Administrative Code.

A discharge may enter one of two segments of the Salt River which have different designated uses. Under the State of Arizona's surface water quality standards, the Verde River to 2 km below Granite Reef Dam on the Salt River is designated as Aquatic & Wildlife (warm), Full Body Contact, Domestic Water Source, Fish Consumption, Agricultural Irrigation and Agricultural Lifestock watering. The Salt River from 2 km below the Granite Reef Dam to the I-10 Bridge is designated as Aquatic and Wildlife (ephemeral), Partial Body Contact.

IV. Basis of Permit Requirements

Based on the considerations above, the permit has been written to protect the following designated uses:

Aquatic and Wildlife warm (A&Ww)
Full Body Contact (FBC)
Domestic Water Source (DWS)
Fish Consumption (FC)
Agricultural Irrigation (AgI)
Agricultural Livestock Watering (AgL)

Given the uses stated above, the applicable narrative water quality standards are described in A.A.C. R18-11-108 and the applicable numeric water quality standards are listed in A.A.C. R18-11-109, and in Appendix A thereof. The standards for all applicable designated uses are compared and the most stringent standard is applied, thus protecting for all applicable designated uses.

V. Determination of Effluent Limits, Monitoring and Reporting Requirements

The permittee submitted water quality data for its discharge. In reviewing the data, no limits are required for BOD, suspended solids, oil and grease, nutrients or priority pollutants as

none are present in the discharge. A review of the treatment process indicates that trihalomethanes may be formed in the chlorination process and are considered a chemical of concern in the discharge.

The discharge has the potential to impact the SRPMIC's drainage ditches and tail water ditches due to the flat terrain. The permit requires the City of Phoenix to provide the SRPMIC Department of Public Works 24 hour notice before any planned discharge.

A. Flow Requirements

The discharge may occur at numerous places along the water line, the specific location and volume of the discharge from the pipe must be reported.

B. Total Residual Chlorine

The facility disinfects the water with chlorine and the limit imposed is the most stringent of the applicable standards for the Verde and Salt Rivers. The discharge is required to be dechlorinated before discharge and the use of a portable dechlorination unit has been proposed. As the discharge from the Main cannot be controlled to discharge to a specific waterbody, the more stringent standard of 11ug/L is being used. The monitoring frequency is once per discharge.

C. Total Trihalomethanes (TTHMs)

The facility disinfects the water with chlorine which reacts with naturally-occurring constituents in the water to form trihalomethanes. The permit requires that the discharge not contain Total Trihaolomethanes (TTHMs) in excess of 100 ug/l.

VI. Reporting

The permit requires discharge data to be submitted quarterly, a compilation of the previous three monthly reports. (Section III. D.7.). If there is no discharge for the month, indicate "zero discharge".

VII. Comments

Notice of this proposed permit action was published in the newspaper and on the EPA Region 9 website and provided a 30-day comment period. No public hearing was requested. Written comments were received from the City of Phoenix and the Arizona Department of Environmental Quality. Comments that improved the clarity of the requirements and correct typographical errors were incorporated into the final permit and fact sheet.

The City of Phoenix also indicated that in the event of a line break or leak, it would not be able to dechlorinate the water and requested that EPA remove effluent limits for total residual chlorine. EPA does not agree that effluent limits for total residual chlorine should be removed from the permit due to the potential negative affects chlorine residual has on aquatic life and due

to the presence of residual chlorine in the source water. Therefore, EPA has not removed requirements for dechlorination of the discharge. EPA does recognize, however, that in the event of a line break or leak, that the permittee may not be able to immediately contain the leak or dechlorinate the water. In this instance, EPA notes that standard provisions covering an upset allowed under standard condition Number 15, [40 CFR 122.41(n)] shall provide an affirmative defense for any potential non-compliance. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. Additionally, Part I of the permit also requires notification of the SRPMIC in the event of an unplanned discharge.

The draft NPDES permit, the fact sheet, public notice, comments received, and other relevant documents, have been made part of the Record of this permit.