

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPDES PERMIT NO. AZ0020524**

In compliance with the provisions of the Clean Water Act (“CWA”) (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

| Permittee Name | | City of Phoenix, Water Services Department | | |
|--|----------------------------------|---|----------------------------------|--------------------------------------|
| Permittee Address | | 2474 South 22 nd Avenue - Building 31 Phoenix, AZ 85009 | | |
| Facility Name | | 91 st Avenue Wastewater Treatment Plant | | |
| Facility Location Address | | 5615 South 91 st Avenue Tolleson, AZ, 85353 USA | | |
| Facility Rating | | Major | | |
| Outfall Number | General Type of Waste Discharged | Outfall Latitude | Outfall Longitude | Receiving Water |
| 001 | Treated Domestic Wastewater | 33° 23' 21" N | 112° 15' 15" W 112° 15' 53" W | Lower Salt River Lower Salt River |
| 005 | Treated Domestic Wastewater | 33° 23' 18" N | | |
| This permit was issued on: | | Date of signature below | | |
| This permit shall become effective on: | | May 01, 2023 | | |
| Permit reapplication due no later than: | | November 2, 2027 | | |
| This permit shall expire at midnight on: | | April 30, 2028 | | |
| In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director. | | | | |

Signed for the Regional Administrator: /s/ **February 28, 2023**

Tomás Torres
Director, Water Division

This permit was originally issued, became effective, and shall expire as indicated above. The permit has been modified to require that parameter Hexachlorocyclohexane alpha (Alpha BHC) be monitored at Outfall 001 for one time per month and at Outfall 005 for one time per month. See Table 1. page 12.

Signed for the Regional Administrator: /s/ July 6, 2023

Tomás Torres, Director
Water Division

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Part I. EFFLUENT LIMITS AND MONITORING

A. Effluent Limits and Monitoring

1. Effluent Limits – Outfall No. 001 and 005.
During the period beginning on the effective date of this permit and ending on the expiration date of this permit, the discharger is authorized to discharge treated domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Sections I.B., I.C., and I.D. These requirements are based on a design capacity of 230 MGD. If there is no discharge at this outfall during any one month period, then report “C” in the “No Discharge” box on the DMR form for that month.
2. Additional Effluent Monitoring Requirements – FRW-1, FRW-2, and FRW-3.
The discharger shall comply with monitoring requirements specified in Sections I.C. and I.D for monitoring stations FRW-1, FRW-2, and FRW-3.
3. The discharge of pollutants at any point other than the outfalls specifically authorized in this permit is prohibited, and constitutes a violation thereof.
4. The discharger shall not cause pollutants to the receiving water that will:
 - a Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
 - b Cause objectionable odor in the area where the surface water is located;
 - c Cause off-flavor in aquatic organisms;
 - d Be toxic to humans, plants or other organisms;
 - e Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, propagation of other aquatic life or that impair recreational uses.
5. Samples taken in compliance with the effluent monitoring requirements specified in Part I of this permit shall be taken at the following locations:
 - a Influent samples shall be taken after the last addition to the collection system and prior to in-plant return flow and the first treatment process, where representative samples can be obtained.

- b Effluent samples shall be taken after in-plant return flows and the last treatment process and prior to mixing with the receiving water, where representative samples can be obtained.
6. The discharge shall not cause the dissolved oxygen concentration in the receiving water to fall below 3 mg/l, from 3 hours after sunrise to sunset, and 1mg/l from sunset to 3 hours after sunrise, unless the percent saturation of oxygen remains equal to or greater than 90%.

B. Effluent Limits and Monitoring Requirements – Outfall Number 001 and 005.

Table 1.

| Parameter ⁽³⁾ | Maximum Allowable Discharge Limits ⁽³⁾ | | | | Monitoring Requirements ⁽²⁾ | |
|--|---|----------------|------------------------|-----------------------|--|-------------------|
| | Concentration and Loading | | | | Frequency ⁽³⁾ | Sample Type |
| | Average Monthly | Average Weekly | Maximum Daily | Units | | |
| General Parameters | | | | | | |
| Flow rate | (1) | (1) | (1) | mgd | Continuous | Metered |
| Carbonaceous biochemical oxygen demand (5-day) | 25 48,000 | 40 76,800 | (1) (1) | mg/L lb/day | Daily | 24-hour Composite |
| | The average monthly percent removal shall not be less than 85 percent. ⁽⁵⁾ | | | % | | |
| <i>E. Coli</i> ⁽⁷⁾ | 126 ⁽⁶⁾ | — | 575 | CFU or MPN/ 100 mL | Daily | Discrete |
| pH (hydrogen ion) | Within 6.5 and 9.0 at all times. | | | pH units | Daily | Discrete |
| Temperature | (1) | — | (1) | °C | 1X/ week | Discrete |
| Dissolved Oxygen | — | — | 1, 3 ⁽⁸⁾ | mg/L | 1X/ week ⁽⁸⁾ | Discrete |
| Whole Effluent Toxicity (WET) | 1.0 TUc ⁽⁴⁾ | - | 1.6 TUc ⁽⁴⁾ | TUc | Quarterly | 24-hour Composite |
| Total suspended solids ⁽⁷⁾ | 30 57,600 | 45 86,400 | (1) (1) | mg/L lb/day | Daily | 24-hour Composite |
| | The average monthly percent removal shall not be less than 85 percent. ⁽⁵⁾ | | | % | | |
| Ammonia (as N) ⁽⁹⁾ | (1) | — | (1) | mg/L | 1X/Week | Discrete |
| Ammonia reported as Ammonia Impact Ratio | 1.0 ⁽¹⁰⁾ | — | 2.0 ⁽¹⁰⁾ | mg/L | 1X/ Week | Discrete |
| Chlorine ⁽¹²⁾ , total residual (TRC) | 11 | — | 18.1 | ug/L | Daily | Discrete |
| | 21 | — | 34.7 | lb/day | | |
| Nitrate-nitrite (as N) | — | — | (1) | mg/L | Quarterly | 24-hour Composite |
| Kjeldahl nitrogen, total (as N) | — | — | (1) | mg/L | Quarterly | 24-hour Composite |
| Hydrogen Sulfide or Total Sulfides ⁽¹⁶⁾ | — | — | — | ug/L | Quarterly | Discrete |
| Oil and grease, total recoverable | (1) | — | (1) | mg/L | Quarterly | Discrete |

| | | | | | | |
|--|-----|---|-----|------|-----------|-------------------|
| Phosphorous, Total | — | — | (1) | mg/L | Quarterly | 24-hour Composite |
| Total dissolved solids | — | — | (1) | mg/L | Quarterly | 24-hour Composite |
| Hardness ⁽¹³⁾ , total (as CaCO ₃) | (1) | — | (1) | mg/L | Quarterly | 24-hour Composite |
| Metals (total recoverable), cyanide and total phenols: | | | | | | |
| Antimony, total recoverable CAS #: 7440360 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |

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|---|--------------|--------|----------------|----------------|-----------|-------------------|
| Arsenic, total recoverable CAS #: 7440382 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Beryllium, total recoverable CAS #: 7440417 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Cadmium, ⁽¹³⁾ total recoverable CAS #: 7440439 | 1.14 2.19 | — | 1.83 3.51 | ug/L lb/day | Quarterly | 24-hour Composite |
| Chromium III ⁽¹³⁾ (¹⁴) dissolved CAS #: 16065831 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Chromium VI ⁽¹³⁾ (¹⁴) dissolved CAS #: 18540299 | — | — | (1) | ug/L | Quarterly | Discrete |
| Copper, ⁽¹³⁾ total recoverable CAS #: 7440508 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Iron, ⁽¹³⁾ total recoverable CAS #: 7439896 | — | — | (1) | ug/L lb/day | Quarterly | 24-hour Composite |
| Lead ⁽¹³⁾ total recoverable CAS #: 7439921 | 9.53 18.3 | — | 16.3 31.3 | ug/L lb/day | Quarterly | 24-hour Composite |
| Mercury, total recoverable CAS #: 7439976 | .012 .023 | — | .0219 .0420 | ug/L lb/day | Quarterly | Discrete |
| Nickel, ⁽¹³⁾ total recoverable CAS #: 7440020 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Selenium total recoverable CAS #: 7782492 | 2 3.8 | — — | 3.67 7.04 | ug/L lb/day | Quarterly | 24-hour Composite |
| Silver, ⁽¹³⁾ total recoverable CAS #: 7440224 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Thallium, total recoverable CAS #: 7440280 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |

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|---|-------------|--------|--------------|----------------|-------------|-------------------|
| Zinc, ⁽¹³⁾ total recoverable CAS #: 7440666 | — | — | (1) | ug/L | Quarterly | 24-hour Composite |
| Cyanide, free CAS #: 57125 | 9.7 18.6 | — — | 15.3 29.4 | ug/L lb/day | (11) | Discrete |
| Volatile Organic Compounds: | | | | | | |
| Acrolein CAS #: 107028 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Acrylonitrile CAS #: 107131 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Benzene CAS #: 71432 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Bromoform CAS #: 75252 | — | — | (1) | ug/L | 1X/6 Months | Discrete |

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|--|---|---|-----|------|-------------|----------|
| Carbon tetrachloride CAS #: 56235 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Chlorobenzene CAS #: 108907 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Chlorodibromomethane CAS #: 124481 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Chloroethane CAS #: 75003 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 2-chloroethylvinyl ether CAS #: 110758 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Chloroform CAS #: 67663 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Dichlorobromomethane CAS #: 75274 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,1-dichloroethane CAS #: 75343 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,2-dichloroethane CAS #: 107062 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Trans-1,2dichloroethylene CAS #: 156505 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,1-dichloroethylene CAS #: 75354 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,2-dichloropropane CAS #: 78875 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,3-dichloropropylene CAS #: 542756 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Ethylbenzene CAS #: 100414 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Methyl bromide CAS #: 74839 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Methyl chloride CAS #: 74873 | — | — | (1) | ug/L | 1X/6 Months | Discrete |

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|---|---|---|-----|------|-------------|-------------------|
| Methylene chloride CAS #: 75092 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,1,2,2-tetrachloroethane CAS #: 79345 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Tetrachloroethylene CAS #: 127184 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Toluene CAS #: 108883 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,1,1-trichloroethane CAS #: 71556 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| 1,1,2-trichloroethane CAS #: 79005 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Trichloroethylene CAS #: 79016 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Vinyl chloride CAS #: 76014 | — | — | (1) | ug/L | 1X/6 Months | Discrete |
| Acid-extractable Compounds: | | | | | | |
| P-chloro-m-cresol CAS #: 59507 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2-chlorophenol CAS #: 95578 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|---------------------------------------|---|---|-----|------|-------------|-------------------|
| 2,4-dichlorophenol CAS #: 120832 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,4-dimethylphenol CAS #: 105679 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 4,6-dinitro-o-cresol CAS #: 534521 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,4-dinitrophenol CAS #: 51285 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2-nitrophenol CAS #: 88755 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 4-nitrophenol CAS #: 10027 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Pentachlorophenol CAS #: 87865 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Phenol CAS #: 108952 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,4,6-trichlorophenol CAS #: 88062 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|------------------------------------|---|---|-----|------|-------------|-------------------|
| Base-neutral Compounds: | | | | | | |
| Acenaphthene CAS #: 83329 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Acenaphthylene CAS #: 208968 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Anthracene CAS #: 120127 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Benzidine CAS #: 92875 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Benzo(a)anthracene CAS #: 56553 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|--|-------------|--------|--------------|----------------|---|----------------------|
| Benzo(a)pyrene CAS #: 50328 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 3,4 benzofluoranthene CAS Number. 205-99-2 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Benzo(ghi)perylene CAS #: 191242 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Benzo(k)fluoranthene CAS #: 207089 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Bis (2- chloroethoxy) methane CAS #: 111911 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Bis (2-chloroethyl) ether CAS #: 111444 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Bis (2-chloroisopropyl) ether CAS #: 39638329 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Bis (2-ethylhexyl) phthalate CAS #: 117817 | 7.4 14.2 | — — | 13.3 25.6 | ug/L lb/day | 1X/ Month Outfall 001/005 1X/6 Months FRW 1 | 24-hour Composite |
| 4-bromophenyl phenyl ether CAS #: 101553 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Butyl benzyl phthalate CAS #: 85687 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|---|---|---|-----|------|----------------|----------------------|
| 2-chloronaphthalene CAS #: 91587 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 4-chlorophenyl phenyl ether CAS #: 7005723 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Chrysene CAS #: 218019 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Di-n-butyl phthalate CAS #: 84742 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Di-n-octyl phthalate CAS #: 117817 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Dibenzo(a,h)anthracene CAS #: 53703 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,2-dichlorobenzene CAS #: 95501 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,3-dichlorobenzene CAS #: 541731 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,4-dichlorobenzene CAS #: 106467 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 3,3-dichlorobenzidine CAS #: 91941 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Diethyl phthalate CAS #: 84662 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|---|---|---|-----|------|-------------|-------------------|
| Dimethyl phthalate CAS #: 131113 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,4-dinitrotoluene CAS #: 121142 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,6-dinitrotoluene CAS #: 606202 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,2-diphenylhydrazine CAS #: 122667 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Fluoranthene CAS #: 206440 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Fluorene CAS #: 86637 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hexachlorobenzene CAS #: 118741 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hexachlorobutadiene CAS #: 87683 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hexachlorocyclopentadiene CAS #: 77474 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hexachloroethane CAS #: 67721 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Indeno(1,2,3-cd)pyrene CAS #: 193395 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Isophorone CAS #: 78591 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Naphthalene CAS #: 91203 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Nitrobenzene CAS #: 98953 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| N-nitrosodi-n-propylamine CAS #: 621647 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|---|---|---|-----|------|-------------|-------------------|
| N-nitrosodimethylamine CAS #: 62759 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| N-nitrosodiphenylamine CAS #: 86306 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Phenanthrene CAS #: 85018 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Pyrene CAS #: 12900 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,2,4-trichlorobenzene CAS #: 120821 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Expanded Requirements Based on Designated Uses: | | | | | | |
| Alachlor ⁽¹⁵⁾ CAS #: 15972608 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Aldrin ⁽¹⁵⁾ CAS #: 309002 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|---|---|---|--------------|-----------------|---|----------------------|
| Atrazine ⁽¹⁵⁾ CAS #: 1912249 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Barium CAS #: 10022318 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Boron CAS #: 7440428 | — | — | 1000 1920 | ug/L lbs/day | 1X/ Month Outfall 001/005 1X/6 Months FRW-1 | 24-hour Composite |
| Carbofuran ⁽¹⁵⁾ CAS #: 1563662 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Chlorpyrifos ⁽¹⁷⁾ CAS #: 2921882 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Chlordane CAS #: 57749 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,2-cis-Dichloroethylene CAS #: 156592 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Dalapon ⁽¹⁵⁾ CAS #: 75990 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Diazinon CAS #: 333415 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,2-Dibromo- 3chloropropane (DBCP) CAS # 96128 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 1,2- Dibromoethane (EDB) Ethylene dibromide CAS #: 106934 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 4,4'-DDT CAS #: 50293 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 4,4'-DDE CAS #: 72559 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 4,4'-DDD CAS #: 72548 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,4- Dichlorophenoxyacetic acid (2,4-D) CAS #: 94757 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Dieldrin CAS #: 60571 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|--|---|---|-----|------|-------------|----------------------|
| Di (2-ethylhexyl) adipate CAS #: 103211 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Dinoseb ⁽¹⁵⁾ CAS #: 88857 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Diquat ⁽¹⁵⁾ CAS #: 231367 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Endosulphan sulfate CAS #: 1031078 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

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|---|------------------|---|------------------|----------------|--|-------------------|
| Endosulfan (Total) CAS #: 115297 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Endothall ⁽¹⁵⁾ CAS #: 145733 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Endrin CAS #: 72208 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Endrin aldehyde CAS #: 7421934 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Fluoride CAS #: 16984488 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Glyphosate ⁽¹⁵⁾ CAS #: 1071836 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Guthion ⁽¹⁷⁾ CAS #: 86500 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Heptachlor CAS #: 76448 | .00008 .00016 | — | .00018 .00036 | ug/L lb/day | 1X/ Month Outfall 001/005 1X/6 Months FRW-1 | 24-hour Composite |
| Heptachlor epoxide CAS #: 1024573 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hexachlorocyclohexane alpha Alpha-BHC CAS #: 319846 | .005 .010 | — | .007 .014 | ug/L lb/day | 1X/ Month Outfall 001/005 1X/6 Months FRW-1 | 24-hour Composite |
| Hexachlorocyclohexane beta CAS #: 319857 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hexachlorocyclohexane delta CAS #: 319868 | .005 .010 | — | .007 .014 | ug/L lb/day | 1X/ Month | 24-hour Composite |
| Hexachlorocyclohexane gamma (lindane) CAS #: 59899 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Hydrogen Sulfide ⁽¹⁶⁾ ⁽¹⁷⁾ CAS #: 7783064 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Malathion ⁽¹⁷⁾ CAS #: 121755 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Manganese CAS #: 7439965 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Methoxychlor ⁽¹⁵⁾ CAS # 72435 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Mirex ⁽¹⁵⁾ ⁽¹⁷⁾ CAS #: 2385855 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Oxamyl ⁽¹⁵⁾ CAS #: 23155220 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Parathion ⁽¹⁷⁾ CAS #: 56382 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

| | | | | | | |
|--|---|---|-----|------|-------------|----------------------|
| Paraquat CAS #: 2074502 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Permethrin ⁽¹⁵⁾⁽¹⁷⁾ CAS #: 56382 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Picloram ⁽¹⁵⁾ CAS #: 52438912 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Total polychlorinated biphenyls (PCBs) (sum of all congener or isomer or homolog or arochlor analyses) CAS #: 1336363 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Simazine ⁽¹⁵⁾ CAS #: 122349 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Styrene CAS #: 100425 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2,3,7,8- Tetrachlorodibenzo- p-dioxin CAS #: 1746016 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Toxaphene CAS #: 8001352 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| 2-(2,4,5,- Trichlorophenoxy) Propionic Acid (SILVEX) ⁽¹⁵⁾ CAS #: 93721 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Tributyltin ⁽¹⁵⁾⁽¹⁷⁾ CAS #: 688733 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Uranium ⁽¹⁷⁾ CAS #: 7440611 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |
| Xylenes (Total) CAS #: 1330207 | — | — | (1) | ug/L | 1X/6 Months | 24-hour Composite |

- (1) No effluent limits are set at this time, but monitoring and reporting are required.
- (2) All quarterly samples must be taken concurrently with WET monitoring (See Part II.B. of this permit for detailed WET monitoring requirements).
- (3) Reporting level must be low enough to allow comparison of the results to the applicable water quality standards (WQS). If a reported level below the WQS cannot be achieved, then the permittee shall use the method with the lowest method-specific MDL, as defined in Attachment A 10 of this permit. Samples are to be representative of any seasonal variation in the discharge.

Samples taken at a 1X/6 Month interval require at least 3 months between sampling events.

- (4) These represent action levels for *Ceriodaphnia dubia*, *Pimephales promelas* and *Selenastrum capricornutum* monitored Quarterly. For a complete description of WET testing requirements see Section II. B. of this permit.

- (5) Both the influent and the effluent shall be monitored. The arithmetic mean of the Carbonaceous Biochemical Oxygen Demand (5-day) by concentration, for effluent samples collected in a period of 30 consecutive calendar days, shall not exceed 15 percent of the arithmetic mean of the values, by concentration, for influent samples collected at approximately the same times during the same period.
- (6) This value is a geometric mean for *E.coli*. A minimum of 4 samples is required in order to report a geometric mean.
- (7) For outfall 005, compliance with effluent limits for this parameter may be monitored at FRW-1. Daily monitoring is required at FRW-1 as representative of compliance limits at outfall 005.
- (8) The effluent limit for Dissolved Oxygen is dependent on time of day. The single sample minimum three hours after sunrise to sunset is 3.0 mg/L. The single sample minimum from sunset to three hours after sunrise is 1.0 mg/L. Samples must be taken at a minimum frequency of 1X/week. With each sample, time of day must be recorded. At least ONE sample per month must be taken during EACH of the two time intervals.
- (9) For outfall 005, compliance with effluent limits for this parameter may be monitored at FRW-1. Weekly monitoring is required at FRW-1 as representative of compliance limits at outfall 005.
- (10) The Ammonia Impact Ratio (AIR) is calculated as the ratio of the ammonia value in the effluent and the applicable ammonia standard from section R18-11-109 in the Arizona Water Quality Standards. See Attachment E For a sample log to help calculate and record AIR values see Attachment D. The AIR is the ammonia effluent limit and must be reported in the DMRs in addition to the ammonia, pH, and temperature value.
- (11) Cyanide must be measured separately at outfall 001 and 005. Cyanide must be monitored quarterly at outfall 005 and 2X/Month only during times of flow from outfall at outfall 001. No monitoring of Cyanide at FRW-1 is required.
- (12) The TRC must be measured separately at outfalls 001 and outfall 005.
- (13) The effluent limitations listed are based on a hardness of 279 mg/L as CaCO₃. The effluent must be tested for hardness at the same time that samples for the indicated metals are taken.
- (14) Chromium III is not monitored directly. Chromium III test results are obtained by subtracting chromium VI from total chromium. If chromium VI sampling is not required chromium III results are not required to be reported. If total chromium exceeds 8 ug/L, the permittee must conduct sampling for chromium VI for the remainder of the permit term. Otherwise, monitoring for chromium VI is not required.
- (15) There may be no approved wastewater methods for analysis of these parameters in 40 CFR 136. As such, 500 series drinking water Methods may be used. If drinking water Methods are used a 10X sample dilution is acceptable for these parameters. Appropriate data qualifiers are to be used.
- (16) The permittee may initially monitor for sulfide instead of hydrogen sulfide. The limit of quantification shall be no higher than 100ug/L, and any detection of sulfides shall trigger monitoring for hydrogen sulfide for the remainder of the permit term.
- (17) If no ADHS certified analytical methods exist for these parameters, monitoring is not required.

C. Monitoring Requirements – Monitoring Stations FRW-1

1. The permittee shall also conduct regular monitoring of the influent to the Tres Rios Flow Regulating Wetland (FRW-1) as specified in Section I.B. **Table 1**.
2. All parameters except WET and Cyanide shall be monitored at monitoring stations FRW-1. The monitoring shall be at the frequency specified in **Table 1**. All parameters shall be monitored and reported as specified for Outfalls 001 and 005 above unless otherwise indicated. WET and Cyanide shall be monitored at outfall 001 during times of flow from outfall 001.
3. No limits for the FRW-1 monitoring station have been set at this time.
4. With the exception of TRC, if a parameter exceeds the concentration described in **Table 1** at monitoring stations FRW-1 a written report shall be submitted in accordance with Section II.A., below.
5. With the exception of TRC, monitoring conducted at monitoring station FRW-1 may be considered representative for purposes of effluent characterization for Outfall 001.

D. Monitoring Requirements – Monitoring Station FRW-2 and FRW-3

The permittee shall conduct regular monitoring of in-stream flow through the Tres Rios Flow Regulating Wetland at FRW-2 and FRW-3 as specified in **Table 2**. The location of FRW-2 shall be after the deep water but before the flow regulating portions of the wetland. The FRW-3 shall be within the flow regulating portion of the wetland.

Table 2. Monitoring for Stations FRW-2 and FRW-3

| Parameter | Sampling Frequency |
|---|--------------------|
| Flow | Annually |
| Temperature | Annually |
| pH | Annually |
| TRC | Annually |
| Ammonia | Annually |
| Total suspended solids | Annually |
| Dissolved Oxygen | Annually |
| <i>E. Coli</i> | Annually |
| CBOD | Annually |
| Nitrate-nitrite | Annually |
| Total kjeldahl nitrogen | Annually |
| Hydrogen Sulfide or Total Sulfides ⁽¹⁾ | Annually |

| | |
|---|----------|
| Oil and grease, total recoverable | Annually |
| Phosphorous, Total | Annually |
| Total dissolved solids | Annually |
| Hardness | Annually |
| All Metals, cyanide and total phenols ⁽²⁾ | Annually |
| Volatile Organic Compounds ⁽²⁾ | Annually |
| Acid-extractable Compounds ⁽²⁾ | Annually |
| Base-neutral Compounds ⁽²⁾ | Annually |
| Expanded Requirements Based on Designated Uses ⁽²⁾ | Annually |

(1) The permittee may initially monitor for sulfide instead of hydrogen sulfide. The limit of quantification shall be no higher than 100 ug/L, and any detection of sulfides shall trigger monitoring for hydrogen sulfide for the remainder of the permit term.

(2) As described in Table 1, Section I.B.

E. Twenty-four Hour Reporting of Noncompliance

1. In accordance with 40 CFR 122.41(l)(6)(i), (ii), and (iii), the following condition is expressly incorporated into this permit. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances, to EPA, ADEQ and GRIC DEQ. The permittee shall notify EPA, ADEQ and GRIC DEQ at the following telephone numbers:

U.S. Environmental Protection Agency
Clean Water Act Enforcement Manager
415-972-3577

Arizona Department of Environmental Quality
602-771-2330 (24-hour hotline)

Gila River Indian Community
Department of Environmental Quality
520-562-2234

2. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances to USEPA at R9NPDES@epa.gov and Perkins.Susanne@epa.gov. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3. The following information shall be included as information which must be reported within 24 hours under this paragraph.
 - a. Any unanticipated bypass which exceeds any effluent limit in the permit (see 40 CFR 122.44(g)).
 - b. Any upset which exceeds any effluent limit in the permit.
 - c. Violation of a maximum daily discharge limit for any of the pollutants listed by the director in the permit to be reported within 24 hours (see 40 CFR 122.44(g)).
4. The Director may waive the written report on a case-by-case basis for reports required under paragraph B.2, if the oral report has been received within 24 hours.

F. General Monitoring and Reporting

1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in **Table 1** of this permit, the permittee shall utilize 40 CFR 136 test methods with the lowest MDL or ML and with MDLs and MLs that are lower than the effluent limits in **Table 1** of this permit. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or ML. In this context, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the MDL and ML. For a test method with a published ML, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is at or below the published ML, but still within the range of quantitation for the test method, in accordance with the instructions for calibration in the test method. Influent and effluent analyses for metals shall measure “total recoverable metal”, except as provided under 40 CFR 122.45(c). It is recommended that the permittee use a laboratory licensed by the ADHS Office of Laboratory Licensure and Certification that has demonstrated proficiency for each parameter to be sampled.
2. Because of the short holding time for chlorine, samples may be analyzed on-site using Hach Method No. 10014. Other Hach Methods are also acceptable for chlorine if the method has an MDL lower than effluent limitation specified in this permit.
3. The permittee shall develop a Quality Assurance (“QA”) Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. At a minimum, the QA Manual shall include the following:

- a. a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;
 - b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control (“QC”) samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
 - c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and
 - d. Discussion of how the permittee will perform data review and reporting of results to EPA and ADEQ and how the permittee will resolve data quality issues and identify limits on the use of data.
4. Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the permittee shall ensure that the laboratory has a QA Manual on file. A copy of the permittee’s QA Manual shall be retained on the permittee’s premises and available for review by EPA and ADEQ upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.
 5. Samples collected during each month of the reporting period must be reported on Discharge Monitoring Report forms, as follows:
 - a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or
NODI (Q), if the maximum value of all analytical results is greater than or equal to the laboratory’s MDL, but less than the ML; or
NODI (B), if the maximum value of all analytical results is less than the laboratory’s MDL.

- b. For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or

NODI (Q), if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or

NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.

- c. For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report:

The *average value* of all analytical results where 0 (zero) is substituted for *NODI (B)* and the laboratory's MDL is substituted for *NODI (Q)*.

6. In accordance with 40 CFR 122.45(c), effluent analyses for all metals, with the exception of chromium VI, shall be measured as "total recoverable metals". Effluent levels in this permit are for total recoverable metals, except for Chromium III and VI, for which the levels listed are dissolved.
7. As an attachment to each DMR form, the permittee shall report for all parameters with monitoring requirements specified in **Table 1** of this permit: the test method number or title and published MDL or ML; the test method number or title and preparation procedure used by the laboratory, the laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR 135, the standard deviation (S) from the laboratory's MDL study, and the number of replicate analyses (n) used to compute the laboratory's MDL; and the laboratory's lowest calibration standard. Additionally, the permittee shall retain copies of the original laboratories reports and submit them if requested to do so by EPA.
8. In addition to information requirements specified under 40 CFR 122.41(j)(3) (see section IV.A.1.j.(3) of this permit), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation.
9. All monitoring results shall be submitted in such a format as to allow direct comparison with the effluent limits, monitoring requirements, and conditions of this

permit. The permittee must sign and certify all electronic submissions in accordance with the requirements of Part IV.A. of this permit (“Signatory Requirements”). Monthly Discharge Monitoring Reports (DMRs) shall be submitted by the 28th day of the month following the previous reporting period. For example, under monthly submission the DMR form for January is due by February 28th, and under quarterly submission, the DMR forms for January, February, and March are due on April 28th.

10. Annual and quarterly monitoring must be conducted starting in the first complete quarter or calendar year following the permit effective date. Reporting for annual monitoring is due on January 28th of the following year. A DMR must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required.
11. DMRs must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required.
12. The permittee shall electronically submit Discharge Monitoring Reports and Biosolids/Sewage Sludge Reports using NetDMR (<http://www.epa.gov/netdmr>) and NeT (<http://www.epa.gov/compliance/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-tool-net-fact>) respectively.

Part II. SPECIAL CONDITIONS

A. Permit Reopener(s)

1. In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.
2. In accordance with 40 CFR 122.44(c), EPA may promptly modify or revoke and reissue any permit issued to a treatment works treating domestic sewage (including “sludge only facilities”) to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA, if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

B. Chronic Whole Effluent Toxicity

1. The permit establishes action levels of 1.0 TUc Monthly Median and 1.6 TUc Daily Maximum for the water flea, *Ceriodaphnia dubia*, the fathead minnow, *Pimephales*

promelas and green algae, *Selenastrum capricornutum*. Since the completion of one Chronic WET test takes more than 24 hours, the daily maximum is considered to be the highest allowable test result. The Permittee shall conduct quarterly tests for *Ceriodaphnia dubia* as well as quarterly tests for *Pimephales promelas* and *Selenastrum capricornutum* using 24-hour composite samples of the final effluent.

2. Final effluent samples shall be collected at outfall 001 and outfall 005. The samples must be taken following all treatment processes, including chlorination and dechlorination, and prior to mixing with any in-plant return flows or the receiving water. The required WET tests must be performed on unmodified samples of final effluent. WET tests conducted on samples that are de-chlorinated after collection are not acceptable for compliance with this permit.
3. Chemical testing for all parameters listed in **Table 1** of this permit shall be performed concurrent with quarterly WET testing of all three species.
4. Freshwater Species and Test Methods

Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the fourth edition of Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136). The permittee shall conduct static renewal toxicity tests with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0); the water flea, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.01); and the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

5. Quality Assurance

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

- a. For this discharge, a mixing zone or dilution allowance is not authorized. The chronic instream waste concentrations (IWCs) for this discharge are 100% effluent and 62.5% effluent. A series of at least five effluent dilutions and a control shall be tested. At minimum, the dilution series shall include the IWCs and three dilutions below the IWCs (e.g., 100%, 62.5%, 50%, 25% and 12.5%).
- b. Effluent dilution water and control water should be standard synthetic dilution water, as described in the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used.

- c. Because this permit requires sublethal hypothesis testing endpoints from Methods 1000.0, 1002.0, and 1003.0 in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002), within test variability must be reviewed for acceptability and variability criteria (upper and lower PMSD bounds) must be applied, as directed under Section 10.2.8 - Test Variability of the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Under Section 10.2.8, the calculated percent minimum significant difference (PMSD) for both reference toxicant test and effluent toxicity test results must be compared with the upper and lower PMSD bounds variability criteria specified in Table 6 - Variability Criteria (Upper and Lower PMSD Bounds) for Sublethal Hypothesis Testing Endpoints Submitted Under NPDES Permits, following the review criteria in Paragraphs 10.2.8.2.1 through 10.2.8.2.5 of the test methods manual. Based on this review, only accepted effluent toxicity test results shall be reported on the DMR form. If excessive within-test variability invalidates a test result, then the permittee must resample and retest within 14 days.
 - d. If the discharged effluent is chlorinated, then residual chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.
 - e. pH drift during the toxicity test may contribute to artifactual toxicity when pH dependent toxicants (e.g., ammonia, metals) are present in an effluent. To determine whether or not pH drift during the toxicity test is contributing to artifactual toxicity, the permittee shall conduct three sets of parallel toxicity tests, in which the pH of one treatment is controlled at the pH of the effluent and the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of the test methods manual, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. If toxicity is confirmed to be artifactual and due to pH drift, then, following written approval by the permitting authority, the permittee may use the procedures outlined in Section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.
6. Accelerated Toxicity Testing and TRE/TIE Process
 - a. If a chronic WET permit limit or action level or trigger is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the permittee shall conduct one additional toxicity test using the same species and test method. This test shall begin within 14 days of receipt of test results exceeding a chronic WET permit limit or trigger. If the additional toxicity test does not exceed a

chronic WET permit limit or trigger, then the permittee may return to their regular testing frequency.

- b. If a chronic WET permit limit or action level or trigger is exceeded and the source of toxicity is not known, then the permittee shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12 week period. This testing shall begin within 14 days of receipt of test results exceeding a chronic WET permit limit or trigger. If none of the additional toxicity tests exceed a chronic WET permit limit or trigger, then the permittee may return to their regular testing frequency.
- c. If one of the additional toxicity tests (As described in paragraphs 7.a. or 7.b.) exceeds a chronic WET permit limit or action level or trigger, then, within 14 days of receipt of this test result, the permittee shall initiate a TRE using as guidance, based on the type of treatment facility, EPA manual Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/ 833/B-99/002, 1999) or EPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989). In conjunction, the permittee shall develop and implement a Detailed TRE Workplan which shall include: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. The TRE Workplan shall be submitted to EPA for review and approval within 14 days of receipt of the toxic result.
- d. The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA test method manuals: Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005F, 1992); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996).

7. Reporting of Chronic Toxicity Monitoring Results

A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results—in NOEC; $TU_c = 100/NOEC$; EC25 (or IC25); and

TUc = 100/EC25 (or IC25)—reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations. The permittee shall notify the permitting authority in writing within 7 days of exceedance of a chronic WET action level or trigger. This notification shall describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

8. Permit Reopener for Chronic Toxicity

In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to chronic toxicity.

C. Biosolids

1. General Requirements

- a. Arizona is a delegated state and biosolids are regulated under 18 Arizona Administrative Code (AAC) Chapter 9, Article 10. All biosolids generated by the Discharger shall be used or disposed of in compliance with the applicable portions of 40 CFR §§ 258 and 503, and the applicable portions of Arizona biosolids rules. The Discharger is responsible for assuring that all biosolids produced at the facility are used or disposed of in accordance with these rules, whether the Discharger uses or disposes of the biosolids itself or transfers them to another party for further treatment and use or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must meet under these rules, and any monitoring requirements, including required frequencies of monitoring and maximum hold times for pathogen and indicator organism samples.
- b. Duty to mitigate: The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.
- c. No biosolids shall be allowed to enter wetlands or other waters of the United States.
- d. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.

- e. Biosolids treatment, storage, and use or disposal shall be performed in a manner as to minimize nuisances such as objectionable odors or flies.
 - f. The Discharger shall assure that haulers transporting biosolids off site for further treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. The Discharger shall maintain and have haulers adhere to a spill clean-up plan. Any spills shall be reported to USEPA and the Gila River Indian Community (GRIC). All trucks hauling biosolids shall be thoroughly washed after unloading at the field or at the receiving facility.
 - g. Trucks used to haul Class B biosolids shall not be used to haul animal feed or food on the return trip, unless approved by USEPA after a demonstration of the truck cleaning methods at the unloading site has been made.
 - h. If biosolids are stored for over two years from the time they are generated by the Discharger or their contractor, the Discharger must submit a written notification to USEPA with the information in 40 CFR § 503.20 (b), demonstrating the need for longer temporary storage.
 - i. Any biosolids treatment, disposal, or storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials in the site to escape from the site. Adequate protection is defined as protection from at least a 100-year storm and from the highest tidal stage that may occur.
 - j. There shall be adequate screening at the treatment plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass and other inert objects with a diameter greater than 3/8" are removed.
2. Monitoring
- a. Biosolids shall be monitored for the following constituents, at the frequency specified below: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia-nitrogen, and total solids. This monitoring shall be conducted using methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA publication SW-846), as required in 40 CFR 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in "100% dry weight" or "as is". Biosolid samples collected for compliance purposes must be analyzed by a laboratory licensed by the Arizona Department of Health Services.

- b. The constituents in paragraph 2.a. shall be monitored at the following frequency, based on the volume of sewage solids generated per year.

| Volume Generated (dry metric tons per year) | Monitoring Frequency * |
|---|------------------------|
| >0 - <290 | Once per year |
| 290 - <1,500 | Four times per year |
| 1,500 - <15,000 | Six times per year |
| ≥15,000 | 12 times per year |

*If biosolids are removed for use or disposal on a routine basis, then monitoring should be scheduled at regular intervals throughout the year. If biosolids are stored for an extended period of time prior to use or disposal, then monitoring may occur either at regular intervals, or prior to use or disposal corresponding to tonnage accumulated during the period of storage.

- c. Class 1 facilities (facilities with pretreatment programs or other facilities designated as Class 1 by the Regional Administrator) and Federal facilities with greater than 5 mgd influent flow shall sample biosolids quarterly for pollutants listed under CWA Section 307(a), using best practicable detection limits.

3. Requirements for Land Application

“Land application” is the placement of biosolids on the land for the specific purpose of growing a crop or other vegetation. Land application requirements are addressed in 40 CFR § 503 Subpart B. The following monitoring requirements are applicable to land application:

- a. A representative sample shall be collected and analyzed for the pollutants required under 40 CFR § 503.13 and for Total Kjeldahl nitrogen, and ammonium nitrogen, at the following frequency, based on the tonnage of biosolids produced per year (as expressed on a 100% solids basis):
< 290 dry metric tons/year: once/year

| Volume Generated (dry metric tons per year) | Monitoring Frequency * |
|---|------------------------|
| >0 - <290 | Once per year |
| 290 - <1,500 | Four times per year |
| 1,500 - <15,000 | Six times per year |

| | |
|---------|-------------------|
| ≥15,000 | 12 times per year |
|---------|-------------------|

* If biosolids are removed for use or disposal on a routine basis, then monitoring should be scheduled at regular intervals throughout the year. If biosolids are stored for an extended period of time prior to use or disposal, then monitoring may occur either at regular intervals, or prior to use or disposal corresponding to tonnage accumulated during the period of storage.

All results shall be reported on a 100% dry weight basis.

- b. The Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32.
- c. If Class B is demonstrated by testing fecal coliform, during each sampling event, 7 grab samples must be collected and analyzed, and the geometric mean of these samples calculated to determine the fecal coliform level for the sampling period.
- d. When using fecal coliforms to demonstrate Class A, in conjunction with operational parameters or in conjunction with testing of enteric viruses and helminth ova, four grab samples of fecal coliform shall be collected and analyzed each sampling period. Each of these samples must have levels of < 1,000 mpn/gram, dry weight basis.
- e. If Class A or B pathogen requirements are met by monitoring pathogens and/or indicator organisms, samples must be collected in sterile containers, immediately cooled, and analysis started within the USEPA-specified holding times for these analyses: 8 hours for fecal coliform (24 hours for fecal coliform if the biosolids have been digested or composted), 24 hours for salmonella, 2 weeks for enteric viruses when frozen, 1 month for helminth ova when cooled to 4 degrees C).
- f. If pathogen reduction is demonstrated using a Process to Significantly / Further Reduce Pathogens, the Discharger shall maintain daily records of the operating parameters used to achieve this reduction.
- g. The Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction (VAR) requirements in 40 CFR § 503.33(b). If VAR is met at the application site by incorporation or covering, the Discharger must obtain certification that these requirements have been met from the land applier or surface disposal site operator, and maintain these with their records.

4. Requirements for Surface Disposal

“Surface disposal” is the placement of biosolids on the land in a sludge-only dedicated land disposal site or monofill for the purpose of disposal. Surface disposal requirements are addressed in 40 CFR § 503 Subpart C.

- a. If the surface disposal site is unlined, a representative sample shall be collected and analyzed for the pollutants required under 40 CFR § 503.23, at the following frequency, based on the tonnage of biosolids produced per year (as expressed on a 100% solids basis:

| Volume Generated (dry metric tons per year) | Monitoring Frequency * |
|---|------------------------|
| >0 - <290 | Once per year |
| 290 - <1,500 | Four times per year |
| 1,500 - <15,000 | Six times per year |
| ≥15,000 | 12 times per year |

* If biosolids are removed for use or disposal on a routine basis, then monitoring should be scheduled at regular intervals throughout the year. If biosolids are stored for an extended period of time prior to use or disposal, then monitoring may occur either at regular intervals, or prior to use or disposal corresponding to tonnage accumulated during the period of storage.

All results shall be reported on a 100% dry weight basis.

- b. The Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32, or cover the site at the end of each operating day.
- c. If Class B is demonstrated by testing fecal coliform, during each sampling event, 7 grab samples must be collected and analyzed, and the geometric mean of these samples calculated to determine the fecal coliform level for the sampling period.
- d. If Class A or B pathogen requirements are met by monitoring pathogens and/or indicator organisms, samples must be collected in sterile containers, immediately cooled, and analysis started within the USEPA-specified holding times for these analyses: 8 hours for fecal coliform (24 hours for fecal coliform if the biosolids have been digested or composted), 24 hours for salmonella, 2 weeks for enteric viruses when frozen, 1 month for helminth ova when cooled to 4 degrees C).
- e. If pathogen reduction is demonstrated using a Process to Significantly / Further Reduce Pathogens, the Discharger shall maintain daily records of the operating parameters used to achieve this reduction.

- f. The Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction (VAR) requirements in 40 CFR § 503.33(b). If VAR is met at the surface disposal site by incorporation or covering, the Discharger must obtain certification that these requirements have been met from the land applier or surface disposal site operator, and maintain these with their records.

5. Requirements for Disposal in a Municipal Landfill

“Disposal in a municipal landfill” is the placement of biosolids in a landfill subject to the requirements in 40 CFR § 258 where it is mixed with other materials being placed in the landfill or used as alternative daily or final cover at the landfill.

- a. The Discharger shall ensure that the landfill used is in compliance with 40 CFR § 258 requirements and applicable state or tribal requirements.
- b. If the biosolids are less than 15% solids, the discharger shall run a paint filter test on an as-needed basis to demonstrate that the biosolids does not contain free liquids.

6. Notification Requirements

The Discharger either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:

- a. Notification of non-compliance: The Discharger shall notify ADEQ, USEPA Region 9 and the GRIC of any non-compliance within 24 hours by phone or e-mail if the non-compliance may seriously endanger public health or the environment. A written report shall also be submitted within 5 working days of knowing the non-compliance. For other instances of non-compliance, the Discharger shall notify ADEQ, USEPA Region 9 and GRIC of the non-compliance in writing within 5 working days of becoming aware of the non-compliance. The Discharger shall require their biosolids management contractors to notify ADEQ, USEPA Region 9, and GRIC of any non-compliance within the same timeframes. Non-compliance notification shall be sent to the contact number, address and/or email provided in Section I. E. above.
- b. If biosolids are shipped to another state or to Tribal Lands, the Discharger shall send 30 days prior notice of the shipment to the USEPA and permitting authorities in the receiving State/Tribal authority.
- c. The Discharger shall notify ADEQ, USEPA and GRIC at least 60 days prior to starting a new biosolids use or disposal practice. See Section I.E. for where such notification should be sent.

7. Reporting requirements (facilities with design flows of equal to or greater than 1 mgd, and other facilities designated by EPA as Class 1 Sludge Management Facilities)
 - a. The Discharger shall submit an annual biosolids report to ADEQ, using ADEQ's format. A copy of the report in PDF shall be sent via email to USEPA Region 9 at R9NPDES@epa.gov and to the Regional biosolids coordinator, Lauren Fondahl at Fondahl.Lauren@epa.gov by February 19 of each year for the period covering the previous calendar year. The report shall include the tonnages of biosolids (reported in dry metric tons, 100% dry weight), that were land applied (without further treatment by another party), land applied after further treatment by another preparer, disposed in a sludge-only surface disposal site, sent to a landfill for alternative cover or fill, stored on site or off site, or used for another purpose. The report shall include the following attachments:
 - (1) Copies of the original monitoring reports from laboratories (results only, QA/QC pages not required). The lab reports must indicate whether the results are on a 100% dry weight basis. Lab reports for fecal coliforms must show the time the samples were collected and the time analysis was started.
 - (2) If operational parameters were used to demonstrate compliance with pathogen reduction and vector attraction reduction, the ranges of these parameters for each sampling period (i.e. ranges of times and temperatures).
 - (3) If biosolids are stored on-site or off-site for more than 2 years, the information required in 40 CFR § 503.20(b) to demonstrate that the storage is temporary.

If biosolids were land applied, the Discharger shall ensure the person applying the biosolids submits a pdf report to U.S. EPA Region 9 and ADEQ (if land applied in Arizona) showing the name of each field; location, ownership, size in acres; the dates of applications, seedings and crop seeded, harvesting and crop yield; the tonnage applied to field, in actual and dry weight; the calculated Plant Available Nitrogen; and copies of applicator's certifications of management practices and site restrictions. Reports to EPA shall be sent to R9NPDES@epa.gov and Fondahl.Lauren@epa.gov. Such reporting to EPA is adequate and separate reporting to GRIC is not necessary. For Arizona such reports may be sent to ADEQ via the portal provided by ADEQ for land application reporting.

D. Pretreatment

1. As parties contributing to the City of Phoenix treatment works, the Cities of Phoenix, Glendale, Mesa, Scottsdale, and Tempe, Arizona (hereafter, "the Cities")

shall be individually responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions. Where 40 CFR 403 places mandatory actions on the Cities as Control Authority but does not specify a timetable for completion of the actions, the Cities shall complete the required actions within six months from the issuance date of this permit, or the effective date of the 40 CFR 403 revision, whichever comes later. For violations of pretreatment requirements, the Cities shall be subject to enforcement actions, penalties, fines, and other remedies by EPA, ADEQ, or other appropriate parties, as provided in the CWA. EPA or ADEQ may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements, as provided in the CWA.

2. The Cities shall enforce the requirements promulgated under CWA sections 307(b), 307(c), 307(d), and 402(b) with timely, appropriate, and effective enforcement actions. The Cities shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those standards or, in the case of a new nondomestic user, upon commencement of discharge.
3. The Cities shall perform the pretreatment functions, as required in 40 CFR 403 including, but not limited to:
 - a. Implement the necessary legal authorities, as provided in 40 CFR 403.8(f)(1);
 - b. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - c. Implement the programmatic functions, as provided in 40 CFR 403.8(f)(2); and
 - d. Provide the requisite funding and personnel to implement the pretreatment program, as provided in 40 CFR 403.8(f)(3).
4. The Cities shall submit annually a report to EPA Region 9 and ADEQ describing their pretreatment activities over the previous calendar year. The report to EPA Region 9 should be sent to R9Pretreatment@epa.gov and to the Regional pretreatment coordinator, Amelia Whitson at Whitson.Amelia@epa.gov. The Report to ADEQ should be emailed to pretreatment@azdeq.gov. If any City is not in compliance with any conditions or requirements of this permit, then the City shall also include the reasons for noncompliance and state how and when the City shall comply with such conditions or requirements. This annual report shall cover operations from January 1 through December 31 and is due on February 28 of each year. The report shall contain, but not be limited to, the following information (paragraph (a) applies only to the City of Phoenix):
 - a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants identified under CWA section 307(a) with the exception of mercury and cyanide

(collected as discrete samples) which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan. Influent or effluent monitoring data shall be provided for nonpriority pollutants which the Cities believe may be causing or contributing to Interferences or Pass Through. All sampling and analysis required under this paragraph must be performed using the test methods specified under 40 CFR 136. Sampling and analysis for asbestos is not required. Sludge sampling and analyses are covered elsewhere in this permit.

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the Cities know or suspect were caused by nondomestic users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limits to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Interference or Pass Through.
- c. An updated list of the Cities' significant industrial users ("SIUs"), including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Cities shall provide a brief explanation of each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limits.
- d. The Cities shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - (1) Name of the SIU;
 - (2) Category, if subject to federal categorical standards;
 - (3) The type of wastewater treatment or control processes in place;
 - (4) The number of samples taken by the POTW during the year;
 - (5) The number of samples taken by the SIU during the year;
 - (6) For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - (7) A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
 - (8) Whether the facility is in significant noncompliance (SNC), as defined at 40 CFR 403.12(f)(2)(viii) at any time during the year; and

- (9) A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance;
- e. A brief description of any programs the POTW implements to reduce pollutants from nondomestic users that are not classified as SIUs;
- f. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;
- g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and
- h. A summary of activities to involve and inform the public of the program, including a copy of the newspaper notice, if any, required under 40 CFR 403.8(f)(2)(viii).
- 5 As part of the second annual pretreatment report required under Part II.D.4., the permittee shall provide a written technical evaluation of the need to revise local limits under 40 CFR § 403.5(c)(1), as required under 40 CFR § 122.44(j)(2)(ii). Such written technical evaluation shall be provided by February 19, 2025.
6. All pretreatment reports shall be submitted to:

Pretreatment Coordinator
EPA Region 9
NPDES Permits Office (WTR-2-3)
75 Hawthorne Street
San Francisco, CA 94105

Or emailed to:

R9Pretreatment@epa.gov and Whitson.Amelia@epa.gov

Pretreatment reports shall be submitted to ADEQ: pretreatment@azdeq.gov

E. Capacity Attainment and Planning

The permittee shall file a written report with EPA within ninety (90) days after the average dry-weather waste flow for any month that either equals or exceeds 90 percent of the annual

dry weather design capacity of the waste treatment and/or disposal facilities. The permittee's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

1. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.
2. The permittee's best estimate of when the average daily dry weather flow rate will equal or exceed the design capacity of the facilities.
3. The permittee's intended schedule for the studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present facilities.

F. Asset Management

The permittee shall develop an asset management program (AMP) to cover the treatment plant and collection system. The City of Phoenix receives effluent from collection systems operated by other jurisdictions that are part of the Sub-Regional Operating Group (SROG) which, besides Phoenix, includes the Cities of Glendale, Mesa, Scottsdale and Tempe. The City of Phoenix shall only be responsible for, and the AMP shall only include, assets owned, controlled, and/or operated by the City. The permittee shall:

1. Procure, populate, and utilize asset management and/or work order management software within four years of permit issuance. The software shall:
 - a. Inventory all critical assets valued over \$5,000 into a single database. Assets may include, but are not limited to, sewer lines, manholes, outfalls, pump stations, force mains, catch basins, and wastewater treatment facility assets. Each entry shall include:
 - (1) Name and identification number.
 - (2) Location (GPS coordinate or equivalent identifier).
 - (3) Current performance/condition.
 - (4) Purchase and installation date.
 - (5) Purchase price.
 - (6) Replacement cost.
 - (7) Quantitative consequence of failure.
 - (8) Quantitative likelihood of failure.
 - b. Automate work order production and tracking.

- c. Prioritize system maintenance and rehabilitation projects.
2. Create an Asset Management Plan (“AMP”) within three years of permit issuance. The AMP shall be updated and re-evaluated every five years. A copy of the permittee’s AMP shall be retained on the permittee’s premises and available for review by regulatory authorities upon request.
3. Any existing system that the permittee uses with substantially the same function as the AMP may be adapted to meet the requirements of this section.

G. Summary of Special Reports.

The permittee is required to submit special reports in this permit by the dates listed below in Table 3. For reports that are required to be submitted to “R9NPDES”, the permittee shall email reports to R9NPDES@epa.gov and include the following information in the subject line:

1. The permit number (AZ0020524)
2. The name of the report as written in the table below.
3. The word “submittal”

Table 3. Special Reports to Submit to EPA

| Special Report Name | Due Date | Section of Permit | Submit Report to: |
|--|--|-------------------|---|
| Annual Biosolids Report | One year after effective date of permit | Part II.C. | R9NPDES/Lauren Fondahl OR via CDX system. |
| General Permit for Capacity, Management, Operations, and Maintenance | On-going | Part III. | ADEQ and EPA as pursuant to Part III. |
| Asset Management Plan | Three years after effective date of permit | Part II.F. | Keep Report on site and available when requested. |

Part III. SANITARY SEWER OVERFLOWS

Reporting, Record keeping, and Public Notification for Unauthorized Sewage Overflows.

1. The permittee shall initiate and continue to comply with the provisions of ADEQ’s 2.05 General Permit for Capacity, Management, Operations, and Maintenance (CMOM) and continue to report sanitary sewer overflows to ADEQ.

2. The permittee shall also report to EPA any overflow that may endanger health or the environment from a sanitary sewer or any unauthorized overflow from a combined sewer over which the permittee has ownership or operational control. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to EPA by contacting the EPA's Enforcement Division at 414-972-3577. Permittee shall also provide a written report (via email is acceptable) to EPA's Enforcement Division for any overflow thus identified within 5 days of the time the permittee becomes aware of the circumstances. The report shall be sent to R9NPDES@epa.gov and Perkins.Susanne@epa.gov
3. Overflows, spills, releases, and diversions of wastewater from a sanitary sewer collection system to waters of the United States are prohibited.

Part IV. STANDARD PERMIT CONDITIONS

A. All NPDES Permits

In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.

1. Duty to comply; at 40 CFR 122.41(a).

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such

sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.¹

- c. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

2. Duty to reapply; at 40 CFR 122.41(b).

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new

¹ The civil and administrative penalty amounts are adjusted annually for inflation pursuant to the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, and the current penalty amounts are set forth in 40 CFR 19.4

permit. Any permittee with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.

3. Need to halt or reduce activity not a defense; at 40 CFR 122.41(c).

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate; at 40 CFR 122.41(d).

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.

5. Proper operation and maintenance; at 40 CFR 122.41(e).

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. Permit actions; at 40 CFR 122.41(f).

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property rights; at 40 CFR 122.41(g).

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to provide information; at 40 CFR 122.41(h).

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

9. Inspection and entry; at 40 CFR 122.41(i).

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

10. Monitoring and records; at 40 CFR 122.41(j).

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed
 - (iv) The individuals(s) who performed the analyses;

- (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.
 - e. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
11. Signatory requirement; at 40 CFR 122.41(k).
- a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.) All permit applications shall be signed as follows:
 - (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements, and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate offices identified in 40 CFR § 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR § 122.22(a)(1)(ii) rather than to specific individuals.

- (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA)
- b. All reports required by permits, and other information requested by the Director shall be signed by the person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this section:
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
 - (3) The written authorization is submitted to the Director.
- c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false

information, including the possibility of fine and imprisonment for knowing violations.”

- e. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment of not more than 6 months per violation, or both.

12. Reporting requirements; at 40 CFR 122.41(l).

- a. Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required only when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
 - (3) The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- b. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the CWA. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)
 - (1) Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR § 122.62(b)(2)), or a minor modification made (under 40 CFR § 122.63(d)), to identify the new permittee and incorporated such other requirements as may be necessary under CWA.

- (2) Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new permittee if:
- (A) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
 - (B) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (C) The Director does not notify the existing permittee or the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR § 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.
 - (2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 503, or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

f. Twenty-four hour reporting.

- (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (*e.g.*, manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127. The permittee shall electronically submit all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events using either the provisions specified in Part III above or to CDX (<https://cdx.epa.gov/>) in accordance with the reporting requirements specified in this permit. The permittee must also sign and certify all electronic submissions in accordance with the signatory requirements specified at 40 CFR § 122.41(k).
- (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (i) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g).)
 - (ii) Any upset which exceeds any effluent limitation in the permit.
 - (iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g).)
- (3) The Director may waive the written report on a case-by-case basis for reports under 40 CFR 122.41(l)(6)(ii) of this section if the oral report has been received within 24 hours.

- g. Other noncompliance. The permittee shall report all instances of noncompliance not reported under 40 CFR § 122.41(a)(4), (5), and (6) of this section., at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (1)(6) of this section.
- h. Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

13. Bypass; at 40 CFR 122.41(m).

a. Definitions.

- (1) Bypass” means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) ”Severe property damage” means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 40 CFR 122.41(m)(3) and (m)(4) of this section.

c. Notice.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (1)(6) of this section (24-hour notice).
- (3) As of December 21, 2025 all notices submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

d. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (iii) The permittee submitted notices as required under paragraph (m)(3) of this section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

14. Upset; at 40 CFR 122.41(n).

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent cause by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and

- (3) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24-hour notice).
- (4) The permittee complied with any remedial measures required under paragraph (d) of this section.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Reopener Clause; at 40 CFR § 122.44(c).

For any permit issued to a treatment works treating domestic sewage (including “sludge-only facilities”), the Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA. The Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

16. Minor modifications of permits; at 40 CFR § 122.63.

Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 40 CFR § 124. Any permit modification not processed as a minor modification under this section must be made for cause and with 40 CFR § 124 draft permit and public notice as required in 40 CFR § 122.62. Minor modifications may only:

- a. Correct typographical errors;
- b. Require more frequent monitoring or reporting by the permittee;
- c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
- d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.

- e. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR § 122.29.
- f. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
- g. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR § 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR § 403.18) as enforceable conditions of the POTW's permits.

17. Terminations of permits; at 40 CFR § 122.64.

- a. The following are causes for terminating a permit during its term, or for denying a permit renewal application:
 - (1) Noncompliance by the permittee with any conditions of the permit;
 - (2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
 - (3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
 - (4) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

18. Availability of Reports; pursuant to CWA § 308

Except for data determined to be confidential under 40 CFR § 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential.

19. Removed Substances; pursuant to CWA § 301

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials entering waters of the U.S.

20. Severability; pursuant to CWA § 512

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

21. Civil and Criminal Liability; pursuant to CWA § 309

Except as provided in permit conditions on “Bypass” and “Upset”, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

22. Oil and Hazardous Substances Liability; pursuant to CWA § 311

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

23. State, Tribe, or Territory Law; pursuant to CWA § 510

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State, Tribe, or Territory law or regulation under authorities preserved by CWA § 510.

B. Specific Categories of NPDES Permit (POTWs)

In accordance with 40 CFR § 122.42, the following conditions, in addition to those set forth at 40 CFR § 122.41, apply to all NPDES permits within the category specified below and are expressly incorporated into this permit.

1. Publicly owned treatment works; at 40 CFR § 122.42(b).
 - a. All POTWs must provide adequate notice to the Director of the following:
 - (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 and 306 of the CWA if it were directly discharging those pollutants; and

- (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- b. The following condition has been established by EPA Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act. Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 through 261.33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

Attachment A: Definitions

1. “Average monthly discharge limitation” means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.
2. “Average weekly discharge limitation” means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
3. “Best Management Practices” or “BMPs” are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the U.S. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.
4. A “composite” sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR § 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR § 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
5. A “daily discharge” means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.

6. A “daily maximum allowable effluent limitation” means the highest allowable “daily discharge.”

7. A “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.

8. A “grab” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR § 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR § 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.

9. The “method detection limit” or “MDL” is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is distinguishable from the method blank results, as defined by a specific laboratory method in 40 CFR § 136. The procedure for determination of a laboratory MDL is in 40 CFR § 136, Appendix B.

10. The “minimum level” or “ML” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR § 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:

- a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
 - b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) x 10ⁿ, where n is zero or an integer. (For example, if an MDL is 2.5 µg/l, then the calculated ML is: 2.5 µg/l x 3.18 = 7.95 µg/l. The multiple of (1, 2, or 5) x 10ⁿ nearest to 7.95 is 1 x 10¹ = 10 µg/l, so the calculated ML, rounded to the nearest whole number, is 10 µg/l.)
11. A “NODI(B)” means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory’s MDL.
12. A “NODI(Q)” means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory’s MDL, but less than the ML.

ATTACHMENT B: Location Map

Outfalls and Monitoring Stations for the 91st Ave WWTP NPDES Permit



001- Outfall a monitoring station to the Salt River from the 91st Ave Plant, used only for maintenance activities and emergency discharge only

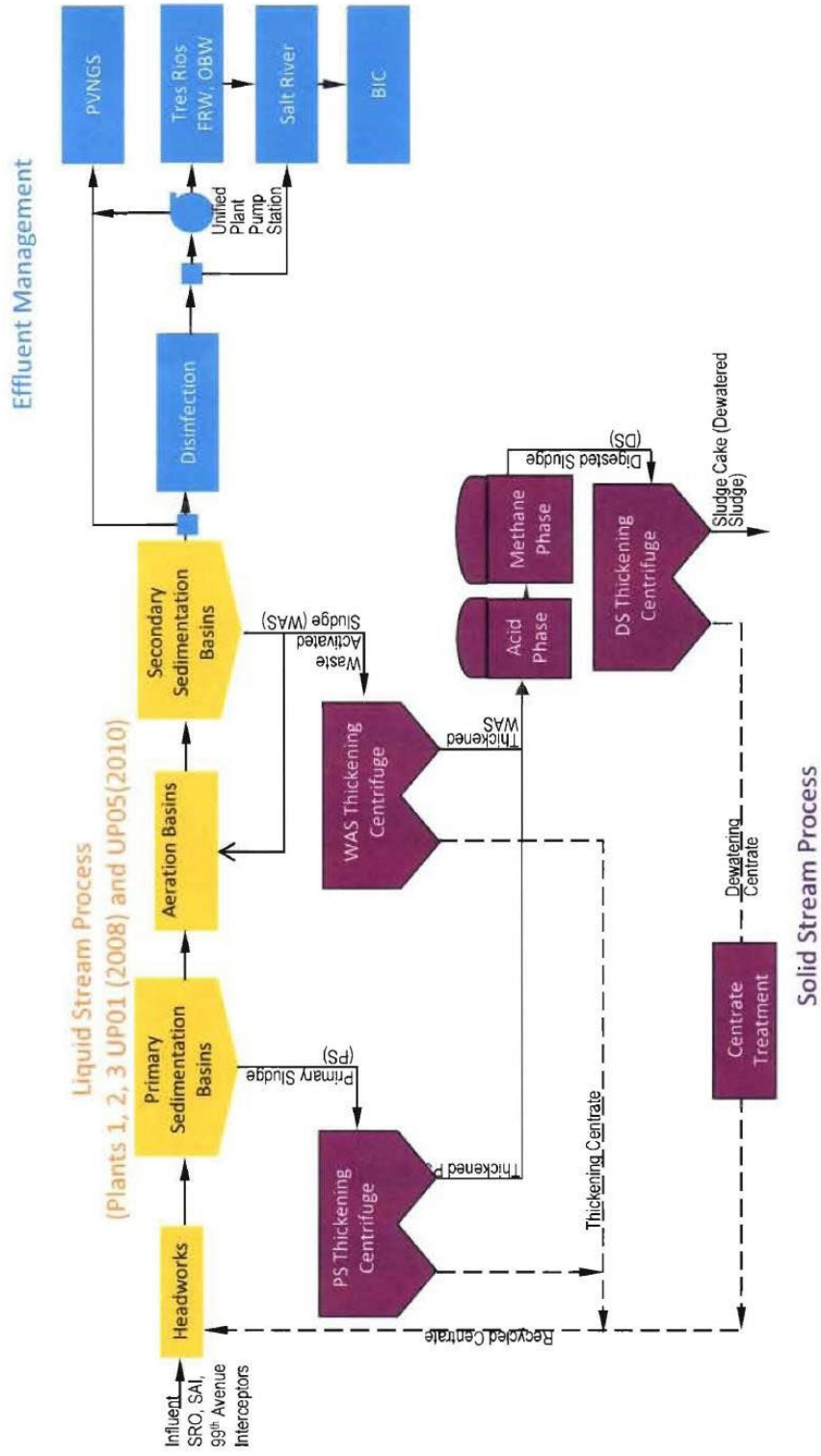
005- Outfall (effluent) to the Salt River from the Tres Rios Flow Regulating Wetlands (FRW)

FRW 1- Monitoring station at the influent to the Tres Rios FRW

FRW 2- Monitoring station after the deep water but before the flow regulating portions of the wetland

FRW 3- Monitoring station within flow regulating portion of the wetland

ATTACHMENT C: Wastewater Flow Schematic



ATTACHMENT D: Ammonia Log

AIR = Ratio of Measured Ammonia Value over Ammonia Limit

$$\text{Effluent Ammonia} \div \text{Ammonia Limit}$$

| A | B | C | D | E | F |
|----------------|------------------------------------|-------------|--------------------------------|---|-------------------------------|
| Date of Sample | Ammonia Value In Effluent (mg/L N) | Effluent pH | Effluent Temperature (Celsius) | Ammonia Limit as Determined from Attachment E | AIR Value (Column B/Column E) |
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Please copy and complete for each month of each year for permit term. Attach any additional pages as necessary.

Signature of Authorized Representative: _____

ATTACHMENT E: pH Dependent Ammonia (as N) Objectives

*2016 Arizona Water Quality Standards for Surface Waters
Table 12 Chronic Criteria for Total Ammonia (mg/L as N)
Aquatic and Wildlife coldwater, warmwater, and edw*

| pH | Temperature in Degrees Celsius | | | | | | | | | | pH |
|-----|--------------------------------|------|------|------|------|------|------|------|------|------|-----|
| | 0 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | |
| 6.5 | 6.7 | 6.7 | 6.1 | 5.3 | 4.7 | 4.1 | 3.6 | 3.2 | 2.8 | 2.5 | 6.5 |
| 6.6 | 6.6 | 6.6 | 6.0 | 5.3 | 4.6 | 4.1 | 3.6 | 3.1 | 2.8 | 2.4 | 6.6 |
| 6.7 | 6.4 | 6.4 | 5.9 | 5.2 | 4.5 | 4.0 | 3.5 | 3.1 | 2.7 | 2.4 | 6.7 |
| 6.8 | 6.3 | 6.3 | 5.7 | 5.0 | 4.4 | 3.9 | 3.4 | 3.0 | 2.6 | 2.3 | 6.8 |
| 6.9 | 6.1 | 6.1 | 5.6 | 4.9 | 4.3 | 3.8 | 3.3 | 2.9 | 2.6 | 2.3 | 6.9 |
| 7.0 | 5.9 | 5.9 | 5.4 | 4.7 | 4.2 | 3.6 | 3.2 | 2.8 | 2.5 | 2.2 | 7.0 |
| 7.1 | 5.7 | 5.7 | 5.2 | 4.5 | 4.0 | 3.5 | 3.1 | 2.7 | 2.4 | 2.1 | 7.1 |
| 7.2 | 5.4 | 5.4 | 4.9 | 4.3 | 3.8 | 3.3 | 2.9 | 2.6 | 2.3 | 2.0 | 7.2 |
| 7.3 | 5.1 | 5.1 | 4.6 | 4.1 | 3.6 | 3.1 | 2.8 | 2.4 | 2.1 | 1.9 | 7.3 |
| 7.4 | 4.7 | 4.7 | 4.3 | 3.8 | 3.3 | 2.9 | 2.6 | 2.3 | 2.0 | 1.7 | 7.4 |
| 7.5 | 4.4 | 4.4 | 4.0 | 3.5 | 3.1 | 2.7 | 2.4 | 2.1 | 1.8 | 1.6 | 7.5 |
| 7.6 | 4.0 | 4.0 | 3.6 | 3.2 | 2.8 | 2.5 | 2.2 | 1.9 | 1.7 | 1.5 | 7.6 |
| 7.7 | 3.6 | 3.6 | 3.3 | 2.9 | 2.5 | 2.2 | 1.9 | 1.7 | 1.5 | 1.3 | 7.7 |
| 7.8 | 3.1 | 3.2 | 2.9 | 2.5 | 2.2 | 2.0 | 1.7 | 1.5 | 1.3 | 1.2 | 7.8 |
| 7.9 | 2.8 | 2.8 | 2.5 | 2.2 | 2.0 | 1.7 | 1.5 | 1.3 | 1.2 | 1.0 | 7.9 |
| 8.0 | 2.4 | 2.4 | 2.2 | 1.9 | 1.7 | 1.5 | 1.3 | 1.2 | 1.0 | 0.90 | 8.0 |
| 8.1 | 2.1 | 2.1 | 1.9 | 1.7 | 1.5 | 1.3 | 1.1 | 1.0 | 0.88 | 0.77 | 8.1 |
| 8.2 | 1.8 | 1.8 | 1.6 | 1.4 | 1.3 | 1.1 | 0.97 | 0.86 | 0.75 | 0.66 | 8.2 |
| 8.3 | 1.5 | 1.5 | 1.4 | 1.2 | 1.1 | 0.94 | 0.83 | 0.73 | 0.64 | 0.56 | 8.3 |
| 8.4 | 1.3 | 1.3 | 1.2 | 1.0 | 0.91 | 0.80 | 0.70 | 0.62 | 0.54 | 0.48 | 8.4 |
| 8.5 | 1.1 | 1.1 | 1.0 | 0.90 | 0.77 | 0.67 | 0.59 | 0.52 | 0.46 | 0.40 | 8.5 |
| 8.6 | 0.92 | 0.92 | 0.84 | 0.74 | 0.65 | 0.57 | 0.50 | 0.44 | 0.37 | 0.34 | 8.6 |
| 8.7 | 0.78 | 0.78 | 0.71 | 0.62 | 0.55 | 0.48 | 0.42 | 0.37 | 0.33 | 0.29 | 8.7 |
| 8.8 | 0.66 | 0.66 | 0.60 | 0.53 | 0.46 | 0.41 | 0.36 | 0.32 | 0.28 | 0.24 | 8.8 |
| 8.9 | 0.57 | 0.57 | 0.51 | 0.45 | 0.40 | 0.35 | 0.31 | 0.27 | 0.24 | 0.21 | 8.9 |
| 9.0 | 0.49 | 0.49 | 0.44 | 0.39 | 0.34 | 0.30 | 0.26 | 0.23 | 0.20 | 0.18 | 9.0 |

NOTES:

1. pH and temperature are field measurements taken at the same time and location as the water samples destined for the laboratory analysis of ammonia.
2. If the field measured pH value falls between the tabular values, round the field measured value according to standard scientific rounding procedures to the nearest tabular value, and then determine the ammonia standard using linear interpolation when the temperature value is between the values provided in the table.