

AUTHORIZATION TO DISCHARGE UNDER THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Article 3.1; the Federal Water Pollution Control Act, (33 USC § 1251 et. seq., as amended), and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 9 and 10, and amendments thereto,

Pima County Wastewater Management Department
Roger Road Wastewater Treatment Plant
210 N. Stone Avenue, 8th Floor
Tucson, Arizona 85701

is authorized to discharge treated domestic wastewater and stormwater from the Roger Road Wastewater Treatment Plant (WWTP) located at 2600 W. Sweetwater Drive, serving the City of Tucson in Pima County, Arizona to the Santa Cruz River in the Santa Cruz Basin at:

Outfall No.	Latitude	Longitude	Legal
001- effluent discharge to the Santa Cruz River	32°17' 05" N	111°01' 41" W	Township 13 S, Range 13 E, Section 20
002- internal outfall. Effluent is sent to reuse from this Outfall. See AZ0025291 for discharges to surface water originating from this outfall	32°17' 06" N	111°01' 03" W	Township 13 S, Range 13 E, Section 21
003- stormwater discharge to the Santa Cruz River	32°17' 06" N	111°01' 03" W	Township 13 S, Range 13 E, Section 20

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein, and in the attached "Standard AZPDES Permit Conditions," dated February 2, 2004.

This permit shall become effective on March 2, 2006.

This permit and the authorization to discharge shall expire at midnight, March 2, 2011.

Signed this 26th day of January, 2006.



Joan Card, Director
Water Quality Division
Department of Environmental Quality

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ATTACHED

PART I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. The permittee shall limit and monitor discharges from outfall 001 as specified in Table 1 a and b which follow. These requirements are based on as design capacity of 155,185 m³/day (41 MGD).

TABLE 1.a: Effluent Limitations and Monitoring Requirements other than Whole Effluent Toxicity – Outfall 001

Parameter	Maximum Allowable Discharge Limitations						Monitoring Requirement (5)	
	Mass Limits			Concentration Limits			Monitoring Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Discharge Flow (MGD)	REPORT (1)	REPORT	REPORT	---	---	---	Continuous	Metered
Biochemical Oxygen Demand (BOD) (5-day)	4656 kg/day	6983 kg/day	---	30 mg/L	45 mg/L	---	daily	24-hour Composite (7)
BOD Removal (2)	---	---	---	85%	---	---	daily	24-hour Composite
Bis (2-ethylhexyl) phthalate	18.5 kg/day	---	62.1 kg/day	119 ug/L	---	400 ug/L	monthly	24-hour Composite
Copper (4) (5)(6)	2638 g/day	---	3414 g/day	17 ug/L (6)	---	22 ug/L (6)	monthly	24-hour Composite
<i>E. Coli</i> (3)	---	---	---	126 cfu/100 ml (3)	---	576 cfu/100 ml (3)	daily	Discrete
Total Suspended Solids (TSS)	4656 kg/day	6983 kg/day	---	30 mg/L	45 mg/L	---	daily	24-hour Composite
TSS Removal (2)	---	---	---	85%	---	---	daily	24-hour Composite
Total Residual Chlorine	635 g/day	---	1275 g/day	4 ug/l	---	8 ug/L	daily	Discrete
Hardness (CaCO ₃) (5)	---	---	---	---	---	Report	Quarterly	24-hr. Composite
pH	Not less than 6.5 standard units (S.U.) nor greater than 9.0 S.U.						daily	Discrete

Footnotes:

- (1) Monitoring and reporting required. No limit set at this time.
- (2) Both the influent and the effluent shall be monitored.
- (3) cfu = colony forming units. The monthly average for *E. Coli* is calculated as a geometric mean. See the definition for "Monthly or Weekly Average concentration in Appendix A.
- (4) Limits listed are based on a hardness of 150 mg/L as CaCO₃ and a translator of 0.7 from the 1995 translator study for Roger Road effluent. The effluent must be tested for hardness at the same time that these metal samples are taken.
- (5) At a minimum, one sample must coincide with one of the Whole Effluent Toxicity Test (WET) samples taken each month. See Part V.A.1. of the permit.
- (6) A variance has been granted for this limit and an Interim limit set at 25 ug/L for the daily maximum. The average monthly limit is not applicable during the variance term. See Part VI.C.
- (7) For this permit, "24-hour composite" means (except for volatile organics) a mixture of discrete samples (allquots). An aliquot shall be collected after each 2 millions gallons of flow over a twenty-four hour period. Volatile organic composite samples shall be composited as given in Table 3.c, footnote 1 of this permit.

TABLE 1.b: Effluent Limitations and Monitoring Requirements for Whole effluent Toxicity (WET) – Outfall 001

Effluent Characteristic (1)	Limit		Monitoring Requirements	
	Daily Maximum (2) (3)	Monthly Median (3)	Monitoring Frequency	Sample Type
Chronic Toxicity <i>Pimephales promelas</i> (Fathead minnow)	1.6 TUc (4)	1.0 TUc (4)	See Table 2 below	24-hr Composite

Footnotes:

- (1) See Part V for additional information on requirements for testing and reporting Whole Effluent Toxicity (WET).
- (2) Since completion of one Chronic WET test takes more than 24 hours, the daily maximum of WET is considered to be the highest allowable test result.
- (3) Any exceedance of these values will require follow-up testing by the permittee. See Part V.D. of the permit for details.
- (4) A variance is granted for this limit due to ammonia toxicity. See Part V for additional testing requirements and Part VI A and B for variance and compliance conditions for ammonia toxicity removal.

B. Trace Substance Monitoring.

The permittee shall monitor discharges from outfall 001 as specified in Table 2. Data results above the Assessment Levels (ALs) listed in Table 2 do not constitute a permit violation, but may trigger evaluation of Reasonable Potential by ADEQ. The permittee shall use an approved analytical method with a Method Detection Limit (MDL) lower than the AL values per Part II.A.5.

TABLE 2: Assessment and Action Level Monitoring Requirements – Outfall 001

Parameter	ASSESSMENT LEVELS (1) (3)		Monitoring Requirements (2)		
	Monthly Average	Daily Maximum	Monitoring Frequency	Sample Type	
Chromium VI	8 ug/L	16 ug/L	1X/ every two weeks	Discrete	
Cyanide	7.9 ug/L	16 ug/L	1X/ every two weeks	Discrete	
Oil and Grease	10 mg/L	15 mg/L	1X/ every two weeks	Discrete	
Selenium	2 ug/L	3 ug/L	1X/ every two weeks	24-hr. Composite	
Sulfides	49.8 ug/L	100 ug/L	1X/ every two weeks	Discrete	
	Action Level			Sample Type	
	Monthly Median	Daily Maximum	Monitoring Frequency		
Chronic Toxicity <i>Selenastrum capricornutum</i> (Green algae)	1.0 TUc	1.6 TUc	Monthly (4)	24-hr Composite	Modified Per Part V.A.3.
Chronic Toxicity <i>Ceriodaphnia dubia</i> (Water flea)	1.0 TUc	1.6 TUc	Monthly (4)	24-hr Composite	Modified Per Part V.A.3.
	Interim Action Level				
Chronic Toxicity <i>Pimephales promelas</i> (Fathead minnow)	1.0 TUc	1.6 TUc	Semi-annually (4)	24-hr Composite	Modified Per Part V.A.3.

Footnotes:

- (1) Concentration values are calculated based on Arizona Water Quality Standards. Monitoring and reporting required.
- (2) At a minimum, one sample must coincide with one of the required WET samples. See Part V.A.1 of the permit.
- (3) All metals effluent Assessment Levels are for total recoverable metals, except for Chromium VI, for which the assessment levels listed are dissolved.
- (4) See Part V of this permit for additional requirements for WET testing.

C. After the permittee obtains samples for at least one year for a Table 2 listed parameter, and all results are lower than the assessment level, the permittee may request to discontinue monitoring for that parameter until quarterly in the last year of the permit. Requests shall be in writing and include an electronic tabulation of all data accrued under Table 2 and be submitted to: ADEQ, Surface Water Permits Unit, 1110 W. Washington, Phoenix, AZ 85007. ADEQ will evaluate the data and advise the permittee in writing if reduction in monitoring is acceptable based on an evaluation of the data. Permittees may not reduce the monitoring frequency until written approval is obtained. (The permittee is also advised data evaluation could potentially trigger a finding of Reasonable Potential with the need to modify this permit to add limits.)

D. The permittee shall monitor effluent discharged through Outfall 001 for the parameters listed in Tables 3.a. – 3.f. at the frequency specified. This monitoring is required for effluent characterization. No limits or ALs are established, but the reporting level must be low enough to allow comparison of the results to the applicable water quality standards (WQS). If a reporting level below the WQS cannot be achieved, then the permittee shall use the method with the lowest method-specific MDL, as defined in Appendix A of this permit. Samples are to be representative of any seasonal variation in the discharge:

TABLE 3.a: Additional Effluent Testing

Parameter	Reporting Units	Monitoring Requirements	
		Monitoring Frequency (1)	Sample Type
Temperature	°Celsius	Monthly	Discrete
Ammonia (as N) (2)	mg/L	Monthly	Discrete
Chlorine (total residual) TRC	mg/L	Quarterly	Discrete
Dissolved oxygen	mg/L	Quarterly	Discrete
Kjeldahl Nitrogen, Total	mg/L	Quarterly	24-hour Composite
Nitrate/Nitrite (as Total N)	mg/L	Quarterly	24-hour Composite
Oil and grease	mg/L	Quarterly	Discrete
Phosphorus	mg/L	Quarterly	24-hour Composite
Total dissolved solids	mg/L	Quarterly	24-hour Composite

- (1) If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 3.a. requirements.
- (2) The Ammonia Log (Appendix C) must be completed and submitted annually to: ADEQ, Surface Water Permits Unit, Mailcode 5415B-3, 1110 W. Washington St. Phoenix, AZ 85007.

TABLE 3.b: Effluent Characterization Testing - Selected Metals (Total Recoverable) – Outfall 001

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency (1)	Sample Type
Antimony	560	2 times per year	24-hour Composite
Arsenic	190	2 times per year	24-hour Composite
Beryllium	5.3	2 times per year	24-hour Composite
Cadmium	3.026	2 times per year	24-hour Composite
Chromium	100	2 times per year	24-hour Composite
Chromium VI	11	2 times per year	Discrete
Copper	18	2 times per year	24-hour Composite
Lead	3.9	2 times per year	24-hour Composite
Mercury	0.2	2 times per year	24-hour Composite
Nickel	73.3	2 times per year	24-hour Composite
Selenium	2	2 times per year	24-hour Composite
Silver	6.9	2 times per year	24-hour Composite
Thallium	112	2 times per year	24-hour Composite
Zinc	165	2 times per year	24-hour Composite
Cyanide	9.7	2 times per year	Discrete

- (1) If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 3.b. requirements.

TABLE 3.c: Effluent Characterization Testing - Selected Volatile Organic Compounds – Outfall 001

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency	Sample Type (1)
Acrolein	30	2 times per year	24-hour Composite
Acrylonitrile	250	2 times per year	24-hour Composite
Benzene	93	2 times per year	24-hour Composite
Bromoform	15000	2 times per year	24-hour Composite

Carbon tetrachloride	980	2 times per year	24-hour Composite
Chlorobenzene	260	2 times per year	24-hour Composite
Chlorodibromomethane	28000	2 times per year	24-hour Composite
Chloroethane	---	2 times per year	24-hour Composite
2-chloroethylvinyl ether	9800	2 times per year	24-hour Composite
Dichlorobromomethane	28000	2 times per year	24-hour Composite
1,1-dichloroethane	---	2 times per year	24-hour Composite
1,2-dichloroethane	41000	2 times per year	24-hour Composite
Trans-1,2-dichloroethylene	3900	2 times per year	24-hour Composite
1,1-dichloroethylene	950	2 times per year	24-hour Composite
1,2-dichloropropane	9200	2 times per year	24-hour Composite
1,3-dichloropropylene	420	2 times per year	24-hour Composite
Ethylbenzene	1400	2 times per year	24-hour Composite
Methyl bromide	360	2 times per year	24-hour Composite
Methyl chloride	15000	2 times per year	24-hour Composite
Methylene chloride	5500	2 times per year	24-hour Composite
1,1,2,2-tetrachloroethane	3200	2 times per year	24-hour Composite
Tetrachloroethylene	680	2 times per year	24-hour Composite
Toluene	180	2 times per year	24-hour Composite
1,1,1-trichloroethane	200	2 times per year	24-hour Composite
1,1,2-trichloroethane	5600	2 times per year	24-hour Composite
Trichloroethylene	1300	2 times per year	24-hour Composite
Vinyl chloride	4200	2 times per year	24-hour Composite

Footnotes:

(1) Samples for Volatile Organic Compounds must be collected as 4 discrete samples and composited per approved methods by the laboratory running the analyses.

TABLE 3.d: Effluent Characterization Testing - Selected Acid-extractable Compounds – Outfall 001

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency	Sample Type
P-chloro-m-cresol	4.7	2 times per year	24-hour Composite
2-chlorophenol	150	2 times per year	24-hour Composite
2,4-dichlorophenol	88	2 times per year	24-hour Composite
2,4-dimethylphenol	310	2 times per year	24-hour Composite
4,6-dinitro-o-cresol	24	2 times per year	24-hour Composite
2,4-dinitrophenol	9.2	2 times per year	24-hour Composite
2-nitrophenol	---	2 times per year	24-hour Composite
4-nitrophenol	3000	2 times per year	24-hour Composite
Pentachlorophenol	10.5	2 times per year	24-hour Composite
Phenol	1000	2 times per year	24-hour Composite
2,4,6- trichlorophenol	25	2 times per year	24-hour Composite

TABLE 3.e: Effluent Characterization Testing - Selected Base-neutral Compounds -Outfall 001

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency	Sample Type
Acenaphthene	550	2 times per year	24-hour Composite
Acenaphthylene	---	2 times per year	24-hour Composite
Anthracene	420000	2 times per year	24-hour Composite
Benzidine	89	2 times per year	24-hour Composite
Benzo(a)anthracene	1.9	2 times per year	24-hour Composite
Benzo(a)pyrene	0.2	2 times per year	24-hour Composite
3,4 benzofluoranthene	1.9	2 times per year	24-hour Composite
Benzo(ghi)perylene	---	2 times per year	24-hour Composite
Benzo(k)fluoranthene	1.9	2 times per year	24-hour Composite
Bis (2-chloroethoxy) methane	---	2 times per year	24-hour Composite
Bis (2-chloroethyl) ether	1.3	2 times per year	24-hour Composite
Bis(2-chloroisopropyl) ether	56000	2 times per year	24-hour Composite
Bis (2-ethylhexyl) phthalate	360	2 times per year	24-hour Composite
4-bromophenyl phenyl ether	14	2 times per year	24-hour Composite
Butyl benzyl phthalate	130	2 times per year	24-hour Composite
2-chloronaphthalene	112000	2 times per year	24-hour Composite
4-chlorophenyl phenyl ether	---	2 times per year	24-hour Composite
Chrysene	19	2 times per year	24-hour Composite
Di-n-butyl phthalate	35	2 times per year	24-hour Composite
Di-n-octyl phthalate	560000	2 times per year	24-hour Composite
Dibenzo(a,h)anthracene	1.9	2 times per year	24-hour Composite
1,2-dichlorobenzene	470	2 times per year	24-hour Composite
1,3-dichlorobenzene	970	2 times per year	24-hour Composite
1,4-dichlorobenzene	780	2 times per year	24-hour Composite
3,3-dichlorobenzidine	3.1	2 times per year	24-hour Composite
Diethyl phthalate	1600	2 times per year	24-hour Composite
Dimethyl phthalate	1000	2 times per year	24-hour Composite
2,4-dinitrotoluene	860	2 times per year	24-hour Composite
2,6-dinitrotoluene	5600	2 times per year	24-hour Composite
1,2-diphenylhydrazine	1.8	2 times per year	24-hour Composite
Fluoranthene	1600	2 times per year	24-hour Composite
Fluorene	56000	2 times per year	24-hour Composite
Hexachlorobenzene	1120	2 times per year	24-hour Composite
Hexachlorobutadiene	8.2	2 times per year	24-hour Composite
Hexachlorocyclopentadiene	0.3	2 times per year	24-hour Composite
Hexachloroethane	350	2 times per year	24-hour Composite
Indeno(1,2,3-cd)pyrene	1.9	2 times per year	24-hour Composite
Isophorone	43000	2 times per year	24-hour Composite
Naphthalene	580	2 times per year	24-hour Composite
Nitrobenzene	700	2 times per year	24-hour Composite
N-nitrosodi-n-propylamine	133000	2 times per year	24-hour Composite
N-nitrosodimethylamine	0.03	2 times per year	24-hour Composite

TABLE 3.e: Effluent Characterization Testing - Selected Base-neutral Compounds -Outfall 001

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency	Sample Type
N-nitrosodiphenylamine	200	2 times per year	24-hour Composite
Phenanthrene	6.3	2 times per year	24-hour Composite
Pyrene	42000	2 times per year	24-hour Composite
1,2,4-trichlorobenzene	14000	2 times per year	24-hour Composite

TABLE 3.f: Effluent Characterization Testing Based on Designated Uses -Outfall 001

Additional Parameters from the Arizona Surface Water Quality Standards, Appendix A: Tables 1 & 2

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency	Sample Type
Alachlor	170	2 times per year	24-hour Composite
Aldrin	2.0	2 times per year	24-hour Composite
Atrazine	49000	2 times per year	24-hour Composite
Barium	98000	2 times per year	24-hour Composite
Boron	128000	2 times per year	24-hour Composite
Carbofuran (Furadan)	50	2 times per year	24-hour Composite
Chlordane	0.21	2 times per year	24-hour Composite
Dalapon	42000	2 times per year	24-hour Composite
1,2-Dibromo-3-chloropropane (DBCP)	2800	2 times per year	24-hour Composite
1,2-Dibromoethane (EDB) Ethylene dibromide	0.05	2 times per year	24-hour Composite
4,4-DDD (p,p,- Dichlorodiphenyldichloroethane)	0.02	2 times per year	24-hour Composite
4,4-DDE (p,p- Dichlorodipenyldichloroethylene)	0.02	2 times per year	24-hour Composite
4,4-DDT ((p,p- Dichlorodiphenyltrichloroethane)	0.001	2 times per year	24-hour Composite
2,4-Dichlorophenoxyacetic acid (2,4-D)	14000	2 times per year	24-hour Composite
Dieldrin	0.005	2 times per year	24-hour Composite
DI (2-ethylhexyl) adipate	840000	2 times per year	24-hour Composite
Dinoseb	1400	2 times per year	24-hour Composite
Diquat	3080	2 times per year	24-hour Composite
Endosulfan sulfate	0.06	2 times per year	24-hour Composite
Endosulfan (Total)	0.06	2 times per year	24-hour Composite
Endothall	28000	2 times per year	24-hour Composite
Endrin	0.08	2 times per year	24-hour Composite
Endrin aldehyde	0.08	2 times per year	24-hour Composite
Fluoride	84000	2 times per year	24-hour Composite
Glyphosate	140000	2 times per year	24-hour Composite
Heptachlor	0.013	2 times per year	24-hour Composite
Heptachlor epoxide	0.013	2 times per year	24-hour Composite
Hexachlorocyclohexane alpha alpha-BHC	130	2 times per year	24-hour Composite
Hexachlorocyclohexane beta	130	2 times per year	24-hour Composite
Hexachlorocyclohexane delta	130L	2 times per year	24-hour Composite
Hexachlorocyclohexane gamma (lindane)	0.81	2 times per year	24-hour Composite
Manganese	196000	2 times per year	24-hour Composite
Methoxychlor	7000	2 times per year	24-hour Composite
Oxamyl	35000	2 times per year	24-hour Composite
Pichloram	98000	2 times per year	24-hour Composite

TABLE 3.f: Effluent Characterization Testing Based on Designated Uses –Outfall 001

Additional Parameters from the Arizona Surface Water Quality Standards, Appendix A: Tables 1 & 2

Parameter	Minimum Applicable Standard (ug/L)	Monitoring Requirements	
		Monitoring Frequency	Sample Type
Polychlorinatedbiphenyls (PCBs)	0.02	2 times per year	24-hour Composite
Sulfides	100	2 times per year	24-hour Composite
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.01	2 times per year	24-hour Composite
Toxaphene	0.02	2 times per year	24-hour Composite
2-(2,4,5,-Trichlorophenoxy) Propionic Acid	11200	2 times per year	24-hour Composite
Xylene	2800000	2 times per year	24-hour Composite

- E. The permittee shall monitor stormwater discharged through Outfall 003 for the parameters listed in Table 4 for each discharge event. No limits or ALs are established, but the reporting level must be low enough to allow comparison of the results to the applicable water quality standards (WQS). If a reporting level below the WQS cannot be achieved, then the permittee shall use the method with the lowest method-specific MDL, as defined in Appendix A of this permit.

TABLE 4: Monitoring Requirements for Outfall 003

Parameter	Reporting Requirements		Monitoring Requirements	
	Discrete Sample	Composite/Second discrete (2)	Monitoring Frequency (2)	Sample Type
Discharge Flow (MGD)	(1)	(1)	Continuous	Estimated
Duration of discharge event	(1)		1X/ six months	Estimated
Copper	(1)	(1)	1X/ six months	(2)
E. Coll	(1)	(1)	1X/ six months	(2)
Oil and Grease	(1)	(1)	1X/ six months	Discrete (2)
Total Suspended Solids (TSS)	(1)	(1)	1X/ six months	(2)
Hardness (CaCO ₃)	---	Report	1X/ six months	(2)
pH	Not less than 6.5 standard units (S.U.) nor greater than 9.0 S.U.		1X/ six months	Discrete (2)

(1) Monitor and report

(2) Monitoring shall include a discrete sample taken within 30 minutes of the start of the flow event and a second discrete sample collected one hour after start if flow continues. These two samples shall be composited except for oil and grease, and pH samples which require discrete. Since Oil and grease and pH require discrete samples, 2 separate discrete samples shall be taken. The first oil and grease or pH sample shall be taken within 30 minutes of the start of flow and the second one hour later if flow continues.

- F. Data must be reported on DMRs as described in Part II.B. Results shall also be reported as required in the permit reapplication if the facility renews this permit.
- G. The discharge shall be free from pollutants in amounts or combinations that:
1. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
 2. Cause objectionable odor in the area in which the surface water is located;
 4. Cause off-flavor in aquatic organisms;

5. Are toxic to humans, animals, plants or other organisms;
 6. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses;
- H. The discharge shall be free from oil, grease and other pollutants that float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank or aquatic vegetation.
- I. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:
1. Samples for monitoring of Outfall 001 Shall be taken:
 - a. Influent samples shall be taken after the grit chamber and prior to the next treatment process.
 - b. Effluent samples shall be taken downstream from the last treatment process and prior to mixing with the receiving waters.
 2. Samples for monitoring of Outfall 003 (except for flow) shall be taken after the surface impoundment and prior to discharge to the River. Flow measurements for Outfall 003 shall be taken at the inflow structure to the stormwater detention/retention basin.
- J. The discharge shall not cause the pH of the receiving water to change more than 0.5 standard units.
- K. 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 1 mg/l from sunset to 3 hours after sunrise unless the percent saturation of oxygen remains equal to or greater than 90%.

PART II. MONITORING AND REPORTING

A. Sample Collection and Analysis

1. Quality Assurance (QA) Manual

The permittee shall retain a QA Manual at the facility that includes a description of the sample collection and analyses processes. If the facility collects samples or conducts sample analyses in-house, the permittee shall develop the QA Manual. If a third party collects and/or analyzes samples on behalf of the permittee, the permittee shall obtain a copy. The QA Manual shall be available for review by ADEQ/ADHS upon request. The permittee is responsible for the quality and accuracy of all data required under this permit. The QA manual shall be updated as necessary and shall describe the following:

- a. Project Management, including roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable regulatory or permit-specific limits or Assessment Levels; and personnel qualification requirements for collecting samples.
- b. Sample collection procedures; equipment used; the type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks); preservatives and holding times for the samples (see methods under 40

CFR 136 or 9 A.A.C. 14, Article 6 or any condition within this permit that specifies a particular test method.)

- c. Approved analytical method(s) to be used; Method Detection Limits (MDLs) and Minimum Levels (MLs) 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 by the permittee or the laboratory as a result of problems identified during QC checks.
 - d. How the permittee will: perform data review; report results to ADEQ; resolve data quality issues; and identify limitations on the use of the data.
2. Sample collection, preservation and handling shall be performed as described under 40 CFR 136 including the referenced Editions of *Standard Methods for the Examination of Water and Wastewater*. Where collection, preservation and handling procedures are not described under 40 CFR 136, the procedures specified under 9 A.A.C. 14, Article 6 methods for wastewater samples shall be used. (The permittee shall outline the proper procedures in the QA Manual and samples taken to meet the monitoring requirements in this permit must conform with these procedures whether collection and handling is performed directly by the permittee or contracted to a third party.)
3. All samples collected for monitoring must be analyzed:
- a. by a laboratory that is licensed by the ADHS Office of Laboratory Licensure and Certification, and that has demonstrated proficiency within the last 12 months for each parameter to be sampled under the terms of this permit, under A.A.C.R9-14-609. This requirement does not apply to parameters that must be analyzed for at the time of sampling and which are therefore exempt under A.A.C. R9-14-602. These parameters include flow, dissolved oxygen, pH, temperature, and total residual chlorine.
 - b. using a method specified in this permit. If no test procedure is specified within this permit, then the permittee shall analyze the pollutant using:
 - i. a test procedure listed in 40 CFR 136;
 - ii. an alternative test procedure approved by the EPA as provided in 40 CFR 136;
 - iii. a test procedure listed in 40 CFR 136, with modifications allowed by the EPA and approved as a method alteration by the ADHS under A.A.C. R9-14-610(B); or
 - iv. If a test procedure for a pollutant is not available under subparagraphs (3)(b)(i) through (3)(b)(iii), a test procedure listed in A.A.C. R9-14-612 or approved under A.A.C. R9-14-610(B) for wastewater may be used, except the use of Hach Methods is not allowed unless otherwise specified in this permit. If there is no approved wastewater method for a parameter, any other method identified under 9 A.A.C. 14, Article 6 that will achieve appropriate detection limits may be used to analyze that parameter.
 - c. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods.
4. Because of the short holding time for chlorine, samples may be analyzed on-site using Hach Method No. 10014. Other methods, including Hach methods, are also acceptable for chlorine if the method has an MDL lower than effluent limitations specified in this permit. For purposes of this permit the permittee may use an alternative method that provides the lowest matrix specific

MDL for TRC analyses or analyze for an indicator of chlorine removal, if approved in writing by ADEQ (See Section VI.). Until January 1, 2007 or until the most appropriate method is approved by ADEQ, whichever is shorter, PCWWMD may use method 8167 provided the reporting level is 50 ug/L or lower.

5. The permittee may also use the EPA approved alternative test procedure 200.8 for metal analyses.
6. The permittee shall use an analytical method with a Method Detection Limit (MDL, as defined in Appendix A of this permit) that is lower than the effluent limitations, Assessment Levels, Action Levels, or water quality criteria specified in this permit. **If all method-specific MDLs are higher than the limits specified in this permit, the permittee shall use the approved analytical method with the lowest method-specific MDL.**
7. The permittee shall use a standard calibration where the lowest standard point is equal to or less than the Minimum Level (ML) as defined under 40 CFR 136. When a method-specific ML is not available 40 CFR 136, the *interim* ML (see definitions in Appendix A) is to be used for calibration.

When neither a ML nor MDL is promulgated under 40 CFR 136, the Laboratory ML, (as defined in Appendix A) shall be used for calibration.

8. 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 VI, for which the levels listed are dissolved.

B. Reporting of Monitoring Results

1. The permittee shall report monitoring results on Discharge Monitoring Report (DMR) forms supplied by ADEQ, to the extent that the results reported may be entered on the forms. The permittee shall submit results of all monitoring required by this permit in a format that will allow direct comparison with the limitations and requirements of this permit. If no discharge occurs during the reporting period, the permittee shall specify "No discharge" on the DMR.

The permittee shall submit DMRs by the 28th day of the second month following the end of any given monitoring period. For example, if the monitoring period ends January 31st, the permittee shall submit the DMR by March 28th. The permittee shall submit original copies of these and all other reports required herein, signed by an authorized representative, to ADEQ at the following address:

ADEQ Water Quality Compliance Section
Data Unit Mailcode: 5415B-1
1110 W. Washington
Phoenix, AZ 85007

Copies of the original laboratory results for parameters monitored during the reporting period shall be submitted with the DMR for that month.

2. The permittee shall submit the results of the annual proficiency evaluation(s) performed under R9-14-609 to ADEQ and ADHS.

3. For the purposes of reporting, the permittee shall use the reporting threshold equivalent to the method-specific ML. If there is no method-specific ML promulgated, the laboratory's ML shall be used.
4. For parameters with Daily Maximum Limits or Daily Maximum Assessment Levels specified in this permit, the permittee shall review the results of all samples collected during the reporting period and report:

For Daily Maximum Limits/Assessment Levels	The Permittee shall Report on the DMR
When the maximum value of any analytical result is greater than the ML (e.g., method-specific ML if one exists, or if not, the laboratory's ML)	The maximum value of all analytical results
When the maximum value detected is greater than or equal to the laboratory's MDL, but less than the ML;	NODI (Q) ⁽¹⁾
When the maximum value is less than the laboratory's MDL.	NODI (B) ⁽²⁾

- 1 NODI (Q) means Not Quantifiable
- 2 NODI(B) means Below Detection

5. For parameters with Monthly Average Limits or Monthly Average Assessment Levels specified in this permit, the permittee shall review the results of all samples collected during the reporting period and report.

For Monthly Average Limits/Assessment Levels		The Permittee shall Report on the DMR
If only one sample is collected during the reporting period (monthly, quarterly, annually, etc.) (In this case, the sample result is the monthly average.)	When the value detected is greater than the ML (e.g., method-specific ML if one exists, or if not, the laboratory's ML)	the analytical result
	When the value detected is greater than or equal to the laboratory's MDL, but less than the ML;	NODI (Q) (1)
	When the value is less than the laboratory's MDL.	NODI (B) (2)
If more than one sample is collected during the reporting period	All samples collected in the same calendar month must be averaged. <ul style="list-style-type: none"> • When all results are greater than the ML, all values are averaged • When calculating monthly averages where some samples have non-numeric results, substitute the laboratory's MDL for NODI(Q) and substitute "0" for NODI(B). 	the highest monthly average which occurred during the reporting period

- 1 NODI (Q) means Not Quantifiable
- 2 NODI (B) means Below Detection

6. If the information below is not provided on the laboratory reports required in Part II.B.1, the permittee shall attach a report to each DMR that includes the following for all analytical results during the reporting period:
 - a. The analytical result.
 - b. The number or title of the approved analytical method, preparation and analytical procedure utilized by the laboratory and method-specific MDL or method-specific ML

of the analytical method for the pollutant. When no method-specific ML exists, the laboratory derived ML shall be reported.

- c. The levels at which any results are reported as either *NODI(B)* or *NODI(Q)*.
- d. Any applicable data qualifiers using Arizona Data Qualifiers Revision 2 (11/26/2003).

C. Twenty-four Hour Reporting of Noncompliance

The permittee shall orally report any noncompliance with conditions of this permit which may endanger the environment or human health within 24 hours from the time the permittee becomes aware of the event to:

ADEQ 24 hour hotline at 602-771-2330

The permittee shall also notify the Southern Regional Office at (520) 628-6724 by phone call, voice mail, or by fax by 9 a.m. on the first business day following the noncompliance. The permittee shall also provide written follow-up notification to the Water Quality Compliance Section in writing (including fax or electronic mail) within 5 days of the noncompliance event. The permittee shall include in the written notification a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D. Monitoring Records

The permittee shall retain the following monitoring information:

1. Date, exact location and time of sampling or measurements performed, preservatives used;
2. Individual(s) who performed the sampling or measurements;
3. Date(s) the analyses were performed;
4. Laboratory(s) which performed the analyses;
5. Analytical techniques or methods used;
6. Chain of custody forms;
7. Any comments, case narrative or summary of results produced by the laboratory. These comments should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether analyses met project requirements and 40 CFR 136. 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, sample receipt condition, holding times and preservation.
8. Summary of data interpretation and any corrective action taken by the permittee.
9. Effluent Limitations or Assessment Levels for analytes/compound being analyzed.

PART III. SEWAGE SLUDGE REQUIREMENTS

A. Use or Disposal Requirements

All sewage sludge generated by the Roger Road WWTP shall be sent via pipeline to the Ina Road Wastewater Treatment Plant for treatment and disposal. If the permittee wishes to change this practice during the life of this permit, a request for a permit modification must be made and the permit modified to reflect the change(s) in sludge handling, storage or disposal prior to such a change(s) being made.

B. Sewage Sludge Generator's and Biosolids Preparer's Responsibility

The permittee (PCWWMD) is responsible for assuring that all sewage sludge produced at this facility is used or disposed of in accordance with 40 CFR 503, 257, 258 and 18 A.A.C. Chapter 9, Article 10, as applicable. The permittee is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must meet under 40 CFR 503 and 18 A.A.C. 9, Art 10.

C. Facilities with Pretreatment Programs

The permittee shall design local limits to achieve the metals concentration limits in Table 2 of A.A.C. R18-9-1005 and Table 2 of 40 CFR 503.23. (See Part VI.G.4 and b of this permit.)

D. Annual Report for all Permittees

The permittee shall submit an annual biosolids report to the ADEQ Biosolids Coordinator by **February 19 of each year** for the period covering the previous calendar year. PCWWMD's Roger Road WWTP annual biosolids report shall state the annual amount of sewage sludge generated from the treatment process and the amount that was sent to the Ina Road WWTP. The annual biosolids report shall be submitted to:

ADEQ Biosolids Coordinator
Water Quality Compliance Section (5415B-1)
1110 W. Washington St.
Phoenix, AZ 85007
602-771-4612

Note: Sewage sludge that is hazardous as defined in 40 CFR 261 must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA). Sludge with PCB (polychlorinated biphenyls) levels greater than 50 mg/kg must be disposed of in accordance with 40 CFR 761.

PART IV. STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

This permit authorizes the discharges of stormwater from the treatment works at Roger Road WWTF through Outfall 003 under the following conditions:

A. Prohibited Discharges

No process wastewaters, industrial wastewater or equipment and vehicle washwaters are authorized for discharge through Outfall 003.

B. Non stormwater Discharges

The following non-stormwater discharges are authorized for discharge through Outfall 003 if they are addressed in the Stormwater Pollution Prevention Plan (SWPPP) described in Section C below: discharges from fire fighting activities, fire hydrant flushings, potable water sources including waterline flushings, drinking fountain water, uncontaminated compressor condensate, lawn watering, routine external building wash down that does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, compressor condensate, uncontaminated springs, or groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

C. Stormwater Pollution Prevention Plan Requirements

The permittee shall review the existing Stormwater Pollution Prevention Plan (SWPPP) for the Roger Road WWTF, and revise it as necessary to ensure that it fully and accurately addresses all the following provisions. Any updates or revisions needed shall be completed within 90 days of the effective date of this permit.

1. Pollution Prevention Team

The SWPPP shall identify individuals at the Roger Road WWTF that are members of a stormwater Pollution Prevention Team who are responsible for assisting the facility management in implementation, maintenance, and revision of the SWPPP. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's SWPPP.

2. Description of Potential Pollutant Sources

The plan shall describe and identify all sources at the facility which may reasonably be expected to add significant amounts of pollutants to stormwater discharges or which may result in the discharge of pollutants during dry weather from the facility. These shall include all activities and exposed materials which may potentially be significant pollutant source.

a. Drainage Considerations

- i.** The SWPPP must contain a drainage area site map which identifies the locations of any of the following activities or sources which may be exposed to precipitation/surface runoff: storage tanks, scrap yards, general refuse areas; short and long term storage of general materials (including but not limited to: supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning material, paint, water treatment chemicals, fertilizer and pesticides); landfills, construction sites; stock piles areas (e.g., coal or limestone piles).
- ii.** Each stormwater outfall shall be clearly identified by narrative in the SWPPP and depicted on a facility map included in the SWPPP. The SWPPP shall identify the types of pollutants which are likely to be present in the stormwater discharges at each designated outfall. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

b. **Inventory of Exposed Materials**

The SWPPP shall include an inventory of the types of materials handled at the site that may be exposed to precipitation. This shall include a description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to stormwater; method and location of onsite storage and/or disposal; materials management practices employed to minimize contact of materials with stormwater runoff; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c. **Spills and Leaks**

The SWPPP shall contain a list of significant spills and/or leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility since January 1, 2000. This list shall be reviewed and updated, as appropriate, at least annually.

d. **Sampling Data**

A summary of existing discharge sampling data describing pollutants in stormwater discharges from the facility, including a summary of sampling data collected during the term of this permit.

e. **Risk Identification and Summary of Potential Pollutant Sources**

A description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage; manufacturing, or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., total suspended solids, copper, etc.) of concern shall be identified.

3. **Measures and Controls**

PCWWMD shall develop and implement effective stormwater management controls for all identified potential sources of pollution. For each identified potential source, the SWPPP shall describe the nature of the potential discharges, including the types of pollutants likely to be present in each. For each identified potential source, the SWPPP shall describe either structural and/or non-structural controls (BMPs) that shall be designed and implemented to minimize these releases. The controls shall include at least the following components:

a. **Good Housekeeping**

Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The following areas must be specifically addressed:

i. Bulk Liquid and/or Chemical Delivery Vehicles

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from delivery vehicles arriving on site. The SWPPP should detail the following:

- Procedures for the inspection of delivery vehicles to ensure overall integrity of the body or container; and
- Procedures to deal with leakage or spillage from vehicles or containers. The SWPPP should also identify the nature and location of protective measures available for personnel and environment.

ii. Fuel Oil Unloading Areas

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from fuel oil unloading areas. PCWWMD must implement the following measures, or an equivalent:

- Use of containment curbs in unloading areas;
- Personnel familiar with spill prevention and response procedures must be present during deliveries to ensure that leaks or spills are immediately contained and cleaned up; and
- Use of spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath fuel oil connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors)

iii. Chemical Loading/Unloading Areas

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from chemical loading/unloading areas. PCWWMD must implement the following measures, or an equivalent:

- Where practicable, chemical loading/unloading areas are to be covered, and chemicals are to be stored indoors.
- Use of containment curbs at chemical loading/unloading areas to contain spills; and
- Personnel familiar with spill prevention and response procedures must be present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up.

iv. Miscellaneous Loading/Unloading Areas

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from loading and unloading areas.

v.. **Liquid Storage Tanks**

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from above-ground liquid storage tanks. Liquid storage areas for Section 313 water priority chemicals must have secondary containment for at least the entire contents of the largest tank plus sufficient freeboard to allow for the 25-year, 24-hour precipitation event and a strong spill contingency and integrity testing plan. In addition, PCWWMD must implement the following measures, or an equivalent, for any above-ground liquid storage tanks:

- Use of protective guards around tanks;
- Use of containment curbs;
- Use of spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors); and
- Use of dry cleanup methods.

vi. **Large Bulk Fuel Storage Tanks**

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from bulk fuel storage tanks. PCWWMD must implement the following measures:

- Compliance with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC); and
- Use of containment berms, or equivalent.

vii. **Oil or Chemical Spill**

The SWPPP must describe, or reference the appropriate section of the facility's SPCC plan that describes, measures that prevent or minimize the potential for an oil or chemical spill. PCWWMD must implement the measures described. The structural integrity of all above ground tanks, pipelines, pumps and other related equipment shall be visually inspected on at least a weekly basis. All repairs deemed necessary based on the findings of the inspections shall be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.

viii. **Oil Bearing Equipment in Switchyards**

If applicable, the SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from oil bearing equipment in switchyard areas.

ix. **Vehicle Maintenance Activities**

If vehicle maintenance activities are performed on the plant site, PCWWMD shall use the applicable BMPs outlined in Part 6.P. of the *Final Reissuance of National*

Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities (Federal Register/ Vol. 65, No. 210/ Monday, October 30, 2000/ Notices -- Storm Water Discharges Associated With Industrial Activities From Railroad Transportation, Local and Highway Passenger Transportation, Motor Freight Transportation and Warehousing, United States Postal Service, and Petroleum Bulk Stations and Terminals).

x. **Material Storage Areas**

The SWPPP must describe, and PCWWMD must implement, measures that prevent or minimize the potential for contamination from material storage areas (including areas used for temporary storage of miscellaneous products, and construction materials stored in lay down areas).

b. **Preventive Maintenance**

The SWPPP must describe, and PCWWMD must implement, a preventive maintenance program that includes timely inspection and maintenance of stormwater management devices (e.g., cleaning oil/water separators, catch basins). PCWWMD shall also routinely inspect and test facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and shall ensure appropriate maintenance of such equipment and systems.

c. **Spill Prevention and Response Procedures**

The SWPPP must clearly identify describe areas where potential spills could contribute pollutants to stormwater discharge, and their accompanying drainage points. The SWPPP shall describe, and PCWWMD shall implement, specific material handling procedures, storage requirements, and use of equipment such as diversion valves if applicable, to prevent spills. The SWPPP shall describe procedures for cleaning up spills and PCWWMD shall train appropriate personnel to implement these procedures. PCWWMD shall ensure that equipment necessary to implement a clean up is available to personnel.

d. **Stormwater Inspections**

i. **PCWWMD shall identify qualified facility personnel and ensure that at they:**

- assess the integrity of stormwater discharge diversions, conveyance systems, sediment control and collection systems, and containment structures at least monthly and after significant storm events; visually inspect sediment and erosion BMPs to determine if soil erosion has occurred at least monthly and after significant storm events;
- visually inspect storage areas and other potential sources of pollution for evidence of actual or potential discharges of contaminated storm water at least monthly and after significant storm events;
- inspect material handling, and unloading and loading areas daily whenever loading or unloading industrial activities occur in these areas; and

- inspect processing and transport areas at least monthly to assess the effectiveness of practices to minimize drippage of treatment chemicals on unprotected soils and areas that will come in contact with stormwater discharges.
- ii. Records of inspections shall be maintained onsite. PCWWMD shall implement and maintain an effective system for recordkeeping and tracking of follow-up corrective actions needed and taken in response to inspections. Inspection and related records are subject to review by ADEQ, EPA, and state and local agencies with jurisdiction, and must be retained onsite.

e. Employee Training

PCWWMD shall ensure that an effective training program is developed and implemented to inform personnel responsible for stormwater management or implementing activities addressed in the SWPPP. Training shall address topics such as goals of the SWPPP, spill prevention and control, proper handling procedures for hazardous wastes, good housekeeping and material management practices, and storm water sampling techniques. PCWWMD must hold this training at least annually and the training agenda and records of employee attendance must be maintained as part of the SWPPP.

f. SWPPP Recordkeeping

PCWWMD shall include in the SWPPP:

- i. a description of incidents (such as spills, or other discharges) that occur in areas exposed to precipitation;
- ii. other information describing the quality and quantity of storm water discharges;
- iii. documentation of inspections, maintenance activities, and training activities;
- iv. any analytical results available that relate to stormwater discharges on-site; and
- v. other certifications or records required by Part IV of this permit.

4. Non-storm Water Discharges (to Outfall 003)

- a. PCWWMD shall annually test or evaluate for the presence of non-stormwater discharges at the facility that are not authorized by this permit. If any non-stormwater discharges (not authorized by this permit) are found to be present, PCWWMD must discontinue discharge until appropriate authorization is obtained. Non-storm water discharges to waters of the United States which are not authorized by an AZPDES permit are unlawful, and must be terminated.
- b. Except for flows from fire fighting activities, PCWWMD must identify and describe in the SWPPP, any sources of non-storm water (identified in Part IV.B) that are combined with on-site stormwater. The SWPPP must ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

5. Sediment and Erosion Control

The SWPPP shall identify specific areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion. PCWWMD must include the following areas in the assessment: loading and unloading areas, access roads, material handling areas, storage areas, and any other areas where heavy equipment and vehicle use is prevalent. PCWWMD shall employ effective erosion and sediment controls to minimize the discharge of sediments from the site.

6. Management of Runoff

The SWPPP shall describe stormwater management practices used to divert, infiltrate, reuse, or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. Measures PCWWMD determines to be reasonable and appropriate shall be implemented and maintained. PCWWMD shall consider the potential for various sources at the facility to contribute pollutants when determining reasonable and appropriate measures.

D. Comprehensive Site Compliance Evaluation

Qualified personnel shall conduct comprehensive stormwater compliance evaluations at least annually that shall address the following:

1. Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the SWPPP shall be observed to ensure that they are operating correctly. A visual evaluation of all equipment needed to implement the plan, including spill response equipment, shall be made.
2. Based on the results of the evaluation, PCWWMD shall revise the description of potential pollutant sources (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the SWPPP (Measures and Controls) as appropriate within 2 weeks after the evaluation. PCWWMD must implement any changes to the plan within 12 weeks after the evaluation.

PART V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. General Conditions

1. The permittee shall conduct chronic toxicity tests as specified in Tables 1.b and 2 and Part V of this permit. All tests shall be done using 24-hour composite samples of the final effluent. Chemical testing for ammonia (NH₃-N), and all the parameters listed in Part I.A, Tables 1 and 2 of this permit (except for flow and toxicity) shall be performed on a split of at least one of the three composite samples taken for each chronic WET test performed. Analysis of the split sample(s) may be used to fulfill the monitoring requirements in Part I.A., but only for parameters whose required sample type is a composite.

2. Final effluent samples must be taken following all treatment processes, including chlorination and dechlorination, and prior to mixing with the receiving water. **WET tests conducted on samples that are dechlorinated after collection are not acceptable for compliance with this permit.**
3. Under the ammonia toxicity variance, effluent samples used in *Pimephales promelas*, *Selenastrum Capricornutum* and *Ceriodaphnia dubia* chronic WET tests may be treated to remove ammonia with zeolite prior to testing. Samples treated with zeolite are to be treated daily, before use in WET tests, rather than batch treated for multiple day usage. Ammonia, pH, hardness, and alkalinity are to be measured prior to and after zeolite treatment and the test is to be run with a second blank that has been run through zeolite. WET test results must indicate whether or not zeolite is used in the test.
4. Definitions related to toxicity are found in Appendix A.

B. Chronic Toxicity

1. The permittee shall conduct short-term chronic toxicity tests on three species; the water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test) and the green alga, *Selenastrum capricornutum* (growth test).
2. The permittee must follow the USEPA 4th edition manual, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (EPA/821-R-02-013) for all chronic compliance toxicity testing.
3. The chronic toxicity limits and action levels for all three species are any one test result greater than 1.6 TUc or any calculated monthly median value greater than 1.0 TUc. If chronic toxicity is detected above these values, follow-up testing is required per Part V, Section D. A chronic toxicity unit (TUc) shall be calculated as $TUc = 100/NOEC$.
4. The chronic WET test shall be conducted using a series of five dilutions and a control. The following dilution series must be used: 12.5, 25, 50, 75, 100% effluent.

C. Quality Assurance:

1. Effluent samples must be maintained between 0 and 6°C from collection until utilized in the toxicity testing procedure. When a composite sample is required, each aliquot making up the composite must be chilled after collection and throughout the compositing period. The single allowable exception is when a grab sample is delivered to the performing laboratory for test initiation no later than 4 hours following the time of collection.
2. Control and dilution water should be receiving water or lab water as appropriate, as described in the 40 CFR Part 136.3 approved method. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.
3. Reference toxicity tests, (a check of the laboratory and test organisms' performance), shall be conducted at least 1 time in a calendar month for each toxicity test method conducted in the laboratory during that month. Additionally, any time the laboratory changes its source of test organisms, a reference toxicity test must be conducted before or in conjunction with the first WET test performed using the organisms from the newer source. Reference toxicant testing

must be conducted using the same test conditions as the effluent toxicity tests (i.e. same test duration, etc.).

4. If either the reference toxicant test or the effluent test does not meet all test acceptability criteria as specified in the 40 CFR Part 136.3 approved WET methods, then the permittee must re-sample and re-test within 14 days of receipt of the test results. The re-sampling and re-testing requirements include laboratory induced error in performing the test method.
5. The chronic reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method (see Section 10, Table 6 in EPA/821-R-02-013). There are five possible outcomes based on the PMSD result.
 - a. *Unqualified Pass*- The test's PMSD is within bounds and there is no significant difference between the means for the control and the effluent. The regulatory authority would conclude that there is no toxicity.
 - b. *Unqualified Fail*- The test's PMSD is larger than the lower bound (but not greater than the upper bound) in Table 6 and there is a significant difference between the means for the control and the effluent. The regulatory authority would conclude that there is toxicity.
 - c. *Lacks Test Sensitivity*- The test's PMSD exceeds the upper bound in Table 6 and there is no significant difference between the means for the control and the effluent. The test is considered invalid. An effluent sample must be collected and another toxicity test must be conducted within 14 days of receipt of the test results.
 - d. *Lacks Test Sensitivity*- The test's PMSD exceeds the upper bound in Table 6 and there is a significant difference between the means for the control and the effluent. The test is considered valid. The regulatory authority will conclude that there is toxicity.
 - e. *Very Small but Significant Difference*- The relative difference between the means for the control and effluent is smaller than the lower bound in Table 6 and this difference is statistically significant. The test is acceptable and the NOEC should be determined

D. Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE) Processes

1. If chronic toxicity is detected above an action level specified in Part I.A, Table 2 and Part V, Section B.3 and the source of toxicity is known (for instance, a temporary plant upset), then the permittee shall conduct one follow-up test within two weeks of receipt of the sample results that exceeded the action level. The permittee shall use the same test and species as the failed toxicity test. If toxicity is detected in the follow-up, the permittee shall immediately begin developing a TRE plan and submit the plan to ADEQ for review and approval within 30 days after receipt of the toxic result. Requirements for the development of a TRE are listed in paragraph 3 below. The permittee must implement the TRE plan as approved and directed by ADEQ.
2. If chronic toxicity is detected an action level specified in Part I.A, Table 2, and Part V, Section B.3 and the source of toxicity is unknown, the permittee shall begin additional toxicity monitoring within two weeks of receipt of the sample results that exceeded the action level. The permittee shall conduct one WET test approximately every other week until either a test exceeds a limit or an action level or four tests have been completed. The follow-up tests must use the

same test and species as the failed toxicity test. For intermittent discharges, testing shall be conducted on the next four discharge events using the same test and species as the failed toxicity test.

- a. If none of the four tests exceed a WET limit or action level, then the permittee may return to the routine WET testing frequency specified in this permit.
 - b. If a WET limit or action level is exceeded in any of the additional tests, the permittee shall immediately begin developing a TRE plan and submit the plan to ADEQ for review and approval within 30 days after receipt of the toxic result. Requirements for the development of a TRE are listed in subsection 3, below. The permittee must implement the TRE plan as approved and directed by ADEQ.
3. The permittee shall use the EPA guidance manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, 1999 [EPA/833/B-99/002] in preparing a TRE plan. The TRE plan shall include, at a minimum, the following:
- a. Further actions to investigate and identify the causes of toxicity, if unknown. The permittee may initiate a TIE as part of the TRE process using the following EPA manuals as guidance: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, 1992 [EPA/600/6-91/005F]; *Methods for Aquatic Toxicity Identification Evaluations: Phase I, Toxicity Characterization Procedures*, 2nd Edition, 1991 [EPA/600/6-91/003]; *Methods for Aquatic Toxicity Identification Evaluations: Phase II, Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993 [EPA/600/R-92/080]; and *Methods for Aquatic Toxicity Identification Evaluations: Phase III, Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993 [EPA/600/R-92/081].
 - b. Action the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
 - c. A schedule for implementing these actions.

E. WET Reporting

1. The permittee shall report chronic toxicity results on DMRs in Chronic Toxicity Units (TUc). The TUc for DMR reporting shall be calculated as $TUc = 100/NOEC$.
2. In addition to reporting WET results on DMRs, the permittee shall submit a copy of the full lab report(s) for all WET testing conducted during the monitoring period covered by the DMR. The lab report should report TUc as 100/NOEC and as 100/IC₂₅. If the lab report does not contain any of the following items, then these must also be supplied in a separate attachment to the report: 1) sample collection and test initiation dates, and 2) the results of the effluent analyses for all parameters required to be tested concurrently with WET testing as defined in Part I, Section A, Tables 1 and 2 and Part IV, Section A.1 of this permit.
3. WET lab reports and any required additional attachments shall be submitted to ADEQ by the 28th day of the second month following the end of the WET monitoring period, or upon request, to the following address:

Arizona Department of Environmental Quality
ADEQ Surface Water Permits Unit, Mailcode: 5415B-3
1110 W. Washington
Phoenix, AZ 85007

(NOTE: This is not the same ADEQ address as the one specified under Part II.B.1. of this permit.)

PART VI. SPECIAL CONDITIONS

A Variances

1. A variance is granted for this permit term for ammonia toxicity. The final *Pimephales promelas* limit is not in effect during the term of the variance. The variance is granted on the condition that PCWWM makes the necessary changes to the Roger Road WWTP (or its replacement) to remove ammonia to below toxic levels according to Part VI.B below. During the variance term, WET interim action level for *Pimephales promelas* and action levels for *Ceriodaphnia dubia* and *Selenastrum Capricornutum* apply and the tests may be conducted on samples with ammonia removal per Parts I.B and V. A.3. ADEQ expects to renew this variance for the next permit term, with the final variance terminating on January 30, 2015.
2. A variance is granted for the final copper limitations. The variance for copper is granted on the condition that PCWWM will achieve compliance with the applicable copper standard by the date at Part VI.C below.
3. Both variances are for the duration of this permit and the variance for ammonia toxicity may be requested and granted at permit renewal, if all conditions in Part VI.B are met.

B. Ammonia Toxicity Variance Terms and Conditions

1. PCWWM must complete their engineering design review for upgrading (or replacing) the Roger Road WWTP and submit to ADEQ a letter documenting the selected construction option by January 30, 2007.
2. PCWWM must award a contract for construction necessary to implement the selected option from Part V.B.1 by January 30, 2011.
3. The necessary treatment improvements will be operational and producing effluent with non-toxic ammonia levels by January 30, 2015.

C. Copper Variance Terms and Conditions

1. PCWWM must comply with the copper standard by January 30, 2011.
2. An interim copper limit for the duration of the copper variance is set at 25 ug/L.

D. Chlorine Monitoring Investigation

PCWWM shall continue its investigation of appropriate chlorine monitoring methods for use in this permit. The PCWWM shall:

1. Conduct matrix specific MDL determinations on Roger Road effluent using, at least, the following methods: Hach 10014, Hach 8167, 4500-Cl C and D (Hach AutoCat 9000) for residual chlorine. Matrix specific MDLs shall be determined monthly for 6 months on each method. The matrix specific MDLs must be determined at the same range of true values for all methods and at a level approximating the MDL.
2. Submit the results of the investigation to ADEQ by September 30, 2006.
3. Follow the conditions for sampling and reporting in Part II of this permit for total residual chlorine unless approval is given in writing by ADEQ to use an alternate method. See Part II.A.4.

E. Metals Translator Study

If PCWWMD intends that site-specific metal translators be used in future AZPDES permit limit development for the Roger Road WWTP, PCWWMD shall conduct a new site-specific translator study on Roger Road effluent to verify the current translators, determined in 1995 are still appropriate. If completed, the metals translator study shall include representative effluent samples across four seasons.

F. Operation

The permittee shall ensure that the facilities or systems are operated by or under the supervision of an operator currently certified by ADEQ at the level appropriate for the facility or system.

G. Pretreatment Conditions

Pima County Wastewater Management Division (PCWWMD) shall implement and enforce its approved pretreatment program. Any modification to this program must be approved by ADEQ prior to implementing the change.

1. PCWWMD shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR Part 403, including any subsequent regulatory revisions to Part 403. Where Part 403 or subsequent revision places mandatory actions upon the PCWWMD as Control Authority but does not specify a timetable for completion of the actions, the PCWWMD shall complete the required actions within six months from the issuance date of this permit or the effective date of the Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the PCWWMD shall be subject to enforcement actions, penalties, fines and other remedies by the U.S. Environmental Protection Agency (EPA), ADEQ, or other appropriate parties, as provided in the Act. EPA or ADEQ may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements as provided in the Act.
2. PCWWMD shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d) and 402(b) of the Act with timely, appropriate and effective enforcement actions. The PCWWMD shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.
3. PCWWMD shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:

- a. Implement the necessary legal authorities as provided in 40 CFR Part 403.8(f)(1);
 - b. Enforce the pretreatment requirements under 40 CFR Part 403.5 and 403.6;
 - c. Implement the programmatic functions as provided in 40 CFR Part 403.8(f)(2); and
 - d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR Part 403.8(f)(3).
4. PCWWMD shall submit an annual report to EPA, Region 9 and ADEQ describing its pretreatment activities over the previous year. In the event the PCWWMD is not in compliance with any conditions or requirements of this permit, then the PCWWMD shall also include the reasons for noncompliance and state how and when the PCWWMD shall comply with such conditions and requirements. This annual report shall cover operations from January 1 through December 31 and shall be submitted by February 28 of each year. The report shall contain, but not be limited to, the following information:
- a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the POTW's influent, effluent, and sludges/biosolids for those pollutants EPA has identified under section 307(a) of the Act 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. However, PCWWMD is not required to sample and analyze for asbestos and sampling for dioxin is only required in the first annual scan unless it is detected in the scan. The PCWWMD shall also provide any influent or effluent monitoring data for nonpriority pollutants which the PCWWMD believes may be causing or contributing to interference or pass through. Sampling and analysis shall be performed with the techniques prescribed in 40 CFR Part 136.
 - b. The summary of all analytical results from representative sampling of the POTW's sludge shall also include quarterly results for the following pollutants of concern:

Arsenic	Silver	Mercury
Cadmium	Zinc	Nickel
Chromium	Molybdenum	
Copper	Selenium	
Cyanide	Lead	
 - b. A discussion of Upset, Interference or Pass Through incidents, if any, at the treatment plant which the PCWWMD knows or suspects 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 limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through or interference;
 - c. An updated list of the PCWWMD's 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 PCWWMD shall provide a brief explanation for 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 limitations;
- d. PCWWMD shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - i. Name of the SIU;
 - ii. Category, if subject to federal categorical standards;
 - iii. The type of wastewater treatment or control processes in place;
 - iv. The number of samples taken by the POTW during the year;
 - v. The number of samples taken by the SIU during the year;
 - vi. For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - vii. A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
 - viii. Whether the facility is in significant noncompliance (SNC) as defined at 40 CFR 403.12(f)(2)(vii) at any time during the year; and
 - ix. 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)(vii).
5. PCWWMD shall submit semiannual SIU compliance status reports to ADEQ and EPA, Region 9. The reports shall cover the periods of January 1 - June 30 and July 1 - December 31. Each report shall be submitted within 60 days following the reporting period. The July - December report may be included in the annual report. The reports shall contain:
- a. The name and address of all SIUs which violated any discharge or reporting requirements during that quarter;

- b. A description of the violations including whether any discharge violations were for categorical standards or local limits;
 - c. A description of the enforcement or other actions that were taken to remedy the noncompliance; and
 - d. The status of active enforcement and other actions taken in response to SIU noncompliance identified in previous reports.
6. All reports required to be submitted by Part V.C of this permit shall be submitted to the following addresses:

Regional Pretreatment Coordinator
US EPA Region 9 (WTR-7)
75 Hawthorne St.
San Francisco, CA 94105-3901

Pretreatment Coordinator
ADEQ / Water Quality Compliance Section (5415B-1)
1110 W. Washington St.
Phoenix, AZ 85007

G. Reopener

This permit may be modified per the provisions of A.A.C. R18-9-B906, and R18-9-A905 which incorporates 40 CFR Part 122. This permit may be reopened based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if Assessment Levels in this permit are exceeded.

APPENDIX A PART A: ACRONYMS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
AZPDES	Arizona Pollutant Discharge Elimination System
A.R.S.	Arizona Revised Statutes
CFR	Code of Federal Regulations
CFU	colony forming units
Director	The Director of ADEQ or any authorized representative thereof
DMR	Discharge Monitoring Report
EPA	The U.S. Environmental Protection Agency
kg/day	kilograms per day
MGD	million gallons per day
mg/L	milligrams per Liter, also equal to parts per million (ppm)
NPDES	National Pollutant Discharge Elimination System
QA	quality assurance
ug/L	micrograms per Liter, also equal to parts per billion (ppb)

APPENDIX A PART B: DEFINITIONS

ACUTE TOXICITY TEST is a test used to determine the concentration of effluent or ambient waters that produces an adverse effect (lethality) on a group of test organisms during a short-term exposure (e.g., 24, 48, or 96 hours). Acute toxicity is measured using statistical procedures (e.g., point estimate techniques or hypothesis testing) and is reported as PASS/FAIL or in TUAs, where $TU_a = 100/LC_{50}$.

ACUTE-to-CHRONIC RATIO (ACR) is the ratio of the acute toxicity of an effluent or a toxicant to its chronic toxicity. It is used as a factor for estimating chronic toxicity on the basis of acute toxicity data, or for estimating acute toxicity on the basis of chronic toxicity data.

CHRONIC TOXICITY TEST is a test in which sublethal effects (e.g., reduced growth or reproduction) are measured in addition to lethality. Chronic toxicity is measured as $TU_c = 100/NOEC$ or $TU_c = 100/E_{cp}$ or $100/IC_p$. The IC_p and E_{cp} value should be the approximate equivalent of the NOEC calculated by hypothesis testing for each test method.

COMPOSITE SAMPLE means a mixture of two or more discrete samples (aliquots) obtained at equal time intervals (e.g., 24-hour composite may be three samples collected eight hours apart, four samples six hours apart, or eight samples collected three hours apart) or collected proportional to the flow rate over the compositing period. This permit may further specify the number of samples to be composited, the timing of the samples, and the volume of each aliquot to be collected.

DAILY MAXIMUM CONCENTRATION LIMIT means the maximum allowable discharge of a pollutant in a calendar day as measured on any single discrete sample or composite sample.

DAILY MAXIMUM MASS LIMIT means the maximum allowable total mass of a pollutant discharged in a calendar day.

DISCRETE or GRAB SAMPLE means an individual sample of at least 100 mL collected from a single location, or over a period of time not exceeding 15 minutes

EFFECT CONCENTRATION POINT (ECP) is a point estimate of the toxicant (or effluent) concentration that would cause an observable adverse effect (e.g., survival or fertilization) in a given percent of the test organisms, calculated from a continuous model (e.g., USEPA Probit Model).

HARDNESS means the sum of the calcium and magnesium concentrations, expressed as calcium carbonate ($CaCO_3$) in milligrams per liter.

HYPOTHESIS TESTING is a statistical technique (e.g., Dunnetts test) that determines what concentration is statistically different from the control. Endpoints determined from hypothesis testing are NOEC and LOEC. The two hypotheses commonly tested in WET are:

- Null hypothesis (H_0): The effluent is not toxic.
- Alternative hypothesis (H_a): The effluent is toxic.

INHIBITION CONCENTRATION (IC) is a point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., USEPA Interpolation Method). **IC25** is a point estimate of the toxicant concentration that would cause a 25% reduction in a non-lethal biological measurement.

INTERIM ML If a promulgated method-specific ML is not available, then an interim ML must be calculated. The interim ML is equal to 3.18 times the promulgated method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc.

LABORATORY ML, is to be calculated when neither an ML or MDL are promulgated under 40 CFR 136 or 9 A.A.C. 14, Article 6. A laboratory ML should be calculated by multiplying the best estimate of detection by a factor of 3.18 and rounding the value to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. When a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.

LC50 is the toxicant (or effluent) concentration that would cause death in 50 percent of the test organisms.

METHOD DETECTION LIMIT (MDL) is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined under 40 CFR 136 or 9 A.A.C. 14, Article 6 methods. The procedure for determination of a laboratory MDL is prescribed under 9 A.A.C. 14, Article 6 methods or by 40 CFR Part 136, Appendix B (1998).

METHOD SPECIFIC ML is the promulgated method-specific ML contained in 40 CFR 136 or 9 A.A.C.14, Article 6 (as "Minimum Levels") and must be used if available.

MINIMUM LEVEL (ML) is the concentration at which the entire analytical system gives 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 by a specific analytical procedure, assuming that all of the method-specified 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).

MIXING ZONE is an area where an effluent discharge undergoes initial dilution and may be extended to cover the secondary mixing in the ambient waterbody. A mixing zone is an allocated impact zone where water quality criteria can be exceeded as long as acutely toxic conditions are prevented.

MONTHLY OR WEEKLY AVERAGE CONCENTRATION LIMIT, other than for bacteriological testing, means the highest allowable average calculated as an arithmetic mean of consecutive measurements made during calendar month or week, respectively. The "monthly or weekly average concentration limit" for *E. coli* bacteria means the highest allowable average calculated as the geometric mean of a minimum of four (4) measurements made during a calendar month or week, respectively. The geometric mean is the n th root of the product of n numbers.

MONTHLY OR WEEKLY AVERAGE MASS LIMITATION means the highest allowable value that shall be obtained by taking the total mass discharged during a calendar month or week, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the monthly or weekly average value shall be determined by the summation of all the measured discharges by mass divided by the number of days during the month or week, respectively, when the measurements were made.

NO OBSERVED EFFECT CONCENTRATION (NOEC) is the highest tested concentration of effluent or toxicant, that causes no observable adverse effect on the test organisms (i.e., the highest concentration of toxicant at which the values for the observed responses are not statistically significant different from the controls).

POINT ESTIMATE TECHNIQUES such as Probit, Interpolation Method, Spearman-Karber are used to determine the effluent concentration at which adverse effects (e.g., fertilization, growth or survival) occurred. For example, concentration at which a 25 percent reduction in fertilization occurred.

REFERENCE TOXICANT TEST is a toxicity test conducted with the addition of a known toxicant to indicate the sensitivity of the organisms being used and demonstrate a laboratory's ability to obtain consistent results with the test method. Reference toxicant data are part of the routine QA/QC program to evaluate the performance of laboratory personnel and test organisms.

SIGNIFICANT DIFFERENCE is defined as statistically significant difference (e.g., 95% confidence level) in the means of two distributions of sampling results.

SINGLE CONCENTRATION ACUTE TEST is a statistical analysis comparing only two sets of replicate observations. In the case of WET, comparing only two test concentrations (e.g., a control and 100% effluent). The purpose of this test is to determine if the 100% effluent concentration differs from the control (i.e., the test passes or fails).

SUBMIT, as used in this permit, means post-marked, documented by other mailing receipt, or hand-delivered to ADEQ.

TEST ACCEPTABILITY CRITERIA (TAC) are specific criteria for determining whether toxicity tests results are acceptable. The effluent and reference toxicant must meet specific criteria as defined in the test

TOXIC UNIT (TU) is a measure of toxicity in an effluent as determined by the acute toxicity units or chronic toxicity units measured. Higher the TUs indicate greater toxicity.

TOXIC UNIT ACUTE (TU_a) is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end of an acute toxicity test (i.e., $TU_a = 100/LC50$).

TOXIC UNIT CHRONIC (TU_c) is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of a chronic toxicity test (i.e., $TU_c = 100/NOEC$).

TOXICITY IDENTIFICATION EVALUATION (TIE) is a set of procedures used to identify the specific chemical(s) causing effluent toxicity.

TOXICITY REDUCTION EVALUATION (TRE) is a site-specific study conducted in a stepwise process designed to identify the causative agents of effluent toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity.

TOXICITY TEST is a procedure to determine the toxicity of a chemical or an effluent using living organisms. A toxicity test measures the degree of effect of a specific chemical or effluent on exposed test organisms.

WHOLE EFFLUENT TOXICITY is the total toxic effect of an effluent measured directly with a toxicity test.

APPENDIX D

STANDARD AZPDES PERMIT CONDITIONS & NOTIFICATIONS

(Updated as of February 2, 2004)

1. Duty to Reapply [R18-9-B904(C)]
Unless the Permittee permanently ceases the discharging activity covered by this permit, the Permittee shall submit a new application 180 days before the existing permit expires.
2. Applications [R18-9-A905(A)(1)(c) which incorporates 40 CFR 122.22]
 - a. All 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:
 - A) A president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - B) 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;
 - 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 having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
 - b. All reports required by permits and other information requested by the Director shall be signed by a 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, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

3. **Duty to Comply** [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(i) and A.R.S. §§ 49-262, 263.01, and 263.02.]

- a. The Permittee shall comply with all conditions of this permit and any standard and prohibition required under A.R.S. Title 49, Chapter 2, Article 3.1 and A.A.C. Title 18, Chapter 9, Articles 9 and 10. Any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
- b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.
- c. The Permittee shall comply with the effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulation that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- d. **Civil Penalties.** A.R.S. § 49-262(C) provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
- e. **Criminal Penalties.** Any a person who violates a condition of this permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 9, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

4. **Need to Halt or Reduce Activity Not a Defense** [R18-9-A905(A)(3)(a) which incorporates 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.

5. **Duty to Mitigate** [R18-9-A905(A)(3)(a) which incorporates 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.

6. **Proper Operation and Maintenance** [R18-9-A905(A)(3)(a) which incorporates 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 back-up 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.

7. Permit Actions [R18-9-A905(A)(3)(a) which incorporates 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.

8. Property Rights [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(g)]

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

9. Duty to Provide Information [R18-9-A905(A)(3)(a) which incorporates 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.

10. Inspection and Entry [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(i)]

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such 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 terms of the permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring equipment or 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 A.R.S. Title 49, Chapter 2, Article 3.1, and A.A.C. Title 18, Chapter 9, Articles 9 and 10, any substances or parameters at any location.

11. Monitoring and Records [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(j)]

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. 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, 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). This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - 1) The date, exact place and time of sampling or measurements;
 - 2) The individual(s) who performed the sampling or measurements;
 - 3) The date(s) the analyses were performed;
 - 4) The individual(s) who performed the analyses;
 - 5) The analytical techniques or methods used; and

- 6) The results of such analyses.
- d. Monitoring must be conducted according to test procedures specified in this permit. If a test procedure is not specified in the permit, then monitoring must be conducted according to test procedures approved under A.A.C. R18-9-A905(B) including those under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 (for sludge).
- e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both for first conviction. For a second conviction, such a person is subject to a fine of not more than \$20,000 per day of violation, or imprisonment for not more than four years, or both.

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Signatory Requirement [R18-9-A905(A)(3)(a) which incorporates 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 incorporated at R18-9-A905(A)(1)(c))
- b. The CLEAN WATER ACT 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 for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four years, or both.

13. Reporting Requirements [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(l)]

- a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations of 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) (incorporated by reference at R18-9-A905(A)(1)(e)); 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) (incorporated by reference at R18-9-A905(A)(3)(b)).
 - 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. (R18-9-B905) 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 Arizona Revised Statutes and the Clean Water Act.

- 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.
 - 2) If the Permittee monitors any pollutant more frequently than required by the permit, then the results of this 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 human health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. 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 recurrence of the noncompliance.
 - 2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g) which is incorporated by reference at R18-9-A905(A)(3)(a))
 - b) Any upset which exceeds any effluent limitation in the permit.
 - c) 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) which is incorporated by reference at R18-9-A905(A)(3)(d))
 - g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) 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.
14. Bypass [R18-9-A905(A)(3)(a) which incorporates 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 provision of paragraphs (c) and (d) 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 bypass.
 - 2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph (f)(2) of section 13 (24-hour notice).
 - d. Prohibition of bypass.
 - 1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
 - a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - b) 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 down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - c) The Permittee submitted notices as required under paragraph (c) 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 (d)(1) of this section.
15. Upset [A.R.S. §§ 49-255(8) and 255.01(E), R18-9-A905(A)(3)(a) which incorporates 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 caused 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 (c) 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 defenses 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 (f)(2) of Section 13 (24-hour notice).
 - 4) The Permittee has taken appropriate measure including all reasonable steps to minimize or prevent any discharge or sewage sludge use or disposal that is in violation of the permit and that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d)
- d. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

16. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers [R18-9-A905(A)(3)(b) which incorporates 40 CFR 122.42(a)]

In addition to the reporting requirements under 40 CFR 122.41(l) (which is incorporated at R18-9-A905(A)(3)(a)), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - 1) One hundred micrograms per liter (100 µg/l);
 - 2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - 3) Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7) (which is incorporated at R18-9-A905(A)(1)(b)); or
 - 4) The level established by the Director in accordance with 40 CFR 122.44(f) (which is incorporated at R18-9-A905(A)(3)(d)).
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - 1) Five hundred micrograms per liter (500 µg/l);
 - 2) One milligram per liter (1 mg/l) for antimony;
 - 3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7)(which is incorporated at R18-9-A905(A)(1)(b));
 - 4) The level established by the Director in accordance with 40 CFR 122.44(f) (which is incorporated at R18-9-A905(A)(3)(d)).

17. Publicly Owned Treatment Works [R18-9-A905(A)(3)(b) which incorporates 40 CFR 122.42(b)]

This section applies only to publicly owned treatment works as defined at ARS § 49-255(5).

- a. All POTW's 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 or 306 of the CLEAN WATER ACT 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 the 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 discharge from the POTW.
- b. 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 - 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.

18. Reopener Clause [R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44(c)]

This permit shall be modified or revoked and reissued to incorporate any applicable effluent standard or limitation or standard for sewage sludge use or disposal under sections 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 405(d) which is promulgated or approved after the permit is issued if that effluent or sludge standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant or sludge use or disposal practice not limited in the permit.

19. Privately Owned Treatment Works [R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44]

This section applies only to privately owned treatment works as defined at 40 CFR 122.2.

- a. Materials authorized to be disposed of into the privately owned treatment works and collection system are typical domestic sewage. Unauthorized material are hazardous waste (as defined at 40 CFR Part 261), motor oil, gasoline, paints, varnishes, solvents, pesticides, fertilizers, industrial wastes, or other materials not generally associated with toilet flushing or personal hygiene, laundry, or food preparation, unless specifically listed under "Authorized Non-domestic Sewer Dischargers" elsewhere in this permit.
- b. It is the Permittee's responsibility to inform users of the privately owned treatment works and collection system of the prohibition against unauthorized materials and to ensure compliance with the prohibition. The Permittee must have the authority and capability to sample all discharges to the collection system, including any from septic haulers or other unsewered dischargers, and shall take and analyze such samples for conventional, toxic, or hazardous pollutants when instructed by the permitting authority. The Permittee must provide adequate security to prevent unauthorized discharges to the collection system.
- c. Should a user of the privately owned treatment works desire authorization to discharge non-domestic wastes, the Permittee shall submit a request for permit modification and an application, pursuant to 40 CFR 122.44(m), describing the proposed discharge. The application shall, to the extent possible, be submitted using ADEQ Forms 1 and 2C, unless another format is requested by the permitting authority. If the privately owned treatment works or collection system user is different from the Permittee, and the Permittee agrees to allow the non-domestic discharge, the user shall submit the application and the Permittee shall submit the permit modification request. The application and request for modification shall be submitted at least 6 months before authorization to discharge non-domestic wastes to the privately owned treatment works or collection system is desired.

20. Transfers by Modification [R18-9-B905]

Except as provided in section 21, 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, or a minor modification made under R18-9-B906, to identify the new Permittee and incorporate such other requirements as may be necessary.

21. Automatic Transfers [R18-9-B905]

An alternative to transfers under section 20, any AZPDES 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;
- b. The notice includes a written agreement between the existing and new Permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- c. The Director does not notify the existing Permittee and 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 R18-9-B906(B).

22. Minor Modification of Permits [R18-9-B906(B)]

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 public notice procedures under R18-9-A907 or A908. Minor modifications may only:

- a. Correct typographical errors;
- b. Update a permit condition that changed as a result of updating an Arizona water quality standard;
- c. Require more frequent monitoring or reporting by the Permittee;
- d. 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;
- e. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in their 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 Permittee has been submitted to the Director.
- f. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation prior to discharge under 40 CFR 122.29 (which is incorporated by reference in R18-9-A905(A)(1)(e)).
- g. 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 the permit limits.
- h. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 and 403.18 as enforceable conditions of the POTW's permit.
- i. Annex an area by a municipality.

23. Termination of Permits [R-9-B906(C)]

The following are causes for terminating a permit during its term, or for denying a permit renewal application:

- a. Noncompliance by the Permittee with any condition of the permit;
 - b. 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;
 - c. 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
 - d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, a plant closure or termination of discharge by connection to a POTW).
24. Availability of Reports [Pursuant to A.R.S. § 49-205]
- Except for data determined to be confidential under A.R.S. § 49-205(A), all reports prepared in accordance with the terms of this permit shall be available for public inspection at ADEQ offices. As required by A.R.S. § 49-205(B) and (C), permit applications, permits, and effluent data shall not be considered confidential.
25. Removed Substances [Pursuant to Clean Water Act Section 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 from entering navigable waters.
26. Severability [Pursuant to A.R.S. § 49-324(E)]
- 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.
27. Civil and Criminal Liability [Pursuant to A.R.S. § 49-262, 263.01, and 263.02]
- Except as provided in permit conditions on "Bypass" (Section 14) and "Upset" (Section 15), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.
28. Oil and Hazardous Substance Liability [Pursuant to Clean Water Act Section 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 Clean Water Act.
29. State or Tribal Law [Pursuant to R18-9-A904(C)]
- 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 or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.