

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

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

NPDES PERMIT NO. AZ0020524

In compliance with the provisions of the Clean Water Act (“CWA”) (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:

Discharger Name		City of Phoenix, Water Services Department		
Discharger Address		200 W. Washington St Phoenix, AZ 85003		
Facility Name		91 st Avenue Wastewater Treatment Plant		
Facility Location Address		5615 South 91 st Avenue Tolleson, AZ, 85353 USA		
Facility Rating		Major		
Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Treated Domestic Wastewater	33° 23' 21" N	112° 15' 12" W	Lower Salt River
002	Treated Domestic Wastewater	33° 23' 22" N	112° 15' 15" W	Lower Salt River
004	Treated Domestic Wastewater	33° 23' 18" N	112° 15' 22" W	Lower Salt River
005	Treated Domestic Wastewater	33° 23' 18" N	112° 15' 53" W	Lower Salt River
This permit was issued on:		May 24, 2010		
This permit shall become effective on:		July 01, 2010		
This permit shall expire at midnight on:		June 30, 2015		
In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.				

Signed this 24th day of May, 2010, for the Regional Administrator.

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Alexis Strauss, Director
Water Division

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Part I. EFFLUENT LIMITS AND MONITORING

A. Effluent Limits and Monitoring

1. Effluent Limits – Outfall No. 001, 002, 004, and 005.
During the period beginning on the effective date of this permit and ending on the expiration date of this permit, the discharger is authorized to discharge treated domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Sections I.B., I.C., I.F and II. These requirements are based on a design capacity of 230 MGD. If there is no discharge at this outfall during any one month period, then report “C” in the “No Discharge” box on the DMR form for that month.
2. Additional Effluent Monitoring Requirements – FRW-1, FRW-2, FRW-3 and HDW-1.
The discharger shall comply with monitoring requirements specified in Sections I.D. and I.E for monitoring stations FRW-1, FRW-2, FRW-3 and HDW-1.
3. The discharge of pollutants at any point other than the outfalls specifically authorized in this permit is prohibited, and constitutes a violation thereof.
4. The discharger shall not cause pollutants to the receiving water that will:
 - a Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
 - b Cause objectionable odor in the area in which the surface water is located;
 - c Cause off-flavor in aquatic organisms;
 - d Are toxic to humans, animals, plants or other organisms;
 - e Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, propagation of other aquatic life or that impair recreational uses.
5. Samples taken in compliance with the effluent monitoring requirements specified in Part I of this permit shall be taken at the following locations:
 - a. Influent samples shall be taken after the last addition to the collection system and prior to inplant return flow and the first treatment process, where representative samples can be obtained.
 - b. Effluent samples shall be taken after in plant return flows and the last treatment process and prior to mixing with the receiving water, where representative samples can be obtained.

6. The discharge shall not cause the dissolved oxygen concentration in the receiving water to fall below 3 mg/l, from 3 hours after sunrise to sunset, and 1mg/l from sunset to 3 hours after sunrise, unless the percent saturation of oxygen remains equal to or greater than 90%.

B. Effluent Limits and Monitoring Requirements – Outfall Number 001, 002, and 005.

Table 1.

Parameter ⁽³⁾	Maximum Allowable Discharge Limits				Monitoring Requirements ⁽²⁾	
	Concentration and Loading					
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency ⁽³⁾	Sample Type ⁽⁴⁾
General Parameters						
Flow rate	(1)	(1)	(1)	mgd	Continuous	Metered
Carbonaceous biochemical oxygen demand (5-day)	25 48,000	40 76,800	(1) (1)	mg/L lb/day	Daily	24-hour Composite
	The average monthly percent removal shall not be less than 85 percent. ⁽⁵⁾			%		
<i>E. Coli</i> ⁽⁷⁾	126 ⁽⁶⁾	—	575	CFU or MPN/100 mL	Daily	Discrete
pH (hydrogen ion)	Within 6.5 and 9.0 at all times.			pH units	Daily	Discrete
Temperature	(1)	—	(1)	°C	1X/ month	Discrete
Dissolved Oxygen ⁽⁸⁾	—	—	1, 3 ⁽⁸⁾	mg/L	1X/ week ⁽⁸⁾	Discrete
Total suspended solids ⁽⁹⁾	30 57,600	45 86,400	(1) (1)	mg/L lb/day	Daily	24-hour Composite
	The average monthly percent removal shall not be less than 85 percent. ⁽⁵⁾			%		
Ammonia (as N) ⁽¹⁰⁾	(10)	—	(10)	mg/L	1X/ Week	Discrete
Chlorine ⁽¹¹⁾ , total residual (TRC)	11	—	18.1	ug/L	Daily	Discrete
	21	—	34.7	lb/day		
Nitrate-nitrite (as N)	—	—	(1)	mg/L	Quarterly	24-hour Composite
Kjeldahl nitrogen, total (as N)	—	—	(1)	mg/L	Quarterly	24-hour Composite
Hydrogen Sulfide or Total Sulfides	—	—	—	ug/L	1X/ Month	Discrete
Oil and grease, total recoverable	(1)	—	(1)	mg/L	2X/ Month	Discrete
Phosphorous, Total	—	—	(1)	mg/L	1X/ Month	24-hour Composite
Total dissolved solids	—	—	(1)	mg/L	Quarterly	24-hour Composite
Chronic Toxicity ⁽⁴⁾	1.0 ⁽⁶⁾	—	1.6 ⁽⁶⁾	TUc	(4)	24-hour Composite
Hardness ⁽¹²⁾ , total (as CaCO3)	(1)	—	(1)	mg/L	2X/ Month	24-hour Composite
Metals (total recoverable), cyanide and total phenols:						
Antimony, total recoverable CAS #: 7440360	—	—	(1)	ug/L	Quarterly	24-hour Composite
Arsenic, total recoverable CAS #: 7440382	—	—	(1)	ug/L	Quarterly	24-hour Composite
Beryllium, total recoverable	—	—	(1)	ug/L	Quarterly	24-hour Composite

CAS #: 7440417						
Cadmium, ⁽¹²⁾ , total recoverable CAS #: 7440439	1.14 2.19	—	1.83 3.51	ug/L lb/day	2X/ Month	24-hour Composite
Chromium III ⁽¹²⁾ , ⁽¹³⁾ , total recoverable CAS #: 16065831	—	—	(1)	ug/L	Quarterly	24-hour Composite
Chromium VI ⁽¹²⁾ , ⁽¹³⁾ , total recoverable CAS #: 18540299	—	—	(1)	ug/L	Quarterly	Discrete
Copper, ⁽¹²⁾ , total recoverable CAS #: 7440508	—	—	(1)	ug/L	Quarterly	24-hour Composite
Lead ⁽¹²⁾ , total recoverable CAS #: 7439921	9.53 18.3	—	16.3 31.3	ug/L lb/day	2X/ Month	24-hour Composite
Mercury, total recoverable CAS #: 7439976	.012 .023	—	.0219 .0420	ug/L lb/day	2X/ Month	Discrete
Nickel, ⁽¹²⁾ , total recoverable CAS #: 7440020	—	—	(1)	ug/L	Quarterly	24-hour Composite
Selenium total recoverable CAS #: 7782492	2 3.8	— —	3.67 7.04	ug/L lb/day	2X/ Month	24-hour Composite
Silver, ⁽¹²⁾ , total recoverable CAS #: 7440224	—	—	(1)	ug/L	Quarterly	24-hour Composite
Thallium, total recoverable CAS #: 7440280	—	—	(1)	ug/L	Quarterly	24-hour Composite
Zinc, ⁽¹²⁾ , total recoverable CAS #: 7440666	—	—	(1)	ug/L	Quarterly	24-hour Composite
Cyanide, free CAS #: 57125	9.7 18.6	— —	15.3 29.4	ug/L lb/day	2X/ Month	Discrete
Volatile Organic Compounds:						
Acrolein CAS #: 107028	—	—	(1)	ug/L	Quarterly	Discrete
Acrylonitrile CAS #: 107131	—	—	(1)	ug/L	Quarterly	Discrete
Benzene CAS #: 71432	—	—	(1)	ug/L	Quarterly	Discrete
Bromoform CAS #: 75252	—	—	(1)	ug/L	Quarterly	Discrete
Carbon tetrachloride CAS #: 56235	—	—	(1)	ug/L	Quarterly	Discrete
Chlorobenzene CAS #: 108907	—	—	(1)	ug/L	Quarterly	Discrete
Chlorodibromomethane CAS #: 124481	—	—	(1)	ug/L	Quarterly	Discrete
Chloroethane CAS #: 75003	—	—	(1)	ug/L	Quarterly	Discrete
2-chloroethylvinyl	—	—	(1)	ug/L	Quarterly	Discrete

ether CAS #: 110758						
Chloroform CAS #: 67663	—	—	(1)	ug/L	Quarterly	Discrete
Dichlorobromomethane CAS #: 75274	—	—	(1)	ug/L	Quarterly	Discrete
1,1-dichloroethane CAS #: 75343	—	—	(1)	ug/L	Quarterly	Discrete
1,2-dichloroethane CAS #: 107062	—	—	(1)	ug/L	Quarterly	Discrete
Trans-1,2-dichloroethylene	—	—	(1)	ug/L	Quarterly	Discrete
1,1-dichloroethylene CAS #: 75354	—	—	(1)	ug/L	Quarterly	Discrete
1,2-dichloropropane CAS #: 78875	—	—	(1)	ug/L	Quarterly	Discrete
1,3-dichloropropylene CAS #: 542756	—	—	(1)	ug/L	Quarterly	Discrete
Ethylbenzene CAS #: 100414	—	—	(1)	ug/L	Quarterly	Discrete
Methyl bromide CAS #: 74839	—	—	(1)	ug/L	Quarterly	Discrete
Methyl chloride CAS #: 74873	—	—	(1)	ug/L	Quarterly	Discrete
Methylene chloride CAS #: 75092	—	—	(1)	ug/L	Quarterly	Discrete
1,1,1,2-tetrachloroethane CAS #: 79345	—	—	(1)	ug/L	Quarterly	Discrete
Tetrachloroethylene CAS #: 127184	—	—	(1)	ug/L	Quarterly	Discrete
Toluene CAS #: 108883	—	—	(1)	ug/L	Quarterly	Discrete
1,1,1-trichloroethane CAS #: 71556	—	—	(1)	ug/L	Quarterly	Discrete
1,1,2-trichloroethane CAS #: 79005	—	—	(1)	ug/L	Quarterly	Discrete
Trichloroethylene CAS #: 79016	—	—	(1)	ug/L	Quarterly	Discrete
Vinyl chloride CAS #: 76014	—	—	(1)	ug/L	Quarterly	Discrete
Acid-extractable Compounds:						
P-chloro-m-creso	—	—	(1)	ug/L	2X/ Year	24-hour Composite
2-chlorophenol CAS #: 95578	—	—	(1)	ug/L	2X/ Year	24-hour Composite
2,4-dichlorophenol CAS #: 120832	—	—	(1)	ug/L	2X/ Year	24-hour Composite
2,4-dimethylphenol CAS #: 105679	—	—	(1)	ug/L	2X/ Year	24-hour Composite
4,6-dinitro-o-cresol	—	—	(1)	ug/L	2X/ Year	24-hour Composite
2,4-dinitrophenol CAS #: 51285	—	—	(1)	ug/L	2X/ Year	24-hour Composite

2-nitrophenol CAS #: 88755	—	—	(1)	ug/L	2X/ Year	24-hour Composite
4-nitrophenol CAS #: 10027	—	—	(1)	ug/L	2X/ Year	24-hour Composite
Pentachlorophenol CAS #: 87865	—	—	(1)	ug/L	2X/ Year	24-hour Composite
Phenol CAS #: 108952	—	—	(1)	ug/L	2X/ Year	24-hour Composite
2,4,6-trichlorophenol CAS #: 88062	—	—	(1)	ug/L	2X/ Year	24-hour Composite
Base-neutral Compounds:						
Acenaphthene CAS #: 83329	—	—	(1)	ug/L	Quarterly	24-hour Composite
Acenaphthylene CAS #: 208968	—	—	(1)	ug/L	Quarterly	24-hour Composite
Anthracene CAS #: 120127	—	—	(1)	ug/L	Quarterly	24-hour Composite
Benzidine CAS #: 92875	—	—	(1)	ug/L	Quarterly	24-hour Composite
Benzo(a)anthracene CAS #: 56553	—	—	(1)	ug/L	Quarterly	24-hour Composite
Benzo(a)pyrene CAS #: 50328	—	—	(1)	ug/L	Quarterly	24-hour Composite
3,4 benzofluoranthene	—	—	(1)	ug/L	Quarterly	24-hour Composite
Benzo(ghi)perylene CAS #: 191242	—	—	(1)	ug/L	Quarterly	24-hour Composite
Benzo(k)fluoranthene CAS #: 207089	—	—	(1)	ug/L	Quarterly	24-hour Composite
Bis (2-chloroethoxy) methane CAS #: 111911	—	—	(1)	ug/L	Quarterly	24-hour Composite
Bis (2-chloroethyl) ether CAS #: 111444	—	—	(1)	ug/L	Quarterly	24-hour Composite
Bis (2-chloroisopropyl) ether CAS #: 39638329	—	—	(1)	ug/L	Quarterly	24-hour Composite
Bis (2-ethylhexyl) phthalate CAS #: 117817	7.4 14.2	— —	13.3 25.6	ug/L lb/day	1X/ Month	24-hour Composite
4-bromophenyl phenyl ether CAS #: 101553	—	—	(1)	ug/L	Quarterly	24-hour Composite
Butyl benzyl phthalate CAS #: 85687	—	—	(1)	ug/L	Quarterly	24-hour Composite
2-chloronaphthalene CAS #: 91587	—	—	(1)	ug/L	Quarterly	24-hour Composite
4-chlorophenyl phenyl ether CAS #: 7005723	—	—	(1)	ug/L	Quarterly	24-hour Composite
Chrysene CAS #: 218019	—	—	(1)	ug/L	Quarterly	24-hour Composite
Di-n-butyl phthalate	—	—	(1)	ug/L	Quarterly	24-hour Composite

Di-n-octyl phthalate	—	—	(1)	ug/L	Quarterly	24-hour Composite
Dibenzo(a,h)anthracene CAS #: 53703	—	—	(1)	ug/L	Quarterly	24-hour Composite
1,2-dichlorobenzene CAS #: 95501	—	—	(1)	ug/L	Quarterly	24-hour Composite
1,3-dichlorobenzene CAS #: 541731	—	—	(1)	ug/L	Quarterly	24-hour Composite
1,4-dichlorobenzene CAS #: 106467	—	—	(1)	ug/L	Quarterly	24-hour Composite
3,3-dichlorobenzidine CAS #: 91941	—	—	(1)	ug/L	Quarterly	24-hour Composite
Diethyl phthalate CAS #: 84662	—	—	(1)	ug/L	Quarterly	24-hour Composite
Dimethyl phthalate CAS #: 131113	—	—	(1)	ug/L	Quarterly	24-hour Composite
2,4-dinitrotoluene CAS #: 121142	—	—	(1)	ug/L	Quarterly	24-hour Composite
2,6-dinitrotoluene CAS #: 606202	—	—	(1)	ug/L	Quarterly	24-hour Composite
1,2-diphenylhydrazine CAS #: 122667	—	—	(1)	ug/L	Quarterly	24-hour Composite
Fluoranthene CAS #: 206440	—	—	(1)	ug/L	Quarterly	24-hour Composite
Fluorene CAS #: 86637	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorobenzene CAS #: 118741	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorobutadiene CAS #: 87683	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorocyclopentadiene CAS #: 77474	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachloroethane CAS #: 67721	—	—	(1)	ug/L	Quarterly	24-hour Composite
Indeno(1,2,3-cd)pyrene CAS #: 193395	—	—	(1)	ug/L	Quarterly	24-hour Composite
Isophorone CAS #: 78591	—	—	(1)	ug/L	Quarterly	24-hour Composite
Naphthalene CAS #: 91203	—	—	(1)	ug/L	Quarterly	24-hour Composite
Nitrobenzene CAS #: 98953	—	—	(1)	ug/L	Quarterly	24-hour Composite
N-nitrosodi-n-propylamine CAS #: 621647	—	—	(1)	ug/L	Quarterly	24-hour Composite
N-nitrosodimethylamine CAS #: 62759	—	—	(1)	ug/L	Quarterly	24-hour Composite
N-nitrosodiphenylamine CAS #: 86306	—	—	(1)	ug/L	Quarterly	24-hour Composite
Phenanthrene CAS #: 85018	—	—	(1)	ug/L	Quarterly	24-hour Composite
Pyrene	—	—	(1)	ug/L	Quarterly	24-hour

CAS #: 12900						Composite
1,2,4-trichlorobenzene CAS #: 120821	—	—	(1)	ug/L	Quarterly	24-hour Composite
Expanded Requirements Based on Designated Uses:						
Alachlor	—	—	(1)	ug/L	Quarterly	24-hour Composite
Aldrin CAS #: 309002	—	—	(1)	ug/L	Quarterly	24-hour Composite
Atrazine	—	—	(1)	ug/L	Quarterly	24-hour Composite
Barium	—	—	(1)	ug/L	Quarterly	24-hour Composite
Boron	—	—	(1)	ug/L	Quarterly	24-hour Composite
Carbofuran (Furadan)	—	—	(1)	ug/L	Quarterly	24-hour Composite
Chlordane CAS #: 57749	—	—	.0008 .0016	ug/L lb/day	Quarterly	24-hour Composite
1,2-cis-Dichloroethylene	—	—	(1)	ug/L	Quarterly	24-hour Composite
Dalapon	—	—	(1)	ug/L	Quarterly	24-hour Composite
Diazinon	—	—	(1)	ug/L lb/day	Quarterly	24-hour Composite
1,2-Dibromo-3- chloropropane (DBCP)	—	—	(1)	ug/L	Quarterly	24-hour Composite
1,2-Dibromoethane (EDB) Ethylene dibromide	—	—	(1)	ug/L	Quarterly	24-hour Composite
4,4'-DDT CAS #: 50293	—	—	.0002 .0004	ug/L lb/day	Quarterly	24-hour Composite
4,4'-DDE CAS #: 72559	—	—	.0002 .0004	ug/L lb/day	Quarterly	24-hour Composite
4,4'-DDD CAS #: 72548	—	—	.0002 .0004	ug/L lb/day	Quarterly	24-hour Composite
2,4- Dichlorophenoxyacetic acid (2,4-D)	—	—	(1)	ug/L	Quarterly	24-hour Composite
Dieldrin CAS #: 60571	—	—	(1)	ug/L	Quarterly	24-hour Composite
Di (2-ethylhexyl) adipate	—	—	(1)	ug/L	Quarterly	24-hour Composite
Dinoseb	—	—	(1)	ug/L	Quarterly	24-hour Composite
Diquat	—	—	(1)	ug/L	Quarterly	24-hour Composite
Endosulphan sulfate CAS #: 1031078	—	—	(1)	ug/L	Quarterly	24-hour Composite
Endosulfan (Total)	.06 0.115	—	0.103 0.198	ug/L lb/day	1X/ Month	24-hour Composite
Endothall	—	—	(1)	ug/L	Quarterly	24-hour Composite
Endrin CAS #: 72208	.004 .00769	—	.0072 .0138	ug/L lb/day	1X/ Month	24-hour Composite

Endrin aldehyde CAS #: 7421934	—	—	(1)	ug/L	Quarterly	24-hour Composite
Fluoride	—	—	(1)	ug/L	Quarterly	24-hour Composite
Glyphosate	—	—	(1)	ug/L	Quarterly	24-hour Composite
Heptachlor CAS #: 76448	—	—	(1)	ug/L	Quarterly	24-hour Composite
Heptachlor epoxide CAS #: 1024573	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorocyclohexane alpha Alpha-BHC	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorocyclohexane beta	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorocyclohexane delta	—	—	(1)	ug/L	Quarterly	24-hour Composite
Hexachlorocyclohexane gamma (lindane)	—	—	(1)	ug/L	Quarterly	24-hour Composite
Manganese	—	—	(1)	ug/L	Quarterly	24-hour Composite
Methoxychlor	—	—	(1)	ug/L	Quarterly	24-hour Composite
Oxamyl	—	—	(1)	ug/L	Quarterly	24-hour Composite
Pichloram	—	—	(1)	ug/L	Quarterly	24-hour Composite
Total polychlorinated biphenyls (PCBs) (sum of all congener or isomer or homolog or arochlor analyses)	—	—	(1)	ug/L	Quarterly	24-hour Composite
Simazine	—	—	(1)	ug/L	Quarterly	24-hour Composite
Styrene	—	—	(1)	ug/L	Quarterly	24-hour Composite
2,3,7,8- Tetrachlorodibenzo-p- dioxin	—	—	(1)	ug/L	Quarterly	24-hour Composite
Toxaphene CAS #: 8001352	—	—	.0003 .0006	ug/L lb/day	Quarterly	24-hour Composite
2-(2,4,5,- Trichlorophenoxy) Propionic Acid (SILVEX)	—	—	(1)	ug/L	Quarterly	24-hour Composite
Xylenes (Total)	—	—	(1)	ug/L	Quarterly	24-hour Composite

(1) No effluent limits are set at this time, but monitoring and reporting is required.

(2) At minimum, at least one sample per month must be taken concurrent with monthly whole effluent toxicity monitoring unless specific monitoring frequency identified in Table 1 is quarterly. All quarterly samples must be taken concurrently with WET monitoring (See Part III.B. of this permit for detailed WET monitoring requirements).

- (3) Reporting level must be low enough to allow comparison of the results to the applicable water quality standards (WQS). If a reported level below the WQS cannot be achieved, then the permittee shall use the method with the lowest method-specific MDL, as defined in Appendix B/Part V of this permit. Samples are to be representative of any seasonal variation in the discharge.

Samples taken at a 2X/Year interval requires at least 3 months between sampling events.

Samples taken at a 2X/Month interval requires at least 7 days between sampling events.

- (4) These represent effluent limits for *Ceriodaphnia dubia* monitored 1X/month and action levels for *Pimephales promelas* and *Selenastrum capricornutum* monitored Quarterly. For a complete description of WET testing requirements see Section III. D. of this permit.
- (5) Both the influent and the effluent shall be monitored. The arithmetic mean of the Carbonaceous Biochemical Oxygen Demand (5-day) by concentration, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the values, by concentration, for influent samples collected at approximately the same times during the same period.
- (6) This value is a geometric mean for *E. Coli* and a median for chronic toxicity. A minimum of 4 samples is required in order to report a geometric mean.
- (7) For outfall 005, compliance with effluent limits for *E.coli* may be monitored at FRW-1. Daily monitoring is required at outfall 005.
- (8) The effluent limit for Dissolved Oxygen is dependant on time of day. The single sample minimum three hours after sunrise to sunset is 3.0 mg/L. The single sample minimum sunset to three hours after sunrise is 1.0 mg/L. Samples must be taken at a minimum frequency of 1X/week. With each sample, time of day must be recorded. At least ONE sample per month must be taken during EACH of the two time intervals.
- (9)At the discretion of EPA, for outfall 005, compliance with effluent limits for Total Suspended Solids may be permitted at FRW-1.
- (10)For total ammonia nitrogen (in mg N/L), freshwater water quality criteria for chronic protection of aquatic life are expressed as a function of pH, temperature, and the presence or absence of fish early life stages. Water quality criteria and calculated WQBELs are expressed based on historical effluent data and fluctuate based on the month, as described in Section E below. Monitoring for total ammonia nitrogen, pH, and temperature must be concurrent. A compliance schedule is in place for ammonia. Refer to Part 1, Section F for more details.
- (11)The TRC must be measured separately at outfalls 001 or 002, outfall 004, and outfall 005.
- (12)The effluent limitations listed are based on a hardness of 279 mg/L as CaCO₃. The effluent must be tested for hardness at the same time that samples for the indicated metals are taken.
- (13)Chromium III is not monitored directly. Chromium III test results are obtained by subtracting chromium VI from total chromium. If chromium VI sampling is not required chromium III results are not required to be reported. If total chromium exceeds 8 ug/L, the permittee must conduct sampling for chromium VI for the remainder of the permit. Otherwise, monitoring for chromium VI is not required.

C. Effluent Limits and Monitoring Requirements – Outfall Number 004.

The permittee shall comply with all permit limits specified in **Table 1** of Section I.B. The monitoring frequency shall be at the frequencies specified in **Table 2** below.

Table 2. Monitoring Frequency for Outfall 004.

Parameter	Sampling Frequency
Flow ⁽¹⁾	Weekly ⁽¹⁾
CBOD	Monthly
<i>E. Coli</i> ⁽²⁾	Monthly
pH	Monthly
Temperature	Monthly
Dissolved Oxygen	Monthly
Total suspended solids	Monthly
Ammonia	Monthly
TRC	Monthly
Nitrate-nitrite	Quarterly
Kjeldahl nitrogen	Quarterly
Hydrogen Sulfide	Quarterly
Oil and grease, total recoverable	Monthly
Phosphorous, Total	Quarterly
Total dissolved solids	Quarterly
Hardness	Quarterly
All Metals, cyanide and total phenols ⁽³⁾	Quarterly
Volatile Organic Compounds ⁽³⁾	Annually
Acid-extractable Compounds ⁽³⁾	Annually
Base-neutral Compounds ⁽³⁾	Annually
Expanded Requirements Based on Designated Uses ⁽³⁾	Annually

(1) Flow sampling for outfall 004 may be discrete.

(2) For outfall 004, compliance with effluent limits for *E.coli* may be monitored at HFD-1. Monthly monitoring is required at outfall 004.

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

D. Monitoring Requirements – Monitoring Stations FRW-1 and HDW-1

1. The permittee shall conduct regular monitoring of the influent to the Tres Rios Flow Regulating Wetland (FRW-1) and Hayfield Demonstration Wetland (HDW-1) as specified in Section I.B. **Table 1.**
2. All parameters shall be monitored at monitoring stations FRW-1 and HDW-1 at the frequency specified in **Table 1.** All parameters shall be monitored and reported as specified for Outfalls 001 through 005 above unless otherwise specified.
3. No limits for the monitoring stations have been set at this time.
4. With the exception of TRC and ammonia, if a parameter exceeds the concentration described in **Table 1** at monitoring stations FRW-1 and HDW-1, a written report shall be submitted in accordance with Section II.a.2., below.

5. With the exception of TRC and ammonia, if influent to the Tres Rios Wetland or Hayfield Demonstration has received identical treatment to outfalls 001 or 002, monitoring conducted at the outfalls may be considered representative of the monitoring stations.
6. EPA recommends samples taken at outfalls 004 and 005 to account for retention time in the wetlands. Therefore, samples from FRW-1 and HDW-1 may be taken several days or weeks prior to samples taken at 004 and 005.

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

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

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

Parameter	Sampling Frequency
Flow	None
Temperature	Weekly
pH	Weekly
TRC	Weekly
Ammonia	Weekly
Total suspended solids	Weekly
Dissolved Oxygen	Monthly
<i>E. Coli</i>	Monthly
CBOD	Monthly
Nitrate-nitrite	Quarterly
Kjeldahl nitrogen	Quarterly
Hydrogen Sulfide	Quarterly
Oil and grease, total recoverable	Quarterly
Phosphorous, Total	Quarterly
Total dissolved solids	Quarterly
Hardness	Quarterly
All Metals, cyanide and total phenols ⁽¹⁾	Quarterly
Volatile Organic Compounds ⁽¹⁾	Annually
Acid-extractable Compounds ⁽¹⁾	Annually
Base-neutral Compounds ⁽¹⁾	Annually
Expanded Requirements Based on Designated Uses ⁽¹⁾	Annually

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

F. Ammonia Limitations

1. Limitations Effective January 1st, 2013 for Outfalls 001 and 002.
Limitations Effective Immediately for Outfalls 004 and 005.

The Arizona Administrative Code, Title 18, Chapter 11 Department of Environmental Quality Water Quality Standards contains acute and chronic ammonia standards that are contingent upon temperature and pH values. The chronic criteria are more stringent than the acute ammonia criteria, so the effluent ammonia shall be compared to the chronic ammonia standards. The limit calculation has been calculated based on historical effluent data and is month-dependant. The limits for each month are specified in the table below:

Table 4. Ammonia Limits (mg/L) (Effective 1/1/13 for Outfalls 001 and 002)

Month	Average Monthly	Daily Maximum
January	2.92	4.56
February	2.92	4.56
March	2.92	4.56
April	2.57	4.01
May	2.26	3.53
June	1.99	3.10
July	1.99	3.10
August	1.99	3.10
September	1.99	3.10
October	1.99	3.10
November	2.26	3.53
December	2.57	4.01

2. Interim Ammonia Limits Effective through December 31st, 2012 for Outfalls 001 and 002.

In order to attain compliance with the new water quality standard set forth by Arizona for ammonia, the permittee is granted a compliance schedule. The interim limits ensure compliance with acute ammonia criteria and require full compliance with both chronic and acute criteria by January 1st, 2013. The limits for the interim period are defined in the table below for Outfalls 001 and 002:

Table 5. Interim Ammonia Limits (mg/L) (Effective through 12/31/12 for Outfalls 001 and 002)

Limit	Maximum Concentration
Daily Maximum	29.5
Average Monthly	18.9

Part II. REPORTING

A. *Twenty-four Hour Reporting of Noncompliance*

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

U.S. Environmental Protection Agency
CWA Compliance Office (WTR-7)
415-972-3577

Arizona Department of Environmental Quality
Water Quality Compliance Section Manager
602-771-2209
602-771-2330 (24 hour hotline)

Gila River Indian Community
Department of Environmental Quality
520-562-223

2. 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 reoccurrence of the noncompliance.
3. The following information shall be included as information which must be reported within 24 hours under this paragraph.
 - a. Any unanticipated bypass which exceeds any effluent limit in the permit (see 40 CFR 122.44(g)).
 - b. Any upset which exceeds any effluent limit in the permit.
 - c. Violation of a maximum daily discharge limit for any of the pollutants listed by the director in the permit to be reported within 24 hours (see 40 CFR 122.44(g)).

4. The Director may waive the written report on a case-by-case basis for reports required under paragraph B.2, if the oral report has been received within 24 hours.

B. General Monitoring and Reporting

1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in **Table 1** of this permit, the permittee shall utilize 40 CFR 136 test methods with the lowest MDL or ML and with MDLs and MLs that are lower than the effluent limits in **Table 1** of this permit. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or ML. In this context, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the MDL and ML. For a test method with a published ML, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is at or below the published ML, but still within the range of quantitation for the test method, in accordance with the instructions for calibration in the test method. Influent and effluent analyses for metals shall measure “total recoverable metal”, except as provided under 40 CFR 122.45(c). It is recommended that the permittee use a laboratory licensed by the ADHS Office of Laboratory Licensure and Certification that has demonstrated proficiency for each parameter to be sampled.
2. Because of the short holding time for chlorine, samples may be analyzed on-site using Hach Method No. 10014. Other Hach Methods are also acceptable for chlorine if the method has an MDL lower than effluent limitation specified in this permit.
3. The permittee shall develop a Quality Assurance (“QA”) Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. At a minimum, the QA Manual shall include the following:
 - a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;
 - b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control (“QC”) samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
 - c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical

method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and

- d. Discussion of how the permittee will perform data review and reporting of results to EPA and ADEQ and how the permittee will resolve data quality issues and identify limits on the use of data.
4. Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the permittee shall ensure that the laboratory has a QA Manual on file. A copy of the permittee's QA Manual shall be retained on the permittee's premises and available for review by EPA and ADEQ upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.
5. Samples collected during each month of the reporting period must be reported on Discharge Monitoring Report forms, as follows:

- a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:

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

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

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

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

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

6. In accordance with 40 CFR 122.45(c), effluent analyses for all metals, with the exception of chromium VI, shall be measured as “total recoverable metals”. Effluent levels in this permit are for total recoverable metals, except for Chromium VI, for which the levels listed are dissolved.
7. As an attachment to each DMR form, the permittee shall report for all parameters with monitoring requirements specified in **Table 1** of this permit: the test method number or title and published MDL or ML; the test method number or title and preparation procedure used by the laboratory, the laboratory’s MDL for the test method computed in accordance with Appendix B of 40 CFR 135, the standard deviation (S) from the laboratory’s MDL study, and the number of replicate analyses (n) used to compute the laboratory’s MDL; and the laboratory’s lowest calibration standard. Additionally, the permittee shall submit copies of the original laboratories reports along with all DMRs.
8. In addition to information requirements specified under 40 CFR 122.41(j)(3) (see section IV.A.1.j.(3) of this permit), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation.
9. All monitoring results shall be submitted in such a format as to allow direct comparison with the effluent limits, monitoring requirements, and conditions of this permit. Influent and effluent monitoring results must be reported on EPA Form 3320-1, a pre-printed Discharge Monitoring Report form (“DMR”) provided by the EPA DMR Coordinator for NPDES. A DMR form must be submitted for the reporting period even if there was not any discharge. DMR forms shall be submitted on the 28th day of the month following the previous monthly reporting period. For example, the DMR form for January is due by February 28th. Duplicate signed copies of these, and all other reports required herein, shall be submitted to EPA and ADEQ at the following addresses, unless otherwise specified in this permit:

U.S. EPA, Region IX
ATTN: WTR-1, NPDES/ DMR
75 Hawthorne Street
San Francisco, CA 94105

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

Part III. SPECIAL CONDITIONS

A. *Permit Reopener(s)*

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

B. *Wetland Treatment Assessment*

1. The permittee shall complete an assessment study to characterize the treatment of the Tres Rios Flow Regulating Wetland. Results shall be submitted to EPA within one year of the permit issuance or wetland treatment, whichever is later.
2. The assessment shall evaluate all monitored parameters in **Table 1**, however the assessment shall primarily characterize parameters that do not consistently meet water quality standards at FRW-1 and Outfall 005.

C. *In-Stream Monitoring*

1. The permittee shall conduct in-stream water quality monitoring at two points in the Salt River: one point immediately upstream of outfall 005 and the other at the old 115th Avenue bridge.
2. The permittee shall conduct monthly monitoring at both locations for temperature, pH, dissolved oxygen, electrical conductivity/total dissolved solids, nutrients, total suspended solids, turbidity, residual chlorine and river flow. Monitoring events should coincide with corresponding monitoring at outfalls 001 and 005.
3. An annual report of the monitoring shall be reported to EPA and ADEQ. The report shall include data compared with water quality standards and corresponding data for outfalls 001 and 005.

D. *Chronic Whole Effluent Toxicity*

1. The permit establishes a chronic toxicity effluent limit for the water flea, *Ceriodaphnia dubia* of 1.0 TUc Monthly Median and 1.6 TUc Daily Maximum.

The permit establishes action levels of 1.0 TUc Monthly Median and 1.6 TUc Daily Maximum for the fathead minnow, *Pimephales promelas* and green algae, *Selenastrum capricornutum*. Since the completion of one Chronic WET test takes more than 24 hours, the daily maximum is considered to be the highest allowable test result. The Permittee shall conduct monthly chronic toxicity tests for *Ceriodaphnia dubia* and quarterly tests for *Pimephales promelas* and *Selenastrum capricornutum* using 24-hour composite samples of the final effluent.

2. Final effluent samples shall be collected at outfall 001 (may be substituted by outfall 002) and outfall 005. The samples must be taken following all treatment processes, including chlorination and de-chlorination, and prior to mixing with any in-plant return flows or the receiving water. The required WET tests must be performed on unmodified samples of final effluent. WET tests conducted on samples that are de-chlorinated after collection are not acceptable for compliance with this permit.
3. Chemical testing for all parameters listed in **Table 1** of this permit shall be performed concurrent with quarterly WET testing of all three species.
4. Freshwater Species and Test Methods

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

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

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

Within 90 days of the permit effective date, the permittee shall prepare and submit a copy of their Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan (1-2 pages) to the permitting authority for review. This plan shall include steps the permittee intends to follow if toxicity is measured above a chronic WET action level or trigger and should include, at minimum:

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.
- c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

7. Accelerated Toxicity Testing and TRE/TIE Process

- a. If a chronic WET permit limit or action level or trigger is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the permittee shall conduct one additional toxicity test using the same species and test method. This test shall begin within 14 days of receipt of test results exceeding a chronic WET permit limit or trigger. If the additional toxicity test does not exceed a chronic WET permit limit or trigger, then the permittee may return to their regular testing frequency.
- b. If a chronic WET permit limit or action level or trigger is exceeded and the source of toxicity is not known, then the permittee shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12 week period. This testing shall begin within 14 days of receipt of test results exceeding a chronic WET permit limit or trigger. If none of the additional toxicity tests exceed a chronic WET permit limit or trigger, then the permittee may return to their regular testing frequency.
- c. If one of the additional toxicity tests (As described in paragraphs 7.a. or 7.b.) exceeds a chronic WET permit limit or action level or trigger, then, within 14 days of receipt of this test result, the permittee shall initiate a TRE using as guidance, based on the type of treatment facility, EPA manual Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/ 833/B-99/002, 1999) or EPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989). In conjunction, the permittee shall develop and implement a Detailed TRE Workplan which shall include: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. The TRE Workplan shall be submitted to EPA for review and approval within 14 days of receipt of the toxic result.
- d. The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA test method manuals: Toxicity Identification Evaluation:

Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005F, 1992); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996).

8. Reporting of Chronic Toxicity Monitoring Results

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

9. Permit Reopener for Chronic Toxicity

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

E. Biosolids

“Biosolids” means non-hazardous sewage sludge, as defined in 40 CFR 503.9. Sewage sludge that is hazardous, as defined in 40 CFR 261, must be disposed of in accordance with the Resource Conservation and Recovery Act. Arizona is a delegated state and biosolids are regulated under 18 Arizona Administrative Code (AAC), Chapter 9, Article 10. The permit shall meet the requirements of both 40 CFR 503 and the AAC.

1. General Requirements

- a. All biosolids generated by the permittee shall be used or disposed of in compliance with the applicable portions of:

- (1) 40 CFR 503 - for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill); Pursuant to the AAC biosolids may not be incinerated.
- (2) 40 CFR 258 - for biosolids disposed of in a municipal solid waste landfill (with other material);
- (3) 40 CFR 257 - for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

40 CFR 503, Subpart B (land application) sets requirements for biosolids that are applied for the purpose of enhancing plant growth or for land reclamation. 40 CFR 503, Subpart C (surface disposal) sets requirements for biosolids that are placed on the land for the purpose of disposal.

The permittee is responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the permittee uses or disposes of the biosolids, itself, or transfers the biosolids to another party for further treatment, use, or disposal. The permittee is responsible for informing subsequent preparers, applicators, and disposers of the requirements that they must meet under these rules.

- b. Duty to mitigate: The permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.
- c. No biosolids shall be allowed to enter wetlands or other waters of the United States.
- d. Biosolids treatment, storage, use, or disposal shall not contaminate groundwater.
- e. Biosolids treatment, storage, use, or disposal shall not create a nuisance such as objectionable odors or flies.
- f. The permittee shall assure that haulers transporting biosolids off site for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. All haulers must have spill clean-up procedures. Trucks hauling biosolids that are not classified as Exceptional Quality (EQ) under the AAC, shall be cleaned as necessary after loading and after unloading so as to have no biosolids on the exterior of the truck body or wheels. Trucks hauling biosolids that are not EQ shall be tarped. Trucks hauling biosolids that are not EQ may not be used for hauling food or feed crops after unloading the biosolids, unless the permittee submits, for EPA approval, a hauling description of how trucks will be thoroughly cleaned prior to adding food or feed.
- g. If biosolids are stored over two years from the time they are generated, then the permittee must ensure compliance with all surface disposal requirements under 40 CFR 503, Subpart C, or must submit a written notification to EPA and ADEQ

with the information under 40 CFR 503.20(b) demonstrating the need for longer temporary storage. During temporary storage (of any length of time) for biosolids that are not Class A, whether on the facility site or off-site, adequate procedures must be taken to restrict public access and access by domestic animals.

- h. Any biosolids treatment, disposal, or storage site shall have facilities adequate to: divert surface runoff from adjacent areas, protect the site boundaries from erosion, and prevent any conditions that would cause drainage from the materials at the site to escape from the site. Adequate protection is defined as protection from at least a 100-year storm event and from the highest tidal stage that may occur.
- i. There shall be adequate screening at the treatment plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass and other inert objects with a diameter greater than 3/8" are removed.

2. Inspection and Entry

The EPA, ADEQ, or an authorized representative thereof, upon presentation of credentials, shall be allowed by the permittee, directly or through contractual arrangements with their biosolids management contractors, to:

- a. Enter upon all premises where biosolids produced by the permittee are treated, stored, used, or disposed of, either by the permittee or another party to whom the permittee transfers the biosolids for treatment, storage, use, or disposal;
- b. Have access to and copy any records that must be kept under the conditions of this permit or 40 CFR 503, by the permittee or another party to whom the permittee transfers the biosolids for further treatment, storage, use, or disposal; and
- c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by the permittee or another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

3. Monitoring

- a. Biosolids shall be monitored for the following constituents, at the frequency specified in paragraph 3.b: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia-nitrogen, and total solids. This monitoring shall be conducted using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA publication SW-846), as required in 40 CFR 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in "100% dry weight" or "as is". Biosolid samples collected for compliance purposes must be

analyzed by a laboratory licensed by the Arizona Department of Health Services pursuant to relevant sections of the AAC.

- b. The constituents in paragraph 3.a shall be monitored at the following frequency, based on the volume of sewage solids generated per year:

Volume Generated (dry metric tons per year)	Monitoring Frequency *
>0 - <290	Once per year
290 - <1,500	Quarterly
1,500 - <15,000	Once per two months
>15,000	Monthly

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

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

4. Pathogen and Vector Control

- a. Prior to land application, the permittee shall demonstrate that biosolids meet Class A or Class B pathogen reduction levels using one of the alternatives listed under 40 CFR 503.32. Additionally, the permittee shall ensure that biosolids meet, and retain records of the operational parameters used to achieve, Vector Reduction requirements in AAC R18-9-1010. Specifically, the permittee shall ensure, and keep documentation, that all biosolids that are sold or given away in a bag or other container, meet one of the vector attraction reduction alternatives established in AAC R18-9-1010 subsections (A)(1) through (A)(8).
- b. Prior to disposal in a surface disposal site, the permittee shall demonstrate that the biosolids meet Class B pathogen reduction levels or shall ensure that the site is covered at the end of each operating day. If pathogen reduction is demonstrated using a Process to Significantly/Further Reduce Pathogens, then the permittee shall maintain daily records of the operating parameters used to achieve this reduction.

If pathogen reduction is demonstrated by testing for fecal coliform and/or other pathogens, then samples must be drawn at the frequency described in paragraph 3.b, above. If Class B pathogen reduction levels are demonstrated using fecal coliform, then at least seven grab samples must be drawn during each sampling event and a geometric mean calculated from these seven samples.

The following sample holding times between sample collection and sample analysis shall not be exceeded: Salmonella sp. - 24 hours when cooled to 4 °C; enteric viruses - 2 weeks when frozen; helminth ova - one month when cooled to 4 °C.

- c. For biosolids that are land applied or placed in a surface disposal site, the permittee shall track and keep records of the operational parameters used to achieve the Vector Attraction Reduction requirements in 40 CFR 503.33(b).

5. Surface Disposal

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), then a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

6. Landfill Disposal

Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (Method Number 9095 in SW-846) at the frequency indicated in paragraph 3.b, above, or more often if necessary, to demonstrate that there are no free liquids.

7. Notification and Reporting

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

(1) Notification of noncompliance: The permittee shall notify EPA, ADEQ and the use/disposal site of any noncompliance within 24 hours, if the noncompliance may seriously endanger health or the environment. For other instances of noncompliance, the permittee shall notify EPA, ADEQ and the use/disposal site, in writing, within five working days of becoming aware of the circumstances. The permittee shall require their biosolids management contractors to notify EPA, ADEQ and the use/disposal site of any noncompliance within these same timeframes.

(2) Interstate notification: If biosolids are shipped to another State, Tribal Lands, or Territory, then the permittee shall send a 60-day prior notice of the shipment to permitting authorities in the receiving State, Tribal Lands, or Territory, and EPA Regional Office.

(3) Land Application: Prior to using any biosolids from this facility at a new or previously unreported site, the permittee shall notify EPA, ADEQ and, in cases where biosolids are being applied to Tribal Lands, GRIC DEQ. The notification shall include: a description and topographic map of the proposed site(s), names and addresses of the applier and site owner, and a list of any state or local permits which must be obtained. The plan shall include a description of the crops or vegetation to be grown, proposed loading rates,

and determination of agronomic rates.

If any biosolids within a given monitoring period do not meet the pollutant limits for metals under 40 CFR 503.13, then the permittee (or its contractor) must pre-notify EPA and ADEQ and determine the cumulative metals loading to date at that site, as required in 40 CFR 503.12.

The permittee shall notify the applier of 40 CFR 503-requirements that are applicable to the applier, including applier certification that management practices, site restrictions, and vector attraction reduction requirements have been met. The permittee shall require the applier to certify at the end of 38 months following the application of Class B biosolids, that the harvesting restrictions in effect for up to 38 months have been met.

(4) Surface Disposal

Prior to disposal at a new or previously unreported site, the permittee shall notify EPA, ADEQ and, in cases where biosolids are being disposed of in Tribal Lands, GRIC DEQ. The notice shall include: a description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator, site owner, and any State or local permits. The notice shall describe procedures for ensuring restricted public access and grazing restrictions for three years following site closure. The notice shall include a groundwater monitoring plan, or a description of why groundwater monitoring is not required.

- b. The permittee shall submit an annual biosolids report to the EPA Region 9 Biosolids Coordinator and ADEQ Biosolids Coordinator by February 19 of each year for the period covering the previous calendar year. This report shall include:
- (1) The amount of biosolids generated that year and the amount of biosolids accumulated from previous years, in dry metric tons.
 - (2) Results of all pollutant monitoring required in the Monitoring section, above, reported on a 100% dry weight basis.
 - (3) Demonstrations and certifications of pathogen reduction methods and vector attraction reduction methods, as required in 40 CFR 503.17 and 503.27.
 - (4) Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, or disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and the volumes delivered to each.
 - (5) For land application sites, the following information must be submitted by the permittee, unless the permittee requires its biosolids management

contractors to report this information directly to the EPA Region 9 Biosolids Coordinator:

The locations of land application sites used that calendar year (with field names and numbers), size of each field applied to, applicator, and site owner; the volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, and calculated plant available nitrogen; the crop planted, date of planting, and date of harvesting; for biosolids exceeding 40 CFR 503.13 Table 3 pollutant concentrations, the locations of sites where applied and cumulative metals loading at that site to date; certifications of management practices in 40 CFR 503.14 and certifications of site restrictions in 40 CFR 503.32(b)(5).

- (6) For surface disposal sites: The locations of sites, site operator, site owner, and size of parcel on which disposed; the results of any required groundwater monitoring; certifications of management practices in 40 CFR 503.24; and for closed sites, the date of site closure and certifications of management practices for the three years following site closure.
- (7) All reports shall be submitted to:

Regional Biosolids Coordinator
U.S. Environmental Protection Agency, Region 9
CWA Compliance Office (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105-3901

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

F. Pretreatment

1. As parties contributing to the City of Phoenix treatment works, the Cities of Phoenix, Glendale, Mesa, Scottsdale, and Tempe, Arizona (hereafter, "the Cities") shall be individually responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions. Where 40 CFR 403 places mandatory actions on the Cities as Control Authority, but does not specify a timetable for completion of the actions, the Cities shall complete the required actions within six months from the issuance date of this permit, or the effective date of the 40 CFR 403 revision, whichever comes later. For violations of pretreatment requirements, the Cities shall be subject to enforcement actions, penalties, fines, and other remedies by EPA, ADEQ, or other appropriate parties, as provided in the CWA. EPA or ADEQ may

initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements, as provided in the CWA.

2. The Cities shall enforce the requirements promulgated under CWA sections 307(b), 307(c), 307(d), and 402(b) with timely, appropriate, and effective enforcement actions. The Cities shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those standards or, in the case of a new nondomestic user, upon commencement of discharge.
3. The Cities shall perform the pretreatment functions, as required in 40 CFR 403 including, but not limited to:
 - a. Implement the necessary legal authorities, as provided in 40 CFR 403.8(f)(1);
 - b. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - c. Implement the programmatic functions, as provided in 40 CFR 403.8(f)(2); and
 - d. Provide the requisite funding and personnel to implement the pretreatment program, as provided in 40 CFR 403.8(f)(3).
4. The Cities shall submit annually a report to EPA Region 9 and ADEQ describing their pretreatment activities over the previous calendar year. If any City is not in compliance with any conditions or requirements of this permit, then the City shall also include the reasons for noncompliance and state how and when the City shall comply with such conditions or requirements. This annual report shall cover operations from January 1 through December 31 and is due on February 28 of each year. The report shall contain, but not be limited to, the following information (paragraph (a) applies only to the City of Phoenix):
 - a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants identified under CWA section 307(a) which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan. Influent or effluent monitoring data shall be provided for nonpriority pollutants which the Cities believe may be causing or contributing to Interferences or Pass Through. All sampling and analysis required under this paragraph must be performed using the test methods specified under 40 CFR 136. Sampling and analysis for asbestos is not required. Sludge sampling and analyses are covered elsewhere in this permit.
 - b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the Cities know or suspect were caused by nondomestic users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and

address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limits to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Interference or Pass Through.

- c. An updated list of the Cities' significant industrial users ("SIUs"), including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Cities shall provide a brief explanation of each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limits.
- d. The Cities shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - (1) Name of the SIU;
 - (2) Category, if subject to federal categorical standards;
 - (3) The type of wastewater treatment or control processes in place;
 - (4) The number of samples taken by the POTW during the year;
 - (5) The number of samples taken by the SIU during the year;
 - (6) For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - (7) A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
 - (8) Whether the facility is in significant noncompliance (SNC), as defined at 40 CFR 403.12(f)(2)(viii) at any time during the year; and
 - (9) A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance;
- e. A brief description of any programs the POTW implements to reduce pollutants from nondomestic users that are not classified as SIUs;
- f. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;

- g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and
 - h. A summary of activities to involve and inform the public of the program, including a copy of the newspaper notice, if any, required under 40 CFR 403.8(f)(2)(viii).
5. The Cities shall submit an annual SIU noncompliance status report to EPA and ADEQ. The report shall contain:
- a. The name and address of all SIUs which violated any discharge or reporting requirements during the reporting period;
 - 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 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 pretreatment reports shall be submitted to:

Regional Pretreatment Coordinator
CWA Compliance Office (WTR-7)
Water Division
USEPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Pretreatment Coordinator
Water Quality Compliance Assurance Unit
Arizona DEQ
Mail Code: 5415B-1
1110 W. Washington Street
Phoenix, AZ 85007

G. Capacity Attainment and Planning

The permittee shall file a written report with EPA within ninety (90) days after the average dry-weather waste flow for any month that either equals or exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities. The permittee's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

- 1. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.

2. The permittee's best estimate of when the average daily dry weather flow rate will equal or exceed the design capacity of the facilities.
3. The permittee's intended schedule for the studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present facilities.

Part IV. SANITARY SEWER OVERFLOWS

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

1. Immediate Reporting
 - a. The permittee shall report to the Director any overflow that may endanger health or the environment from a sanitary sewer or any unauthorized overflow from a combined sewer over which the permittee has ownership or operational control. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to EPA and the applicable State or Tribal authority in accordance with the 24 hour reporting guidelines specified in Part II.A. of this permit. At a minimum, the report shall identify:
 - (i) The location of the overflow, including approximate street address and GPS coordinates;
 - (ii) The receiving water or description of flow destination;
 - (iii) The duration of the overflow; and
 - (iv) The estimated volume of the overflow.
 - b. An *overflow* is any spill, release or diversion of municipal sewage, including:
 - (i) An overflow that results in a discharge to waters of United States (other than a combined sewer overflow that is authorized by a permit); and
 - (ii) An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.
2. Written Reports
 - a. The Permittee shall also provide a written report to the Director for any overflow identified under paragraph (1) within 5 days of the time the permittee becomes aware of the circumstances. The written report shall contain a description of:

- (i) The location of the overflow;
 - (ii) The receiving water (if there is one);
 - (iii) An estimate of the volume of the overflow;
 - (iv) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
 - (v) The estimated date and time when the overflow began and stopped or will be stopped;
 - (vi) The cause or suspected cause of the overflow;
 - (vii) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
 - (viii) If reasonably made, an estimate of the number of persons who came into contact with wastewater from the overflow; and
 - (ix) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.
- b. The Director may waive the written report on a case-by-case basis for reports under paragraph (A) of this section if the oral report required by paragraph (1) above has been received within 24 hours.
 - c. **DMRs** -The permittee shall report any overflow that is not reported under paragraphs (1) or (2)(A) above in the discharge monitoring report required by this permit. The discharge monitoring report shall contain the information listed in paragraph (2)(A) above.
3. Record Keeping. The permittee must maintain a record of the following information for a period of at least 3 years from the date of the report:
- a. any report submitted under paragraph (2); and
 - b. any report, including work orders that are associated with investigation of system problems related to an overflow, that describes the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow, or that documents system performance.
4. Third Party Notice

- a. The permittee must develop a plan that describes how the permittee will notify, under various overflow (and unanticipated bypass and upset) scenarios, the public, as well as other entities, of overflows that may endanger health. The plan should identify all overflows that would be reported, and the specific information that would be reported to each entity receiving notification. The plan should include a description of lines of communication and the identities of responsible officials.
- b. The permittee must immediately notify the public, health agencies and other affected entities (e.g. public water systems) of overflows from a sanitary sewer and any unauthorized overflow from a combined sewer that the permittee owns or over which it has operational control that meet the criteria developed in accordance with paragraph (a); or any unanticipated bypass or upset that exceeds any effluent limitation in the permit, in accordance with the notification procedures developed in paragraph (a) of this section.

B. Proper Operation and Maintenance: Municipal Sanitary Sewer Systems - Capacity, Management, Operation and Maintenance (CMOM) Programs.

1. General Standards.
 - a. Discharges from unauthorized locations are prohibited.
 - b. The permittee must properly manage, operate and maintain, at all times, all parts of the collection system that the permittee owns or over which it has operational control;
 - c. The permittee must take all feasible steps to stop, and mitigate the impact of, sanitary sewer overflows in portions of the collection system the permittee owns or over which it has operational control.
2. Components of CMOM Program. The permittee must develop and implement capacity, management, operation and maintenance (CMOM) programs that addresses subparagraphs (D), (E), (F), (G) and, if applicable, (H), to comply with paragraph (1) of this section. The Cities must develop written summaries of their CMOM programs that addresses subparagraphs (A) through (G), and, if necessary, subparagraph (H). The written summaries, and the program audits under paragraph (2)(I) of this section, must be available to the public upon request. The written summaries addressing subparagraphs (A) through (G), and, if necessary, subparagraph (H), and the program audit under paragraph (2)(I) of this section, must be submitted to the NPDES authority with the application for the next permit renewal. The programs do not need to address any element of this section that the permittee believes is not appropriate or applicable for itsr CMOM programs, provided that the permittee's written summary explains why such element is not appropriate or applicable. Except as provided above, the programs must include the following components:

- a. Goals. The written summaries must specifically identify the major goals of their CMOM programs, consistent with the general standards identified above.
- b. Organization. The written summaries must identify administrative and maintenance personnel positions responsible for implementing measures in their CMOM programs, including lines of authority by organization chart or similar document.
- c. Legal Authority. The written summary must describe the permittee's legal authority, e.g., sewer use ordinances, service agreements or other legally binding documents, to:
 - (i) Control infiltration and connections from inflow sources;
 - (ii) Require that sewers and connections be properly designed and constructed;
 - (iii) Ensure proper installation, testing, and inspection of new and rehabilitated sewers (such as new or rehabilitated collector sewers and new or rehabilitated service laterals);
 - (iv) Control flows from municipal satellite collection systems;
 - (v) Access all necessary locations and undertake all necessary actions for appropriate emergency response;
 - (vi) Implement the general and specific prohibitions of the national pretreatment program under 40 CFR 403.5; and
 - (vii) Control grease.
- d. Overflow Emergency Response Plan. The permittee's CMOM programs must include a overflow emergency response plans to protect public health from overflows and unanticipated bypasses or upsets that exceed any effluent limitation in the permit. At a minimum the emergency response plans must include mechanisms to:
 - (i) Ensure that the permittee is aware (to the greatest extent possible) of all overflows from portions of the collection systems over which the permittee has ownership or operational control and any unanticipated bypass or upset that exceeds any effluent limitation in the permit;
 - (ii) Ensure appropriate responses including assurance that reports of an overflow or of an unanticipated bypass or upset that exceeds any effluent limitation in the permit are immediately dispatched to appropriate personnel for investigation and response;

- (iii) Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained.
- e. Measures and Activities. The permittee's CMOM programs must address the following elements that are appropriate and applicable to the permittee's system, and the written summary must identify the person or position in its organization responsible for each element:
- (i) Provide adequate maintenance facilities and equipment;
 - (ii) Maintain a map of the collection system;
 - (iii) Manage and use timely, relevant information to establish and prioritize appropriate CMOM activities;
 - (iv) Conduct routine preventive operation and maintenance activities;
 - (v) Assess the current dry and wet weather capacities of the collection system and treatment facilities which the permittee owns or over which it has operational control;
 - (vi) Identify and prioritize structural deficiencies, and identify and implement short-term and long-term rehabilitation actions to address each deficiency;
 - (vii) Provide appropriate training on a regular basis; and
 - (viii) Maintain equipment and replacement parts inventories including identification of critical replacement parts.
- f. Design and Performance Provisions. The permittee must establish:
- (i) Requirements and standards for the installation of new sewers, pumps and other appurtenances; and rehabilitation and repair projects; and
 - (ii) Procedures and specifications for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.
- g. Monitoring, Measurement, and Program Modifications. The permittee must:
- (i) Monitor the implementation and, where appropriate, measure the effectiveness of each element of their CMOM programs;
 - (ii) Update program elements as appropriate based on monitoring or performance evaluations; and

- (iii) Modify the summary of their CMOM programs as appropriate to keep them updated and accurate.
- h. System Evaluation and Capacity Assurance Plan. If peak flow conditions are contributing to an unauthorized discharge from the permittee's separate sanitary collection systems or to noncompliance at a treatment plant, then the permittee must prepare and implement plans for system evaluation and capacity assurance. At a minimum the plans must include:
- (i) Evaluation. Steps to evaluate those portions of the collection system which the permittee owns or over which it has operational control which are experiencing or contributing to an unauthorized discharge from its separate sanitary collection system caused by hydraulic deficiency or to noncompliance at a treatment plant. The evaluation must provide estimates of peak flows (including unauthorized flows discharged from the separate sanitary collection system) associated with conditions similar to those causing overflow events, provide estimates of the capacity of key system components, identify hydraulic deficiencies (including components of the system with limiting capacity) and identify the major sources that contribute to the peak flows associated with overflow events.
 - (ii) Capacity Enhancement Measures. Establish short- and long-term actions to address each hydraulic deficiency including prioritization, alternatives analysis, and a schedule.
 - (iii) Plan Updates. The plan must be updated to describe any significant change in proposed actions and/or implementation schedule. The plan must also be updated to reflect available information on the performance of measures that have been implemented.
- i. CMOM Program Audits. Beginning no later than the second year of the permit term, the permittee must conduct comprehensive audits, appropriate to the size of the system and the number of overflows evaluating itsr CMOM programs and compliance with this subsection, including their deficiencies and steps to respond to them.
- j. Communications. The permittee should communicate on a regular basis with interested parties on the implementation and performance of its CMOM programs. The communication systems should allow interested parties to provide input to the permittee as the CMOM programs are developed and implemented.

The permittee must fully implement all components of their CMOM program as described in (2).

Overflows, spills, releases, and diversions of wastewater from a sanitary sewer collection system to waters of the United States are prohibited.

Part V. BMP AND SWPPP REQUIREMENTS

The permittee does not directly discharge storm water through any outfall. The permittee shall, however, comply with requirements set forth under the U.S. EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (2008). These requirements include Control Measures (Section 2.1), Corrective Actions (Section 3), Inspections (Section 4), Stormwater Pollution Prevention Plan (Section 5 and below) and Sector-Specific Requirements (Section 8, Subpart T).

The permittee shall adjust their Storm Water Pollution Prevention Plan (SWPPP) to ensure consistency with the SWPPP requirements outlined in the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP), as it applies. The requirements are detailed below:

A. Contents of the SWPPP.

The SWPPP must contain all of the following elements:

- Stormwater pollution prevention team (see Section 1 below);
- Site description (Section 2);
- Summary of potential pollutant sources (Section 3);
- Description of control measures (Section 4);
- Schedules and procedures (Section 5); and
- Signature requirements (Section 6).

Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) developed for a National Environmental Performance Track facility, copies of the relevant portions of those documents must be kept with the SWPPP.

1. Stormwater Pollution Prevention Team.

The permittee must identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities. The permittee's stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

2. Site Description.

The SWPPP must include the following:

- a. *Activities at the Facility.* Provide a description of the nature of the industrial activities at your facility.
- b. *General location map.* Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges.
- c. *Site map.* Provide a map showing:
 - i. the size of the property in acres;
 - ii. the location and extent of significant structures and impervious surfaces;
 - iii. directions of stormwater flow (use arrows);
 - iv. locations of all existing structural control measures;
 - v. locations of all receiving waters in the immediate vicinity of your facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them;
 - vi. locations of all stormwater conveyances including ditches, pipes, and swales;
 - vii. locations of potential pollutant sources identified under Part 5.1.3.2;
 - viii. locations where significant spills or leaks identified under Part 5.1.3.3 have occurred;
 - ix. locations of all stormwater monitoring points;
 - x. locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2, etc), indicating if you are treating one or more outfalls as “substantially identical” under Parts 4.2.3, 5.1.5.2, and 6.1.1, and an approximate outline of the areas draining to each outfall;
 - xi. municipal separate storm sewer systems, where your stormwater discharges to them;
 - xii. locations and descriptions of all non-stormwater discharges identified under Part 2.1.2.10;
 - xiii. locations of the following activities where such activities are exposed to precipitation:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;
 - loading/unloading areas;
 - locations used for the treatment, storage, or disposal of wastes;
 - liquid storage tanks;
 - processing and storage areas;
 - immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
 - transfer areas for substances in bulk;
 - machinery;
 - grit, screening, and other solids handling, storage, or disposal areas;
 - sludge drying beds;
 - dried sludge beds;
 - compost piles;

- septage or hauled waste receiving stations; and
 - storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides; and
- xiv. locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.

3. Summary of Potential Pollutant Sources.

The permittee must document areas at the facility where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released. *Industrial materials or activities* include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

- a. **Activities in the area.** A list of the industrial activities exposed to stormwater including, but not limited to: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.
- b. **Pollutants.** A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to stormwater in the 3 years prior to the date you prepare or amend the SWPPP.
- c. **Spills and Leaks.** The permittee must document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The permittee must document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the date you prepare or amend the SWPPP. Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.
- d. **Non-Stormwater Discharges.** The permittee must document that they have evaluated for the presence of non-stormwater discharges and that all

unauthorized discharges have been eliminated. Documentation of the evaluation must include:

- i. The date of any evaluation;
 - ii. A description of the evaluation criteria used;
 - iii. A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
 - iv. The different types of non-stormwater discharge(s) and source locations; and
 - v. The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.
- e. Salt Storage.* The permittee must document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.
- f. Sampling Data.* The permittee must summarize all stormwater discharge sampling data collected at your facility during the previous permit term.

4. Description of Control Measures.

- a. Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits.* The permittee must document the location and type of control measures installed and implemented at the site to ensure consistency with the non-numeric effluent limits and numeric effluent limitations listed in Part I. This documentation must describe how the control measures at the site address both the pollutant sources identified in Part IV.A.3., and any stormwater run-on that commingles with any discharges covered under this permit.

5. Schedules and Procedures.

- a. Pertaining to Control Measures Used to Comply with the Effluent Limits.* The following must be documented in your SWPPP (refer to Part 2 of the MSGP for further details):
- i. Good Housekeeping— A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;
 - ii. Maintenance— Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;

iii. Spill Prevention and Response Procedures– Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review consistent with Part 5.3; and

iv. Employee Training– A schedule for all types of necessary training.

b. *Pertaining to Monitoring and Inspection.* The permittee must document in the SWPPP procedures for performing, as appropriate, three types of inspections, including (refer to Part 4 of the MSGP for further details):

- i. Routine facility inspections;
- ii. Quarterly visual assessment of stormwater discharges; and
- iii. Comprehensive site inspections.
- iv. For each type of inspection performed, the SWPPP must identify:
- v. Person(s) or positions of person(s) responsible for inspection;
- vi. Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular stormwater runoff discharges (see Part 4.2.3); and
- vii. Specific items to be covered by the inspection, including schedules for specific outfalls.

6. Signature Requirements.

The permittee must have the SWPPP signed and dated by either a principal executive officer or ranking elected official.

7. Wastewater and Washwater Requirements.

The permittee shall keep a copy of NPDES permit AZ0020524 with the SWPPP.

B. *Required SWPPP Modifications.*

The permittee must modify the SWPPP whenever necessary to address any instances of violation to this permit due to storm water to ensure that they do not reoccur.

C. *SWPPP Availability.*

The permittee must retain a copy of the current SWPPP required by this permit at the facility, and it must be immediately available to EPA; a State, Tribal, or local agency approving stormwater management plans; the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request. EPA may provide access to portions of your SWPPP to a member of the public upon request.

Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within EPA, USFWS, or NMFS.

EPA encourages the permittee to post its SWPPP online.

D. Additional Documentation Requirements.

The permittee is required to keep the following inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit:

1. A copy of this NPDES permit;
2. Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through stormwater or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases;
3. Records of employee training, including date training received;
4. Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules;
5. All inspection reports, including the Routine Facility Inspection Reports, the Quarterly Visual Assessment Reports, and the Comprehensive Site Inspection Reports;
6. Description of any corrective action taken at the site, including triggering event and dates when problems were discovered and modifications occurred;

Part VI. STANDARD PERMIT CONDITIONS

A. All NPDES Permits

1. In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.
 - a. Duty to comply; at 40 CFR 122.41(a).

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

- (1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- (2) The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in

imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

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

- b. Duty to reapply; at 40 CFR 122.41(b).
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- c. Need to halt or reduce activity not a defense; at 40 CFR 122.41 (c).
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- d. Duty to mitigate; at 40 CFR 122.41(d).
The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- e. Proper operation and maintenance; at 40 CFR 122.41(e).
The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

- f. Permit actions; at 40 CFR 122.41(f).
This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- g. Property rights; at 40 CFR 122.41(g).
This permit does not convey any property rights of any sort, or an exclusive privilege.
- h. Duty to provide information; at 40 CFR 122.41(h).
The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.
- i. Inspection and entry; at 40 CFR 122.41(i).
The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:
 - (1) 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;
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; and
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.
- j. Monitoring and records; at 40 CFR 122.41(j).
 - (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and

records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

- (i) The date, exact place, and time of sampling or measurements;
- (ii) The individual(s) who performed the sampling or measurements;
- (iii) The date(s) analyses were performed
- (iv) The individuals(s) who performed the analyses;
- (v) The analytical techniques or methods used; and
- (vi) The results of such analyses.

(4) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.

(5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

k. Signatory requirement; at 40 CFR 122.41(k).

(1) All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.)

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

1. Reporting requirements; at 40 CFR 122.41(l).
 - (1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required only when:
 - (i) The alternation or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - (ii) 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).
 - (iii) 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;
 - (2) 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.
 - (3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)
 - (4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) 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.
 - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 503, or as specified in the permit, the results of 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.

- (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- (5) 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.
- (6) Twenty-four hour reporting.
- (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 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 the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - (ii) 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).)
 - (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).)
 - (iii) The Director may waive the written report on a case-by-case basis for reports under 40 CFR 122.41(l)(1)(ii) of this section if the oral report has been received within 24 hours.
- (7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under 40 CFR 122.41(l)(1), (4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l) (6) of this section.
- (8) 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.

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

(1) Definitions.

- (i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) "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.

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

(3) Notice.

- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (1)(6) of this section (24-hour notice).

(4) Prohibition of bypass.

- (i) 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 downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

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

- (1) 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.
- (2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated; and
 - (iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).
 - (iv) The permittee complied with any remedial measures required under paragraph (d) of this section.
- (4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B. Specific Categories of NPDES Permits

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

1. Publicly owned treatment works.

a. At 40 CFR 122.42(b). All POTWs must provide adequate notice to the Director of the following:

- (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 and 306 of the CWA if it were directly discharging those pollutants; and
- (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

b. The following condition has been established by EPA Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act. Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 through 261-33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

C. Standard Conditions Established by EPA Region 9

1. Duty to reapply; at 40 CFR 122.21(d).

- a. Any POTW with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

- b. All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that: (1) the Regional Administrator may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date.
2. Signatories to permit applications and reports; at 40 CFR 122.22.
 - a. Applications. All permit applications shall be signed as follows:
 - (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (A) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (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.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.
 - (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional 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 or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
 - (3) The written authorization is submitted to the Director.
 - c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. “
3. Transfer of permits; at 40 CFR 122.61.
- a. Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR 122.62(b)(2)), or a minor modification made (under 40 CFR 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.

- b. Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - (1) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
 - (2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (3) 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 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.
- 4. Minor modifications of permits; at 40 CFR 122.63.

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

 - a. Correct typographical errors;
 - b. Require more frequent monitoring or reporting by the permittee.
 - c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
 - d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director;
 - e. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR 122.29.
 - f. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits

7. **Removed Substances; pursuant to CWA 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 entering waters of the U.S.
8. **Severability; pursuant to CWA section 512**
The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.
9. **Civil and Criminal Liability; pursuant to CWA section 309**
Except as provided in permit conditions on “Bypass” and “Upset”, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
10. **Oil and Hazardous Substances Liability; pursuant to CWA 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 CWA.
11. **State, Tribe, or Territory Law; pursuant to CWA section 510**
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State, Tribe, or Territory law or regulation under authorities preserved by CWA section 510.

Part VII. DEFINITIONS

1. “Best Management Practices” or “BMPs” are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the U.S. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.
2. A “composite” sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
3. A “daily discharge” means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.
4. A “daily maximum allowable effluent limitation” means the highest allowable “daily discharge.”
5. A “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.
6. A “grab” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
7. The “method detection limit” or “MDL” is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater

than zero, as defined by a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.

8. The “minimum level” or “ML” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:
 - a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
 - b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) x 10ⁿ, where n is zero or an integer. (For example, if an MDL is 2.5 ug/l, then the calculated ML is: 2.5 ug/l x 3.18 = 7.95 ug/l. The multiple of (1, 2, or 5) x 10ⁿ nearest to 7.95 is 1 x 10¹ = 10 ug/l, so the calculated ML, rounded to the nearest whole number, is 10 ug/l.)
9. A “NODI(B)” means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory’s MDL.
10. A “NODI(Q)” means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory’s MDL, but less than the ML.
11. “ADEQ” stands for Arizona Department of Environmental Quality
12. “GRIC” stands for Gila River Indian Community. “GRIC DEQ” stands for GRIC Department of Environmental Quality.