



ADEQ Inventory No.	100525	Permit No.	AZ0000035
LTF No.	79425	Place ID No.	9676

## AUTHORIZATION TO DISCHARGE UNDER THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Article 2.1; the Federal Water Pollution Control Act, (33 U.S.C. §1251 et seq., as amended), and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 9 and 10, and amendments thereto,

ASARCO LLC – Ray Operations  
P.O. Box 640  
Kearny, AZ 85137

is authorized to discharge into the Gila River, at the following location, stormwater that is conveyed in Mineral Creek including the diversion tunnel and lined and unlined channels:

Outfall No.	Latitude	Longitude	Legal
010 (Outfall of Mineral Creek to the Gila River)	33° 06' 11" N	110° 58' 32" W	Township 3 S, Range 13 E, Section 24

in accordance with discharge limitations, pollution control requirements, monitoring requirements and other conditions set forth herein, and in the attached "Standard AZPDES Permit Conditions." The discharge authorized under this permit includes the potential that stormwater commingled with Mineral Creek tunnel seepage containing pollutants attributable to Ray Operations flowing into the Gila River constitutes a discharge to waters of the United States.

Annual Registration Fees [A.R.S. 49-255.01 and A.A.C. R18-14-104]

The annual registration fee for this permit is payable to ADEQ each year. For the purposes of the annual fees, this permit is a Major permit.

This permit shall become effective on \_\_\_\_\_, 2021.

This permit and the authorization to discharge shall expire at midnight, \_\_\_\_\_, 2026.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Trevor Baggione, Director  
Water Quality Division  
Arizona Department of Environmental Quality

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## PART I – DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

### A. Discharge Limitations and Monitoring Requirements

The Permittee shall limit and monitor discharges from Outfall 010, at MIN-1, as specified in Table 1.a.

Table 1.a - Discharge Limitations and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limitations (Applicable at MIN-1)	Monitoring Requirement	
	Daily Maximum Concentration Limits (1)	Monitoring Frequency (2)	Sample Type
Flow (MGD) (3)	Report (4)	Monthly	Estimated
Copper (5)	29 µg/L	Monthly	Discrete
Selenium	2.0 µg/L	Monthly	Discrete
Hardness (5) (Receiving water)	Report [mg/L]	Monthly	Discrete

#### Footnotes

1. All metal limits are for total recoverable metals.
2. Monitoring results shall be reported monthly. See Part II.B.
3. Flows in Mineral Creek shall be measured at the locations specified in Part II.A.1.
4. Monitoring and reporting required. No limit set at this time.
5. This discharge limit listed is based on the average receiving water hardness in the Gila River of 400 mg/L as CaCO<sub>3</sub>. The Gila River must be tested for hardness at the same time that the metal samples are taken. Please see the hardness definition in Appendix A, Part B.

In order to assess compliance with the discharge limitations in Table 1.a, the Permittee shall also conduct monitoring upstream at BBD-1 as specified in Part II.A.1 below, for parameters listed in Table 1.b.

Table 1.b - Monitoring Requirements at BBD-1

Parameter	Reporting Units	Monitoring Requirement	
		Monitoring Frequency (2)	Sample Type
Flow (MGD) (3)	Report (4)	Monthly	Estimated
Copper	Report [µg/L]	Monthly	Discrete
Selenium	Report [µg/L]	Monthly	Discrete

**Footnotes**

1. All metal limits are for total recoverable metals.
2. Monitoring results shall be reported monthly. See Part II.B.
3. Flows in Mineral Creek shall be measured at the locations specified in Part II.A.1.
4. Monitoring and reporting required. No limit set at this time.

## B. Whole Effluent Toxicity Monitoring

The Permittee shall monitor discharges from Outfall 010, at MIN-1, for Whole Effluent Toxicity (WET) as specified in Table 2.a. If toxicity is detected above an Action Level as specified below, the Permittee must perform follow-up actions and, as applicable, follow the TIE/TRE processes in Part III.E of the permit.

Table 2.a – WET Testing Action Levels

Discharge Characteristic (1)	Action Levels (3)		Monitoring Requirements (6)	
	Daily Maximum (2)	Monthly Median	Monitoring Frequency	Sample Type
Acute Toxicity (4) <i>Pimephales promelas</i> (Fathead minnow)	N/A	Fail	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Acute Toxicity (4) <i>Ceriodaphnia dubia</i> (Water flea)	N/A	Fail	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Chronic Toxicity <i>Pseudokirchneriella subcapitata</i> (Green algae) (5)	1.6 TUc	1.0 TUc	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Chronic Toxicity <i>Pimephales promelas</i> (Fathead minnow)	1.6 TUc	1.0 TUc	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Chronic Toxicity <i>Ceriodaphnia dubia</i> (Water flea)	1.6 TUc	1.0 TUc	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete

### Footnotes

- See Part III for additional requirements for testing and reporting Whole Effluent Toxicity (WET).
- Since completion of one chronic WET test takes more than 24 hours, the daily maximum is considered to be the highest allowable test result.
- If chronic toxicity is detected above the Action Levels in this table or an acute test fails, the Permittee must perform follow-up actions. See Part III for details.
- The requirement for an acute test applies when duration of discharge doesn't allow for chronic tests to be conducted. See Part III.
- Formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*.
- The initial WET test should be conducted on samples collected concurrently with the samples collected for the monitoring required in Part I.A. See Part III.A.3.

In order to assess whether toxicity is detected above an Action Level in Table 2.a, the Permittee shall also conduct monitoring at BBD-1 as specified in Part II.A.1 of the permit, for WET as listed in Table 2.b.

Table 2.b -- WET Monitoring at BBD-1

Discharge Characteristic (1)	Reporting Units		Monitoring Requirements (6)	
	Daily Maximum (2)	Monthly Median	Monitoring Frequency (3)	Sample Type
Acute Toxicity (4) <i>Pimephales promelas</i> (Fathead minnow)	---	Report [Fail]	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Acute Toxicity (4) <i>Ceriodaphnia dubia</i> (Water flea)	---	Report [Fail]	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Chronic Toxicity <i>Pseudokirchneriella subcapitata</i> (Green algae) (5)	Report [TUC]	Report [TUC]	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Chronic Toxicity <i>Pimephales promelas</i> (Fathead minnow)	Report [TUC]	Report [TUC]	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete
Chronic Toxicity <i>Ceriodaphnia dubia</i> (Water flea)	Report [TUC]	Report [TUC]	1x/ during the 1 <sup>st</sup> year of the permit term	Discrete

#### Footnotes

- See Part III for additional requirements for testing and reporting Whole Effluent Toxicity (WET).
- Since completion of one chronic WET test takes more than 24 hours, the daily maximum is considered to be the highest allowable test result.
- Monitoring is to be conducted one time during the first year of the permit term, in conjunction with WET monitoring in Table 2.a.
- The requirement for an acute test applies when duration of discharge doesn't allow for chronic tests to be conducted. See Part III.
- Formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*.
- The initial WET test should be conducted on samples collected concurrently with the samples collected for the monitoring required in Part I.A. See Part III.A.3.

### C. Discharge Characterization Monitoring

The Permittee shall conduct discharge characterization monitoring of discharges from Outfall 010 at locations MIN-1 and BBD-1, as specified in Part II.A.1, for the parameters listed in Table 3. The Permittee shall monitor for the following parameters during the first year following the permit effective date to characterize priority pollutants and assess the presence of pollutants in the discharge.

Table 3 – Discharge Characterization Monitoring – Selected Metals, Hardness, Dissolved Oxygen, and pH

Parameter (1)	Reporting Units	Monitoring Requirement	
		Monitoring Frequency (2)(3)	Sample Type
Arsenic	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Cadmium	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Chromium Total	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Copper	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Lead	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Mercury	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Selenium	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Zinc	µg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Hardness	mg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
Dissolved Oxygen	mg/L	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete
pH	S.U.	Monthly during the 1 <sup>st</sup> year of the permit term	Discrete

#### Footnotes

1. All metals analyses shall be for total recoverable metals.
2. If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 3 requirements.
3. Monitoring is to be conducted monthly during the 1<sup>st</sup> year of the permit term, in conjunction with compliance sampling in Table 1.a.

#### D. Surface Water Quality Standards

1. The discharge shall be free from pollutants in amounts or combinations that, in the receiving water (Gila River):
  - 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 or propagation of other aquatic life or that impair recreational uses;
  - f. Change the color of the surface water from natural background levels or color.
2. The discharge shall be free from oil, grease and other pollutants that, in the receiving water (Gila River) float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank or aquatic vegetation.
3. The discharge shall not cause an increase in the ambient water temperature in the Gila River of more than 3.0 degrees Celsius.
4. The discharge shall not cause the dissolved oxygen concentration in the receiving water (Gila River) to fall below 6 mg/l, unless the percent saturation of oxygen remains equal to or greater than 90%.
5. The discharge shall not cause the receiving water (Gila River) to exceed 80 mg/L for suspended sediment concentration. Suspended sediment concentrations in samples collected during or within 48 hours after a local storm event to determine compliance with this standard.

#### PART II – MONITORING AND REPORTING

##### A. Sample Collection and Analysis

1. Samples taken for the monitoring requirements specified in Part I shall be collected at the following locations:
  - a. Monitoring of the discharge shall be conducted at (MIN-1) and (BBD-1) as specified in Table 4.

Table 4 – Sampling Locations

Location	Storet ID	Latitude Longitude
Big Box Dam (BBD-1)	Mine 009	33° 12' 50" N 110° 59' 53" W
At Highway 177 Bridge (MIN-1)	Mine 010	33° 07' 21" N 110° 58' 34" W

2. The Permittee shall estimate the flow that occurs at BBD-1 when samples are taken in accordance with Part II.A.1.
3. The Permittee is responsible for the quality and accuracy of all data required under this permit.



4. The Permittee shall keep a QA Manual on site that describes the sample collection and analyses processes. If the Permittee collects samples or conducts sample analyses in house, the Permittee shall develop a QA Manual that addresses these activities. If a third party collects and/or analyzes samples on behalf of the Permittee, the Permittee shall obtain a copy of the applicable QA procedures. The QA Manual shall be available for review by ADEQ upon request. The QA Manual shall be updated as necessary to reflect current conditions, and shall describe the following:
  - a. Project Management, including:
    - i. Purpose of sample collection and sample frequency;
    - ii. When and where samples will be collected;
    - iii. How samples will be collected;
    - iv. Laboratory(s) that will perform analyses;
    - v. Any field tests to be conducted (detail methods and specify equipment, including a description of any needed calibrations); and
    - vi. Pollutants or analytes being measured and for each, the permit-specific limits, Assessment Levels, or thresholds, (e.g. the associated detection limits needed.)
  - b. Sample collection procedures including:
    - i. Equipment to be used;
    - ii. Type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks);
    - iii. Types, sizes and number of sample bottles needed;
    - iv. Preservatives and holding times for the samples (see methods under 40 CFR 136 or 9 A.A.C. 14, Article 6 or any condition within this permit that specifies a particular test method); and
    - v. Chain of Custody procedures.
  - c. Specify approved analytical method(s) to be used and include:
    - i. Limits of Detection (LOD) and Limits of Quantitation (LOQs);
    - ii. Required quality control (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
    - iii. Corrective actions to be taken by the Permittee or the laboratory as a result of problems identified during QC checks.
  - d. How the Permittee will perform data review; complete DMRs and records used to report results to ADEQ; resolve data quality issues; and identify limitations on the use of the data.
5. Sample collection, preservation and handling shall be performed as described in 40 CFR 136 including the referenced Edition of *Standard Methods for the Examination of Water and Wastewater*, or by procedures referenced in A.A.C. Title 9, Chapter 14 of the Arizona Department of Health Services (ADHS) Laboratory Licensure rules. The Permittee shall outline the proper procedures in the QA Manual, and samples taken for this permit must conform to these procedures whether collection and handling is performed directly by the Permittee or contracted to a third-party.
6. Analytical requirements
  - a. The Permittee shall use a laboratory licensed by the ADHS Office of Laboratory Licensure and Certification that has demonstrated proficiency within the last 12 months under A.A.C. R9-14-609, for each parameter to be sampled under this permit. However, this requirement does not apply to

parameters which require analysis at the time of sample accordance with A.R.S. 36-495.02(A)(3). (These parameters may include flow, dissolved oxygen, pH, temperature, and total residual chlorine.)

- b. The Permittee must utilize analytical methods specified in this permit. If no test procedure is specified, the Permittee shall analyze the pollutant using:
    - i. A test procedure listed in 40 CFR 136 which is also approved under A.A.C. R9-14-610;
    - ii. An alternative test procedure approved by EPA as provided in 40 CFR 136 and which is also approved under A.A.C. R9-14-610;
    - iii. A test procedure listed in 40 CFR 136, with modifications allowed by EPA or approved as a method alteration by ADHS under A.A.C. R9-14-610C; or
    - iv. If no test procedure for a pollutant is available under (4)(b)(i) through (4)(b)(iii) above, any Method approved under A.A.C. R9-14-610(B) for wastewater may be used, except the use of field kits is not allowed unless otherwise specified in this permit. If there is no approved wastewater method for a parameter, any other method identified in 9 A.A.C. 14, Article 6 that will achieve appropriate detection and reporting limits may be used for analyses.
  - c. For results to be considered valid, all analytical work, including those tests conducted by the Permittee at the time of sampling (see Part II.A.4.a), shall meet quality control standards specified in the approved methods.
  - d. The Permittee shall use analytical methods with a Limit of Quantitation (LOQ) that is lower than the discharge limitations, Action Levels, or other water quality criteria, if any, specified in this permit. If all methods have LOQs higher than the applicable water quality criteria, the Permittee shall use the approved analytical method with the lowest LOQ.
  - e. The Permittee shall use a standard calibration curve when applicable to the method, where the lowest standard point is equal to or less than the LOQ.
7. Mercury Monitoring - The Permittee shall use an ADHS-certified low-level mercury analytical method such as EPA method 245.7 or 1631E to achieve a reporting limit at or below potential discharge limitations or assessment levels (0.01 µg/L) for mercury. The Permittee shall also use a "clean hands/dirty hands" sampling technique such as EPA Method 1669 if necessary to achieve these reporting limits.
  8. Metals Analyses - In accordance with 40 CFR 122.45(c), all discharge metals concentrations shall be measured as "total recoverable metals". Discharge Limits in this permit, if any, are for total recoverable metals.

## **B. Reporting of Monitoring Results**

1. The Permittee shall report monitoring results on Discharge Monitoring Report (DMR) to the ADEQ electronic submission portal myDEQ. The Permittee shall submit results of all monitoring required by this permit in a format that will allow direct comparison with the limitations and requirements of this permit. If no discharge occurs during a reporting period, the Permittee shall specify "No discharge" on the DMR. The results of all discharge analyses conducted during the monitoring period shall be included in determinations of the daily maximums reported on the DMRs if the analyses were by methods specified in Part II.A above, as applicable.
2. DMRs and attachments are to be submitted by the 28th day of the month following the end of a monitoring period. For example, if the monitoring period ends January 31<sup>st</sup>, the Permittee shall submit the DMR by February 28<sup>th</sup>. The Permittee shall electronically submit all compliance monitoring data and reports using the myDEQ electronic portal provided by ADEQ. The reports required to be electronically submitted include, but are not limited to, the following:

- a. Discharge Monitoring Reports
  - b. Original copies of laboratory results
  - c. AZPDES discharge flow records
  - d. Method detection limit studies
  - e. Bench sheets or similar documentation for field testing parameters
3. If requested to participate, the Permittee shall submit the results of the annual NPDES DMR/QA Study to ADEQ and ADHS for all laboratories used in monitoring compliance with this permit by December 31<sup>st</sup> of each year. The Permittee shall also conduct any proficiency testing required by the NPDES DMR-QA Study for those parameters listed in the study that the Permittee analyzes in house or tests in the field at the time of sampling (these parameters may include pH and total residual chlorine). All results of the NPDES DMR-QA Study shall be submitted to the email and addresses listed below, or submit by any other alternative mode as specified by ADEQ:

Arizona Department of Environmental Quality  
Email: AZPDES@azdeq.gov

Arizona Department of Health Services  
Attn: Office of Laboratory Licensure and Certification  
250 North 17<sup>th</sup> Avenue  
Phoenix, AZ 85007

4. For the purposes of reporting, the Permittee shall use the Limit of Quantitation.
5. For parameters with Daily Maximum Limits in this permit, the Permittee shall review the results of all samples collected during the reporting period and report as follows:

Table 5 – DMR Reporting Requirements for Daily Maximum Limits

For Daily Maximum Limits	The Permittee shall Report on the DMR
When the maximum value of any analytical result is greater than or equal to the LOQ	The maximum value of all analytical results
When the maximum value detected is greater than or equal to the laboratory's LOD but less than the LOQ	NODI (Q)
When the maximum value is less than the laboratory's LOD	NODI (B)

6. For all field testing, or if the information below is not included on the laboratory reports required by Part II.B.2, the Permittee shall attach a bench sheet or similar documentation to each DMR that includes, for all analytical results during the reporting period the following:
  - a. the analytical result,
  - b. the number or title of the approved analytical method, preparation and analytical procedure utilized by the field personnel or laboratory, and the LOD and LOQ for the analytical method for the parameter, and
  - c. any applicable data qualifiers using the most current revision of the Arizona Data Qualifiers.

#### **C. Twenty-four Hour Reporting of Noncompliance**

1. The Permittee shall orally report any noncompliance which may endanger the environment or human health within 24 hours from the time the Permittee becomes aware of the event to:

**ADEQ 24 hour hotline at (602) 771-2330**

by phone call or voice mail on the first business day following the noncompliance. The Permittee shall also submit an electronic report within 5 days of the noncompliance event using the myDEQ electronic portal provided by ADEQ. The Permittee shall include in the electronic notification: a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. The following instances of noncompliance are subject to the 24-hour and 5-day reporting requirements:
  - a. An exceedance of any maximum daily limit for the parameters listed in Part I.A Table 1.
  - b. Any unanticipated bypass which exceeds any discharge limitations in the permit.
  - c. Any upset which exceeds any discharge limitations in the permit.

#### **D. Monitoring Records**

1. For at least three (3) years from the date of the monitoring event, the Permittee shall retain records of the following monitoring information:
  - a. Date, exact location and time of sampling or measurements performed, preservatives used;
  - b. Individual(s) who performed the sampling or measurements;
  - c. Date(s) the analyses were performed;
  - d. Laboratory(s) which performed the analyses;
  - e. Analytical techniques or methods used;
  - f. Chain of custody forms;
  - g. Any comments, case narrative or summary of results produced by the laboratory. These comments should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether analyses met project requirements and 40 CFR 136. If results include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, or holding times and preservation, these records must also be retained.
  - h. Summary of data interpretation and any corrective action taken by the Permittee.

### **PART III – WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS**

#### **A. General Conditions**

1. The Permittee shall conduct whole effluent toxicity test (acute, chronic, or both) on discrete samples of the discharge as specified in Part I.B. The requirement to conduct chronic toxicity testing is contingent upon the frequency or duration of discharges. See Part III.C.1.
2. Final discharge samples must be taken at the point of compliance. The required WET tests must be performed on unmodified samples of final discharge.
3. For those parameters listed in Parts I.A of this permit whose required sample type is discrete, the testing shall be performed on a discrete sample collected concurrently with one sample, discrete or composite, collected for an acute or chronic WET test.
4. Definitions related to toxicity are found in Appendix A.

**B. Acute Toxicity**

1. If chronic toxicity testing is not required per Part III.C.1, the Permittee shall conduct 96-hour acute toxicity tests with renewal at 48 hours on two species; *Ceriodaphnia dubia* and *Pimephales promelas* using 100% discharge and a control. The acute test may be completed as a non-renewal 48-hour acute test when a second sample for renewal at 48 hours cannot be taken due to a cessation of the discharge after an acute test has been initiated.
2. The Permittee must follow the USEPA 5th edition manual, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012) for all acute toxicity testing. The presence of chronic toxicity shall be estimated as specified in the method for each species tested.
3. The acute toxicity action level is any failing test result. The test fails if survival in 100% discharge is less than 90%, and is significantly different from control survival (which must be 90% or greater), as determined by hypothesis testing. Section 11.3 of the acute manual referenced above must be followed to determine Pass or Fail. Any result of Fail requires follow-up actions per Part III, Section E.
4. The Permittee shall report results as Pass or Fail.

**C. Chronic Toxicity**

1. The Permittee shall conduct short-term chronic toxicity tests on three species: the waterflea, *Ceriodaphnia dubia* (survival and reproduction test); the fathead minnow, *Pimephales promelas* (larval survival and growth test); and the green alga, *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*) (growth test). Since completion of the chronic WET test for *Ceriodaphnia dubia* and *Pimephales promelas* requires a minimum of three samples be taken for renewals, the chronic WET test will not be required during any given monitoring period in which the discharge(s) does not occur over seven consecutive calendar days and is (are) not repeated more frequently than every thirty days.
2. The Permittee must follow the USEPA 4th edition manual, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (EPA/821-R-02-013) for all chronic compliance toxicity testing.
3. The chronic toxicity action levels are any one test result greater than 1.6 TUC or any calculated monthly median value greater than 1.0 TUC. If chronic toxicity is detected above these values, follow-up testing is required per Part III, Section E. A chronic toxicity unit (TUC) shall be calculated as  $TUC = 100/NOEC$ .
4. The chronic WET test shall be conducted using a series of five dilutions and a control. The following dilution series must be used: 12.5, 25, 50, 75, and 100% discharge.

**D. Quality Assurance**

1. Discharge samples must be maintained between 0 and 6°C from collection until utilized in the toxicity testing procedure. When a composite sample is required, each aliquot making up the composite must be chilled after collection and throughout the compositing period. The single allowable exception is when a grab sample is delivered to the performing laboratory for test initiation no later than 4 hours following the time of collection.

2. Control and dilution water should be receiving water or lab water as appropriate, as described in the 40 CFR Part 136.3 approved method. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.
3. Reference toxicity tests, (a check of the laboratory and test organisms' performance), shall be conducted at least 1 time in a calendar month for each toxicity test method conducted in the laboratory during that month. Additionally, any time the laboratory changes its source of test organisms, a reference toxicity test must be conducted before or in conjunction with the first WET test performed using the organisms from the newer source. Reference toxicant testing must be conducted using the same test conditions as the discharge toxicity tests (ie., same test duration, etc.).
4. If either the reference toxicant test or the discharge test does not meet all test acceptability criteria as specified in the 40 CFR Part 136.3 approved WET methods, then the Permittee must re-sample and re-test within 14 days of receipt of the test results. The re-sampling and re-testing requirements include laboratory induced error in performing the test method.
5. The chronic reference toxicant and discharge tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method (see Section 10, Table 6 in EPA/821-R-02-013). There are five possible outcomes based on the PMSD result.
  - a. *Unqualified Pass*- The test's PMSD is within bounds and there is no significant difference between the means for the control and the discharge. The regulatory authority would conclude that there is no toxicity.
  - b. *Unqualified Fail*- The test's PMSD is larger than the lower bound (but not greater than the upper bound) in Table 6 and there is a significant difference between the means for the control and the discharge. The regulatory authority would conclude that there is toxicity.
  - c. *Lacks Test Sensitivity*- The test's PMSD exceeds the upper bound in Table 6 and there is no significant difference between the means for the control and the discharge. The test is considered invalid. A discharge sample must be collected and another toxicity test must be conducted within 14 days of receipt of the test results.
  - d. *Lack Test Sensitivity*- The test's PMSD exceeds the upper bound in Table 6 and there is a significant difference between the means for the control and the discharge. The test is considered valid. The regulatory authority will conclude that there is toxicity.
  - e. *Very Small but Significant Difference*- The relative difference between the means for the control and discharge is smaller than the lower bound in Table 6 and this difference is statistically significant. The test is acceptable and the NOEC should be determined.

**E. Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE) Process**

1. For purposes of this section, an exceedance of a WET action level occurs when sample results at MIN-1 fail toxicity and sample results at BBD-1 pass for the same species.
2. If (acute and/or chronic) toxicity is detected above a WET action level specified in this permit and the source of toxicity is known (for instance, upstream sample BBD-1 is also detected above a WET action level for the same species), the Permittee is not required to conduct follow-up testing.

3. If (acute and/or chronic) toxicity is detected above a WET action level specified in this permit and the source of toxicity is unknown (for instance, inconsistent results between Min-1 and upstream sample BBD-1 such as one species passing at BBD-1 and a different species exceeding at Min-1), the Permittee shall begin additional toxicity monitoring during the next discharge events. The Permittee shall conduct one WET test during the next two discharge events. The follow-up test must use the same test and species as the failed toxicity test. The subsequent follow-up tests shall be conducted during the next available discharge events.
  - a. If neither of the two tests exceed a WET action level, then the Permittee's WET testing for the permit term is complete.
  - b. If a WET action level is exceeded in any of the additional tests, the Permittee shall immediately begin developing a TRE plan and submit the plan to ADEQ for review and approval within 30 days after receipt of the most recent toxic result. Requirements for the development of a TRE are listed in subsection 4, below. The Permittee must implement the TRE plan as approved and directed by ADEQ.
4. The Permittee shall use the EPA guidance manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, 1999 (EPA/833/B-99/002) in preparing a TRE plan. The TRE plan shall include, at a minimum, the following:
  - a. Further actions to investigate and identify the causes of toxicity, if unknown. The Permittee may initiate a TIE as part of the TRE process using the following EPA manuals as guidance: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, 1992 (EPA/600/6-91/005F); *Methods for Aquatic Toxicity Identification Evaluations: Phase I, Toxicity Characterization Procedures*, 2<sup>nd</sup> Edition, 1991 (EPA/600/6-91/003); *Methods for Aquatic Toxicity Identification Evaluations: Phase II, Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993 (EPA/600/R-92/080); and *Methods for Aquatic Toxicity Identification Evaluations: Phase III, Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity*, 1993 (EPA/600/R-92/081).
  - b. Action the Permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
  - c. A schedule for implementing these actions.

#### **F. WET Reporting**

1. The Permittee shall report chronic toxicity results on DMRs in Chronic Toxicity Units (TUC). The TUC for DMR reporting shall be calculated as  $TUC = 100/NOEC$ .
2. In addition to reporting WET results on DMRs, the Permittee shall submit a copy of the full lab report(s) for all WET testing conducted during the monitoring period covered by the DMR. The lab report should report TUC as 100/NOEC **and** as 100/IC<sub>25</sub>. If the lab report does not contain any of the following items, then these must also be supplied in a separate attachment to the report: 1) sample collection and test initiation dates, 2) the results of the discharge analyses for all parameters required to be tested concurrently with WET testing as defined in Part I.A, Table 1 and Part III.A.3 of this permit, and 3) copies of completed "AZPDES Discharge Flow Records" for the months in the WET monitoring period.
3. WET lab reports and any required additional attachments shall be submitted to ADEQ by the 28<sup>th</sup> day of the month following the end of the WET monitoring period, or upon request.

## PART IV – SPECIAL CONDITIONS

### A. Contingency Sampling

In the event that mine process wastewater enters the lined or unlined channel of Mineral Creek and then reaches the Gila River (as a result of a release of accumulated stormwater from Big Box Dam or otherwise), the Permittee shall take discrete samples of the discharged mine process wastewater (if possible) and of the Gila River upstream and downstream of its confluence with Mineral Creek. The discrete samples shall be taken within 24 hours of the time the Permittee becomes aware of the release and analyzed for the parameters listed in Tables 1 and 3. Sampling results shall be reported to ADEQ within two (2) business days of receipt at [AZPDES@azdeq.gov](mailto:AZPDES@azdeq.gov).

### B. Best Management Practices

1. The Permittee shall continue to implement pollution control measures for the Mineral Creek Diversion Tunnel. The Permittee shall review existing control measures for the tunnel and revise as necessary to ensure that they fully and accurately addresses all the following provisions. The control measures shall include at a minimum the following.
  - a. Seepage into the tunnel from the subsurface exterior of the tunnel shall be diverted to Dalton's Pond when there are no releases from Big Box Dam
  - b. Regular inspection and maintenance of the tunnel, including the curbing and diverters to assess seepage and identify potential new seeps. If the diversion structures are failing, the Permittee shall perform corrective actions in a timely response.

2. The Permittee shall continue to implement a Stormwater Pollution Prevention Plan (SWPPP). The Permittee shall review the existing SWPPP for the facility and revise it as necessary to ensure that it fully and accurately addresses all the following provisions.

The SWPPP requirements of this Section shall apply only to those areas of the Mine where surface flows do not report to the mining pits (areas where surface flows do not report to the pit, and which are therefore subject to the requirements of this section, are hereafter referred to as the "SWPPP Area").

The SWPPP shall include a site map which clearly delineates the SWPPP area as well as those areas of the site which drain to the mining pits or are otherwise considered not subject to stormwater regulations (zero discharge) and indicates the basis for these designations.

3. The SWPPP shall contain the following minimum requirements. The Permittee may rely on documentation developed or measures undertaken pursuant to other programs imposing storm water control requirements to satisfy the requirements set forth below. In such cases, the SWPPP shall clearly reference the documents or programs.
  - a. **Pollution prevention team.** The SWPPP shall identify individuals or positions at the facility that are members of a Stormwater Pollution Prevention Team and who are responsible for assisting the facility management in implementation, maintenance, and revision of the SWPPP. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's SWPPP.
  - b. **Site Description.** The SWPPP shall include a general description of the SWPPP area, including process operations, hydrology, topography, potential receiving waters in the vicinity, a description of the outfall location and potentially contributing drainage areas to the outfall.



- c. **Potential pollution sources.** The SWPPP shall include a description of potential pollution sources (e.g. mining/milling areas, access and haul roads; equipment storage; fueling and maintenance areas; ore piles; materials handling areas; outdoor manufacturing, storage, or material disposal areas; chemical and explosives storage areas; waste rock/overburden; topsoil storage areas; waste storage areas; tailings piles; tailings ponds; tailings conveyances; heap leach pads) within the SWPPP area and the potential for pollutants to be present in significant amounts. Process fluid facilities shall be specifically designated. Areas with the potential for pollutants to be present in significant amounts shall be indicated on the site map.

Factors that shall be considered for determining the potential for pollutants to be present in significant amounts include: the mineralogy of the ore, waste rock and native soils; toxicity and quantity of chemicals used, produced or discharged in the area; likelihood of contact with stormwater; vegetation of site; stabilization of site; history of leaks or spills; and characterization data for acid generating materials.

- d. **Control of runoff, spills, and mine drainage.**
- i. The SWPPP shall identify process areas, tailings ponds, and tailings conveyances present within the SWPPP area. The SWPPP shall describe existing and planned diversion and containment structures and other measures for these areas such that no discharge occurs.
  - ii. The SWPPP shall contain a drainage basin assessment to determine the outline of each basin within the SWPPP area, and its BMP(s) and designated outfall, or termination (if controlled by evapotranspiration or infiltration). The SWPPP shall describe assumptions and methods used to determine the position of drainage divides and identify the drainage divides on the site map. The method shall include field verification. The SWPPP shall provide the stormwater capacities for all stormwater retention basins within the SWPPP area and show the calculations used to determine those capacities.
  - iii. The SWPPP shall include the BMPs utilized within the SWPPP area to contain spills or otherwise prevent spills from reach Mineral Creek, and may include BMPs such as grading a road so as to provide containment for spray originating from a failed coupling. The SWPPP shall describe the drainage such that any spills of process fluids or mine drainage within the SWPPP area will be directed to sediment ponds or fluid control structures designed to contain the 10-year, 24-hour storm event, and the methods to be used to clean up spills. The location of contained process fluids and BMPs to control spills or leaks within the SWPPP area shall be shown on the map. These areas will be made accessible for regular inspections.
  - iv. All areas adjacent to pipes transporting process fluids along the land surface within the SWPPP area shall be bermed and/or graded to contain any spill or leak or direct any such spill or leak to a down gradient control structure. All spills and leaks within the SWPPP area shall be cleaned up in a timely manner.
- e. **Stormwater diversions.** The SWPPP shall indicate the location and the type of stormwater diversions and conveyances (e.g. dikes, swales, curbs, berms, pipe slope drains, subsurface drains, channels, gutters, rolling dips and road slopes) within the SWPPP area.
- f. **Stormwater containment controls.** The SWPPP shall describe and indicate the location of all containment controls within the SWPPP area.

- g. **Site Map.** The SWPPP shall include a site map or maps of the SWPPP area that show all feature required in the SWPPP, including potential pollution sources, conveyance structures, stormwater controls, process water controls, tailings and leach areas, drainage area boundary lines, outfall or termination points, stormwater monitoring points, and all features described in Section 2a-f, above.
- h. **Maintenance of containment facilities.**
- i. The Permittee shall monitor the available surge capacity and freeboard in the process impoundments and all stormwater basins designated as no-discharge within the SWPPP area quarterly and after rainfall events of over 3 inches in 24 hours. After storm events, the Permittee shall take measures as soon as practicable to restore the freeboard necessary in the impoundments to contain the design storm event. Such measures shall be continued by the Permittee until adequate freeboard is restored.
  - ii. The Permittee shall assess the siltation of the process impoundments and all stormwater basins with the SWPPP area designated as no-discharge annually and after rainfall events of over 3 inches in 24 hours. The Permittee shall take action to remove solids when liquid storage capacity is less than 80% of the required design volume. The Permittee shall take measures to maintain the integrity of containment liners during removal of solids.
  - iii. The Permittee shall establish an inspection and maintenance program for pump stations, spare pumps, pipelines, containment structures and standby electrical generators to the extent necessary to prevent a spill or discharge of process fluids or mine drainage in the SWPPP area. The Permittee shall maintain records for inspections of pump stations and equipment and pipelines testing. All repairs deemed necessary based on the findings of the inspections shall be completed as soon as practicable.
- i. **Stormwater source controls.**
- The SWPPP shall include a description of any portion of the SWPPP area where stormwater will be controlled at the source instead of through diversion or containment. The SWPPP shall describe BMPs that will be used to stabilize and protect surface areas to effectively control erosion. Source controls, if utilized, may consist of the following:
- i. Establishment of an effective, permanent vegetative cover at least equal in extent of cover to natural vegetation or that is necessary to achieve the approved post-mining use.
  - ii. Establishment of stable slopes to minimize side slope erosion or gullies. BMPs for creating stable slopes including grading, berming, contour furrowing, limiting slope length, and creating stable slope shapes (concave slopes and complex slopes instead of convex and simple).
  - iii. Regulating channel velocity through diversions, grading, rip rap, or other permanent control measure to prevent erosion.
  - iv. Demonstration through monitoring that runoff from reclaimed land meets all applicable surface water quality standards.
- j. **Site Inspection and Maintenance.**
- All BMPs identified in the SWPPP for the SWPPP area shall be maintained in effective operating condition. The SWPPP shall include a procedure for routine inspection of stormwater diversions, stormwater controls (including the Mineral Creek lined channel, side channels, and associated expansion joints), and sediment and erosion controls. The SWPPP shall include inspection and maintenance procedures for storage/containment ponds to assess available freeboard and surge

capacity, maintenance of ponds, containment structures, pipelines, pump stations; and structural repair of berms, ditches, dikes, dams, etc.

- i. Areas where process fluids are present (process areas, tailings ponds and embankments, and tailings conveyances) shall be inspected at least monthly.
- ii. Areas where process fluids are not present shall be inspected at least quarterly and after significant precipitation events.
- iii. The SWPPP shall describe a method to implement repairs to facility deficiencies found during regular maintenance inspections at all stormwater facilities. If site inspections identify BMPs that are not operating effectively, maintenance shall be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance shall be scheduled and accomplished as soon as practicable.
- iv. Records of inspections shall be maintained onsite. The facility shall implement and maintain an effective system for recordkeeping and tracking of follow-up corrective actions needed and taken in response to inspections.

**k. Employee Training.**

The Permittee shall ensure that an effective training program is developed and implemented to inform personnel responsible for stormwater management or implementing activities addressed in the SWPPP. The SWPPP shall include a description of this training program. Training shall address topics such as goals of the SWPPP, good housekeeping and material management practices, spill prevention and response procedures, stormwater monitoring requirements, and stormwater sampling techniques. The Permittee shall hold this training at least annually and the training agenda and records of employee attendance shall be maintained as part of the SWPPP.

**4. Annual Review, Compliance Evaluation, and Annual Report**

- a. The Permittee shall review the tunnel seepage control measures and SWPPP on an annual basis and update as necessary. The Permittee shall amend the requirements under this Section whenever a)  
there is a change in design, construction, operation, or maintenance affecting the SWPPP area that may have a significant effect on the discharges, or potential discharges, authorized by this permit; or  
b) monitoring results and/or an inspection by the Permittee or ADEQ indicate that the SWPPP is ineffective in controlling stormwater discharge quality.
- b. The Permittee shall conduct a comprehensive site compliance evaluation at least annually to determine whether the BMPs are adequate and properly implemented or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the SWPPP shall be observed to ensure that they are operating correctly. A visual evaluation of all equipment needed to implement the plan, including spill response equipment, shall be made.  
Based on the results of the evaluation, the Permittee shall revise the stormwater pollution prevention measures and controls identified in the SWPPP as appropriate within 2 weeks after the evaluation. The Permittee shall implement any changes to the plan within 12 weeks after the evaluation. The Permittee may request an extension of this time period if necessary by submitting the request in writing to ADEQ at the address shown in below. The request shall include a detailed explanation of why the changes cannot be implemented within 12 weeks.

- c. The Permittee shall make a report summarizing the scope of the annual site compliance evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the tunnel seepage control measures and SWPPP, and actions taken per Part IV.B of the permit. The report shall identify any incidents of noncompliance and recommendations for revisions of the SWPPP. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this part of the permit. The report shall be submitted to ADEQ on an annual basis and due on the anniversary of the effective date of this permit. Each annual report shall also be retained as part of the SWPPP for at least 3 years for the date of evaluation. The report shall be signed in accordance with Part 12 of Appendix C "Standard AZPDES Permit Conditions and Requirements," (Signatory Requirements) and submitted to AZPDES@azdeq.gov.

The annual report shall include a certification that the tunnel seepage control measures and SWPPP have been reviewed, remain accurate or have been revised as necessary, and that the Permittee is implementing all requirements of this part of the permit.

**5. Recordkeeping Requirements**

- a. The Permittee shall retain a copy of any procedures used to implement the tunnel seepage control measures and the current SWPPP on site at the facility or locally available for use by the regulating authorities at the time of an inspection. A record of revisions, including dates, authorizing personnel, and summaries of major changes to each revision, shall be maintained with the current SWPPP or procedures. A copy of applicable procedures for the tunnel, the SWPPP and record of revisions shall be provided to ADEQ upon request.
- b. The Permittee shall maintain all logs, inspection and maintenance reports, and other records required by this permit on file at the facility for three years from when the record was made, and such records shall be available for inspection by ADEQ.

**C. Reopener**

This permit may be modified per the provisions of A.A.C. R18-9-B906, and R18-9-A905 which incorporates 40 CFR Part 122. This permit may be reopened based on newly available information; to add conditions or limits to address demonstrated discharge toxicity; or to implement any EPA-approved new Arizona water quality standard.

Appendix A - Part A: Acronyms

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
AZPDES	Arizona Pollutant Discharge Elimination System
A.R.S.	Arizona Revised Statutes
CFR	Code of Federal Regulations
Director	The Director of ADEQ or any authorized representative thereof
DMR	Discharge Monitoring Report
EPA	The U.S. Environmental Protection Agency
kg/day	Kilograms per day
MGD	Million Gallons per Day
mg/L	Milligrams per Liter, also equal to parts per million (ppm)
NPDES	National Pollutant Discharge Elimination System
QA	Quality Assurance
TBEL	Technology-based Effluent Limitation
µg/L	Micrograms per Liter, also equal to parts per billion (ppb)
WQBEL	Water quality-based Effluent Limitation

**Appendix A - Part B: Definitions**

Acute Toxicity Test	A test used to determine the concentration of discharge or ambient waters that produces an adverse effect (lethality) on a group of test organisms during a short-term exposure (e.g., 24, 48, or 96 hours). Acute toxicity is measured using statistical procedures (e.g., pint estimate techniques or hypothesis testing) and is reported as PASS/FAIL or in TUa, where $TUa = 100LC_{50}$ .
Acute-to Chronic Ratio (ACR)	Is the ratio of the acute toxicity of an effluent or a toxicant to its chronic toxicity. It is used as a factor for estimating chronic toxicity on the basis of acute toxicity data, or for estimating acute toxicity on the basis of chronic toxicity data.
Base Flood	A flood that has a one percent chance of occurring in any given year (or a flood that is likely to occur once in 100 years).
Chronic Toxicity Test	A test in which sublethal effects (e.g., reduced growth or reproduction) are measured in addition to lethality. Chronic toxicity is measured as $TUc = 100/NOEC$ or $TUc = 100/Ecp$ or $100/ICp$ . The ICp and ECp value should be the approximate equivalent of the NOEC calculated by hypothesis testing for each test method.
Daily Maximum Concentration Limit	The maximum allowable discharge of a pollutant in a calendar day as measured on any single discrete sample or composite sample.
Discrete or Grab Sample	An individual sample of at least 100 mL collected from a single location, or over a period of time not exceeding 15 minutes.
Effect Concentration Point (ECP)	A point estimate of the toxicant (or discharge) concentration that would cause an observable adverse effect (e.g., survival or fertilization) in a given percent of the test organisms, calculated from a continuous model (e.g., USEPA Probit Model).
Hardness	The sum of the calcium and magnesium concentrations, expressed as calcium carbonate ( $CaCO_3$ ) in milligrams per liter.
Hypothesis Testing	A statistical technique (e.g., Dunnetts test) that determines what concentration is statistically different from the control. Endpoints determined from hypothesis testing are NOEC and LOEC. The two hypotheses commonly tested in WET are: Null hypothesis ( $H_0$ ): The discharge is not toxic. Alternative hypothesis ( $H_a$ ): The discharge is toxic.
Inhibition Concentration (IC)	A point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., USEPA Interpolation Method). IC25 is a point estimate of the toxicant concentration that would cause a 25% reduction in a non-lethal biological measurement.
LC50	The toxicant (or discharge) concentration that would cause death in 50 percent of the test organisms.

Limit of Quantitation (LOQ)	The minimum levels, concentrations, or quantities of a target variable such as an analyte that can be reported with a specific degree of confidence. The calibration point shall be at or below the LOQ. The LOQ is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed.
Limit of Detection (LOD)	An analyte and matrix-specific estimate of the minimum amount of a substance that the analytical process can reliably detect with a 99% confidence level. This may be laboratory dependent and is developed according to R9014-615(C)(7).
Method Detection Limit (MDL)	See LOD.
Mixing Zone	An area where a discharge undergoes initial dilution and may be extended to cover the secondary mixing in the ambient waterbody. A mixing zone is an allocated impact zone where water quality criteria can be exceeded as long as acutely toxic conditions are prevented.
No Observed Effect Concentration (NOEC)	The highest tested concentration of discharge or toxicant, that causes no observable adverse effect on the test organisms (i.e., the highest concentration of toxicant at which the values for the observed responses are <u>not</u> statistically significant different from the controls).
Point Estimate Techniques	As Probit, Interpolation Method, Spearman-Kärber are used to determine the discharge concentration at which adverse effects (e.g., fertilization, growth or survival) occurred. For example, concentration at which a 25 percent reduction in fertilization occurred.
Reference Toxicant Test	A toxicity test conducted with the addition of a known toxicant to indicate the sensitivity of the organisms being used and demonstrate a laboratory's ability to obtain consistent results with the test method. Reference toxicant data are part of the routine QA/QC program to evaluate the performance of laboratory personnel and test organisms.
Runoff	Rainwater, leachate, or other liquid that drains over any part of a land surface and runs off of the land surface.
Significant Difference	Defined as statistically significant difference (e.g., 95% confidence level) in the means of two distributions of sampling results.
Single Concentration Acute Test	A statistical analysis comparing only two sets of replicate observations. In the case of WET, comparing only two test concentrations (e.g., a control and 100% discharge). The purpose of this test is to determine if the 100% discharge concentration differs from the control (i.e., the test passes or fails).
Submit	Used in this permit, means post-marked, documented by other mailing receipt, electronically through myDEQ, or hand-delivered to ADEQ.
Test Acceptability Criteria (TAC)	Specific criteria for determining whether toxicity tests results are acceptable. The discharge and reference toxicant must meet specific criteria as defined in the test method.
Toxic Unit (TU)	A measure of toxicity in a discharge as determined by the acute toxicity units or chronic toxicity units measured. Higher the TUs indicate greater toxicity.

Toxicity Identification Evaluation (TIE)	A set of procedures used to identify the specific chemical(s) causing discharge toxicity.
Toxicity Reduction Evaluation (TRE)	A site-specific study conducted in a stepwise process designed to identify the causative agents of discharge toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in discharge toxicity.
Toxicity Test	A procedure to determine the toxicity of a chemical or a discharge using living organisms. A toxicity test measures the degree of effect of a specific chemical or discharge on exposed test organisms.
Whole Effluent Toxicity	The total toxic effect of a discharge measured directly with a toxicity test.

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## Appendix B - AZPDES Discharge Flow Record

Asarco Ray Operations – AZ0000035			
Discharge to the Gila River in the Middle Gila River Basin:			
<b>Outfall No:</b>	010 (as estimated at BBD-1)		
<b>Location:</b>	The Permittee shall estimate the flow that occurs at BBD-1 when samples are taken in accordance with Part II.A of the permit.		
<b>Month:</b>		<b>Year:</b>	
<b>Date:</b>	<b>Flow Duration (Total hours per day)</b>	<b>Flow Rate <sup>(1)</sup> (Total MGD)</b>	
1			
2			
3			
4			
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<b>Comment:</b>			

(1) Based on hourly averages to account for the dynamic change of head behind Big Box Dam

## Appendix C - Standard AZPDES Permit Conditions & Notifications

(Updated as of February 2, 2004)

1. Duty to Reapply – [R18-9-B904(C)]  
Unless the Permittee permanently ceases the discharging activity covered by this permit, the Permittee shall submit a new application 180 days before the existing permit expires
2. Applications – [R18-9-A905(A)(1)(C) which incorporates 40CFR 122.22]
  - a. All applications shall be signed as follows:
    - i. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      - A. A president, secretary, treasure, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy-or decision-making functions for the corporation, or
      - B. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
    - ii. For partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
    - iii. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
  - b. All reports required by permits and other information requested by the Director shall be signed by a person described in paragraph (a) of this Section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - i. The authorization is made in writing by a person described in paragraph (a) of this section;
    - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
    - iii. The written authorization is submitted to the Director.
  - c. Changes to Authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
  - d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

*I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

3. Duty to Comply - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(i) and A.R.S. §49- 262, 263.01, and 263.02.]
  - a. The Permittee shall comply with all conditions of this permit and any standard and prohibition required under A.R.S. Title 49, Chapter 2, Article 3.1 and A.A.C. Title 18, Chapter 9, Articles 9 and 10. Any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
  - b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.
  - c. The Permittee shall comply with the discharge standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulation that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
  - d. Civil Penalties. A.R.S. § 49-262(C) provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
  - e. Criminal Penalties. Any a person who violates a condition of this permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 9, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.
4. Need to Halt or Reduce Activity Not a Defense – [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(c)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
5. Duty to Mitigate - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(d)]

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
6. Proper Operation and Maintenance - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(e)]

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
7. Permit Actions - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(f)]

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

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

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

9. Duty to Provide Information - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(h)]

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

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

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms of the permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring equipment or control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and A.A.C. Title 18, Chapter 9, Articles 9 and 10, any substances or parameters at any location

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

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

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

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

12. Signatory Requirement - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(k)]

- a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22 incorporated at R18-9-A905(A)(1)(c))
- b. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four years, or both.

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

- a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations of additions to the permitted facility. Notice is required only when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (incorporated by reference at R18-9-A905(A)(1)(e)); or
  - 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 discharge limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at R18-9-A905(A)(3)(b)).
  - 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.
- b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Transfers. (R18-9-B905) This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under Arizona Revised Statutes and the Clean Water Act.
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- 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, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR, or sludge reporting form specified by the Director.
    - iii. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
  - e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
  - f. Twenty-four hour reporting.
    - i. The Permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
    - 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 discharge limitation in the permit. (See 40 CFR 122.41(g) which is incorporated by reference at R18-9-A905(A)(3)(a))
      - B. Any upset which exceeds any discharge limitation in the permit.
      - C. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at R18-9-A905(A)(3)(d))
  - g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.
  - h. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
14. Bypass - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(m)]
- a. Definitions
    - 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.

- b. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause discharge limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (c) and (d) of this section.
  - c. Notice.
    - 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 bypass.
    - ii. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph (f)(2) of section 13 (24-hour notice).
  - d. Prohibition of bypass.
    - 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 down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      - C. The Permittee submitted notices as required under paragraph (c) of this section.
    - 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 (d)(1) of this section.
15. Upset - [A.R.S. §§49-255(8) and 255.01(E), R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(n)]
- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
  - b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit discharge limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
  - c. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defenses of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - 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 (f)(2) of Section 13 (24-hour notice).
    - iv. The Permittee has taken appropriate measure including all reasonable steps to minimize or prevent any discharge or sewage sludge use or disposal that is in violation of the permit and that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d).

- d. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

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

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

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

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

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

- a. All POTW's must provide adequate notice to the Director of the following:
  - i. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the CLEAN WATER ACT if it were directly discharging those pollutants; and
  - ii. 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.
  - iii. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharge from the POTW.

Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 - 261.33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned



treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

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

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

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

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

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

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

Except as provided in section 21, a permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made under R18-9-B906, to identify the new Permittee and incorporate such other requirements as may be necessary.

21. Automatic Transfers [R18-9-B905]

An alternative to transfers under section 20, any AZPDES permit may be automatically transferred to a new Permittee if:

- a. The current Permittee notifies the Director at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement between the existing and new Permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- c. The Director does not notify the existing Permittee and the proposed new Permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under R18-9-B906(B).

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

Upon the consent of the Permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following public notice procedures under R18-9-A907 or A908. Minor modifications may only:

- a. Correct typographical errors;
- b. Update a permit condition that changed as a result of updating an Arizona water quality standard;
- c. Require more frequent monitoring or reporting by the Permittee;
- d. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;
- e. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in their permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Director.
- f. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation prior to discharge under 40 CFR 122.29 (which is incorporated by reference in R18-9-A905(A)(1)(e)).
- g. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with the permit limits.
- h. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 and 403.18 as enforceable conditions of the POTW's permit.
- i. Annex an area by a municipality.

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

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

- a. Noncompliance by the Permittee with any condition of the permit;
- b. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time;
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, a plant closure or termination of discharge by connection to a POTW).

**24. Availability of Reports - [Pursuant to A.R.S. § 49-205]**

Except for data determined to be confidential under A.R.S. § 49-205(A), all reports prepared in accordance with the terms of this permit shall be available for public inspection at ADEQ offices. As required by A.R.S. § 49-205(B) and (C), permit applications, permits, and discharge data shall not be considered confidential.

**25. Removed Substances - [Pursuant to Clean Water Act Section 301]**

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

**26. Severability - [Pursuant to A.R.S. § 49-324(E)]**

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

27. Civil and Criminal Liability - [Pursuant to A.R.S § 49-262, 263.01, and 263.02]

Except as provided in permit conditions on "Bypass" (Section 14) and "Upset" (Section 15), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.

28. Oil and Hazardous Substance Liability - [Pursuant to Clean Water Act Section 311].

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to which the Permittee is or may be subject under Section 311 of the Clean Water Act.

29. State or Tribal Law - [Pursuant to R 18-9-A904 (C)].

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.