ADEQ Arizona Department of Environmental Quality

DRAFT FACT SHEET

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES)

This document gives pertinent information concerning the reissuance of the AZPDES permit listed below. This facility is a groundwater remediation system and is considered to be a minor industrial facility under the NPDES program. The effluent limitations contained in this permit will maintain the Water Quality Standards listed in Arizona Administrative Code (A.A.C.) R18-11-101 et. seq. This permit is proposed to be issued for a period of 5 years.

Permittee's Name:	Motorola Solutions Inc.
Permittee's Mailing Address:	2900 S. Diablo Way Suite 150 Tempe, Arizona 85282
Facility Name:	North Indian Bend Wash (NIBW) – Area 12 Treatment Facility
Facility Address or Location:	8201 East McDowell Road Scottsdale, Arizona 85257
Contact Person(s): Phone/e-mail address	Terry Lockwood, Program Manager (602) 760-4763
AZPDES Permit Number:	AZ0025933
Inventory Number:	103353

I. STATUS OF PERMIT(s)	
AZPDES permit applied for:	Renewal
Date application received:	**11/16/2015**
Date application was determined administratively complete:	**12/29/2015**
Previous permit expiration date:	5/25/2016

II. GENERAL FACILITY INFORMATION	
Type of Facility:	Groundwater treatment facility
Facility Location Description:	NIBW Area 12 is the site of the former Motorola Solutions Space and Systems Technology Group facility in Scottsdale, Arizona.

Estimated Discharge Flow:	2.7 MGD
County:	Maricopa
Treatment Processes:	Groundwater is pumped into an air stripper tower and agitated with air to volatilize organic compounds, and the vaporized organic compounds are treated through an activated carbon filter. The treated groundwater is discharged to SRP Canal Lateral 1-1.5.
Nature of facility discharge:	Treated groundwater
Average flow per discharge:	1.4 MGD
Continuous or intermittent discharge:	Continuous

The NIBW Area 12 is part of a Comprehensive Environmental Response, Compensation & Liability Act (CERCLA), a.k.a. Superfund, remediation site. Groundwater containing volatile organic compounds (VOCs) is extracted from two SRP-owned extraction wells, 23.1E-6N (MEX-1MAWell) and 23.6E-6N (Granite Reef Well), and treated via an air stripper. NIBW Area 12 is the site of the former Motorola Solutions Space and Systems Technology Group facility, which is currently owned and operated by General Dynamics. Motorola Solutions, which owns the groundwater treatment facility, has an access agreement with General Dynamics to operate it for as long as necessary. Motorola Solutions also operates the two extraction wells. The treatment facility has been in operation since 1999.

III. RECEIVING WATER

The State of Arizona has adopted water quality standards to protect the designated uses of its surface waters. Streams have been divided into segments and designated uses assigned to these segments. The water quality standards vary by designated use depending on the level of protection required to maintain that use.

Receiving Water :	The SRP Canal Lateral 1-1.5.
River Basin:	Middle Gila River Basin
Outfall Location:	Outfall 001: Township 1N, Range 4E, Section 1 Latitude 33° 27’ 35” N, Longitude 111° 54’ 04”W

The outfall discharges to, or the discharge may reach, a surface water listed in Appendix B of A.A.C. Title 18, Chapter 11, Article 1.

Designated uses for the receiving water listed above:	SRP canal: Agricultural Irrigation (AgI) Agricultural Livestock Watering (AgL)

Designated uses for downstream receiving water:	Approximately one mile downstream, the SRP Canal Lateral 1-1.5 discharges to McKellips Park Lake. Due to the discharge reaching McKellips Park Lake, the following downstream uses are being applied: Aquatic & Wildlife-warm water (A&Ww) Partial Body Contact (PBC) Fish Consumption (FC) Agricultural Irrigation (AgI)
Is the receiving water on the 303(d) list?	The receiving waters are not on the 303(d) list and there are no TMDL issues associated.
Given the uses stated above, the applicable narrative water quality standards are described in A.A.C. R18-11-108, and the applicable numeric water quality standards are listed in A.A.C. R18-11-109 and in Appendix A thereof. There are two standards for the Aquatic and Wildlife uses, acute and chronic. In developing AZPDES permits, the standards for all applicable designated uses are compared and limits that will protect for all applicable designated uses are developed based on the standards.	

IV. DESCRIPTION OF DISCHARGE

Because the facility is in operation and discharges have occurred, effluent monitoring data are available. The following is the measured effluent quality reported in the application.

Parameters	Units	No. of Data Points	Discharge Average	Discharge Maximum
Flow	gpm	>1200	964 gpm	1847 gpm
Chromium VI	µg/L	69	4.13	12
Copper	µg/L	45	2.84	8
Hardness	mg/L	46	264	330
1,1,1-Trichloroethane (TCA)	µg/L	56	<0.5	<0.5
1,1- Dichloroehtylene (DCE)	µg/L	56	<0.5	<0.5
Chloroform	µg/L	56	<0.5	<0.5
Tetrachloroethylene (PCE)	µg/L	56	<0.5	<0.5
Trichloroethlyene (TCE)	µg/L	56	<0.5	0.85

V. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT

Date of most recent inspection:	None
DMR files reviewed: DMR Exceedances:	January 2011 through December 2015 None
Lab reports reviewed:	January 2011 through December 2015

NOVs issued:	None
NOVs closed:	N/A
Compliance orders:	None

VI. PROPOSED PERMIT CHANGES

The following table lists the major changes from the previous permit in this draft permit.

Parameter	Existing Permit	Proposed permit	Reason for change
Reporting Location	Mail in hard copies of DMRs and other attachments	Mail in hard copies of DMRs and other attachments or submit by an alternative mode as specified by ADEQ.	Language added to support the NPDES electronic DMR reporting rule that became effective on December 21, 2015.
Chromium VI	Assessment level	Monitoring with a discharge limit. A mixing zone has been re-established for chromium VI.	Data submitted indicated reasonable potential (RP) for an exceedance of a standard.
Selenium	Assessment level	Monitoring with a discharge limit	Data submitted indicated reasonable potential (RP) for an exceedance of a standard.
Copper	Monitoring with a discharge limit	Monitoring required for effluent characterization.	Data submitted indicated no reasonable potential (RP) for an exceedance of a standard.
WET testing	Required 1x/year	1x/year in year 1 and 4 of the permit	Facility is in compliance with WET testing and the toxics in the groundwater discharge is not expected to be variable.

Anti-backsliding considerations – "Anti-backsliding" refers to statutory (Section 402(o) of the Clean Water Act) and regulatory (40 CFR 122.44(l)) requirements that prohibit the renewal, reissuance, or modification of an existing NPDES permit that contains effluent limits, permit conditions, or standards that are less stringent than those established in the previous permit. The rules and statutes do identify exceptions to these circumstances where backsliding is acceptable. This permit has been reviewed and drafted with consideration of anti-backsliding concerns.

Limits for copper have been removed from the permit because evaluation of current data allows the

conclusion that no reasonable potential (RP) for an exceedance of a standard exists.

This is considered allowable backsliding under 303(d)(4). The discharge limitations in the current permit for copper were based on state standards, the respective receiving waters are in attainment for copper, and the revisions are consistent with antidegradation requirements. See Section XII for information regarding antidegradation requirements.

Limits are retained in the draft permit for parameters where reasonable potential (RP) for an exceedance of a standard continues to exist or is indeterminate. In these cases, limits will be recalculated using the most current Arizona Water Quality Standards (WQS). If less stringent limits result due to a change in the WQS then backsliding is allowed in accordance with 303(d)(4) if the new limits are consistent with antidegradation requirements and the receiving water is in attainment of the new standard; see Section XII for information regarding antidegradation requirements.
No limits are less stringent due to a change in the WQS in this permit.

VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS

When determining what parameters need monitoring and/or limits included in the draft permit, both technology-based and water quality-based criteria were compared and the more stringent criteria applied.

Technology-based Limitations:
There are no promulgated technology-based limits for a treatment system such as the NIBW Area 12 Treatment Facility. However, it has been demonstrated that this technology allows for efficient removal of the volatile organic compounds (VOCs), and the discharge can be sampled with low detection limits. The discharge data reviewed showed there were no exceedances of the surface water quality standards for any of the VOCs of concern. There are no promulgated technology-based limits for a treatment system such as the NIBW Area 12 Treatment Facility. However, it has been demonstrated that this technology allows for efficient removal of the volatile organic compounds (VOCs), and the discharge can be sampled with low detection limits. The discharge data reviewed showed there were no exceedences of the surface water quality standards for any of the VOCs of concern.Limits are retained for 1,1-dichloroethene (DCE), tetrachloroethylene (PCE), trichloro-ethylene (TCE), chloroform and 1,1,1-trichloroethane (TCA) in the draft permit in accordance with the 2003 Amended Consent Decree (ACD) and 2001 Record of Decision Amendment (ROD). Except for TCE, all 56 data points for the five contaminants of concern have been reported as less than the laboratory reporting limits (RLs), and with the exception of chloroform, the proposed limits are based on Safe Drinking Water Act Maximum Contaminant Levels (MCLs). Both the 2001 ROD and the original ROD in 1991 had a cleanup level of 6 ug/L for chloroform which is retained as a limit in the proposed draft permit.

Numeric Water Quality Standards: As outlined in A.A.C. R18-11-109 and Appendix A:
Per 40 CFR 122.44(d)(1)(ii), (iii) and (iv), discharge limits must be included in the permit for parameters with "reasonable potential" (RP), that is, those known to be or expected to be present in the effluent at a level that could potentially cause any applicable numeric water quality standard to be exceeded. RP refers to the possibility, based on the statistical calculations using the data submitted, or consideration of other factors to determine whether the discharge may exceed the Water Quality Standards. The procedures used to determine RP are outlined in the *Technical Support Document for Water Quality-based Toxics Control (TSD)* (EPA/505/2-90-001). In most cases, the highest reported value for a parameter is multiplied by a factor (determined from the variability of the data and number of samples) to determine a "highest estimated value". This value is then compared to the lowest applicable Water Quality Standard for the receiving water. If the value is greater than the standard, RP exists and a water quality-based effluent limitation (WQBEL) is required in the permit for that parameter. RP

may also be determined from BPJ based on knowledge of the treatment facilities and other factors. The basis for the RP determination for each parameter with a WQBEL is shown in the table below.

The following trace substances were not included as limits or assessment levels in the draft permit due to a lack of RP based on best professional judgment (BPJ): ammonia, barium, chromium III, cyanide, *E. coli*, fluoride, hydrogen sulfide, iron, manganese, oil & grease, and total residual chlorine (TRC). The numeric standards for these pollutants are well above what would be expected in the discharge from this facility.

The proposed permit limits were established using a methodology developed by EPA. Long Term Averages (LTA) were calculated for each designated use and the lowest LTA was used to calculate the average monthly limit (AML) and maximum daily limit (MDL) necessary to protect all uses. This methodology takes into account criteria, effluent variability, and the number of observations taken to determine compliance with the limit and is described in Chapter 5 of the TSD. Limits based on A&W criteria were developed using the "two-value steady state wasteload allocation" described on page 99 of the TSD. When the limit is based on human health criteria, the monthly average was set at the level of the applicable standard and a daily maximum limit was determined as specified in Section 5.4.4 of the TSD.

Mixing Zone: Arizona state water quality rules require that water quality standards be achieved without mixing zones unless the permittee applies for and is approved for a mixing zone. The previous permit approved a mixing zone for chromium VI and the mixing zone is reestablished in this permit. The factors in Arizona mixing zones rules listed in A.A.C. R18-11-114(D) were considered upon approving the request.

The following trace substances were not included as limits or assessment levels in the draft permit due to a lack of RP based on best professional judgment (BPJ): ammonia, barium, chromium III, cyanide, *E. coli*, fluoride, sulfide, hydrogen sulfide, iron, manganese, oil & grease, and total residual chlorine (TRC). The numeric standards for these pollutants are well above what would be expected in the discharge from this facility.

Hardness: The permittee is required to sample hardness as $CaCO_3$ at the same time the trace metals are sampled because the water quality standards for some metals are calculated using the water hardness values. The hardness value of 225 mg/L was used to calculate the applicable water quality standards and any assessment levels or limits for the hardness dependent metals (cadmium, chromium III, copper, lead, nickel, silver and zinc.

Whole Effluent Toxicity (WET): WET testing is required in the draft permit (Parts I.B and IV) to evaluate the discharge according to the narrative toxic standard in A.A.C. R18-11-108(A)(5), as well as whether the discharge has RP for WET per 40 CFR 122.44(d)(iv).

WET testing for chronic toxicity shall be conducted using the following three surrogate species:

- *Ceriodaphnia dubia* (water flea) – for evaluating toxicity to invertebrates
- *Pimephales promelas* (fathead minnow) – for evaluating toxicity to vertebrates
- *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum or Raphidocelis subcapitata)* (a green alga) – for evaluating toxicity to plant life

ADEQ does not have a numeric standard for Whole Effluent Toxicity. However, ADEQ adopted the EPA recommended chronic toxicity benchmark of 1.0 TUc for a four day exposure period. Using this benchmark, the action levels for WET included in the draft permit were calculated in accordance with the methods specified in the *TSD*. The species chosen for WET testing are as recommended in the *TSD* and in *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*.

An exceedance of an action level will trigger follow-up testing to determine if effluent toxicity is persistent. If toxicity above an action level is found in a follow-up test, the permittee will be required to conduct a Toxicity Reduction Evaluation (TRE) and possibly a Toxicity Identification Evaluation (TIE) to identify the source of toxicity and reduce toxicity. These conditions are required to ensure that toxicants are not discharged in amounts that are toxic to organisms [A.A.C. R18-11-108(A)(5)]. A reopener clause is included in accordance with 40 CFR Parts 122 and 124 and AAC R18-9-B906.

WET sampling must coincide with testing for all the parameters in Parts I.A and B of the draft permit, when testing of those parameters is required, to aid in the determination of the cause of toxicity if toxicity is detected. Additional procedural requirements for the WET test are included in the proposed permit.

The required WET monitoring frequency for this facility is consistent with the WET testing frequency required for facilities with a similar design flow. The draft permit requires WET test results to be reported on discharge monitoring reports and submittal of the full WET lab report to ADEQ.

Discharge Characterization (DC): In addition to monitoring for parameters assigned either a limit or an AL, sampling is required to assess the presence of pollutants in the discharge at certain minimum frequencies for additional suites of parameters, whether the facility is discharging or not. This monitoring is specified in Tables 3.a. and 3.b, *Effluent Characterization Testing*, as follows:

• Table 3.a. – General Chemistry and Microbiology
• Table 3.b. – Selected Metals
NOTE: Some parameters listed in Tables 3.a. and 3.b. are also listed in Tables 1 or 2. In this case, the data from monitoring under Tables 1 or 2 may be used to satisfy the requirements of Tables 3.a. and / or 3.b., provided the specified sample types are the same. In the event the facility does not discharge to a water of the U.S. during the life of the permit, DC monitoring of representative samples of the effluent is still required.

The purpose of DC monitoring is to characterize the discharge and determine if the parameters of concern are present in the discharge and at what levels. This monitoring will be used to assess RP per 40 CFR 122.44(d)(1)(iii)). DC monitoring is required in accordance with 40 CFR 122.43(a), 40 CFR 122.44(i), and 40 CFR 122.48(b) as well as A.R.S. §49-203(A)(7). If pollutants are noted at levels of concern during the permit term, this permit may also be reopened to add related limits or conditions.

Permit Limitations and Monitoring Requirements:
The table that follows summarizes the parameters that are limited in the permit and the rationale for that decision. Also included are the parameters that require monitoring without any limitations or that have not been included in the permit at all and the basis for those decisions. The corresponding monitoring

requirements are shown for each parameter. In general, the regulatory basis for monitoring requirements is per 40 CFR §122.44(i) *Monitoring requirements*, and 40 CFR §122.48(b), *Required monitoring*; all of which have been adopted by reference in A.A.C. R18-9-A905, *AZPDES Program Standards*.

Table 3: Permit Limits/Assessment Levels and Monitoring Requirements						
Parameter	**Lowest Standard/ Designated Use**	**Maximum Reported Daily Value**	**No. of Samples**	**Estimated Maximum Value (1)**	**RP Determination**	**Proposed Monitoring Requirement/ Rationale (2) (3)(7)**
Flow	- - -	- - -	- - -	- - -	- - -	Discharge flow is to be monitored on a continual basis using a flow meter.
Chloroform	6 µg/L TBEL based on BPJ	<0.5 µg/L	56	0.425 µg/L	NA	Discharge monitoring with limitation is required to be consistent with 2003 Amended Consent Decree (ACD) and 2001 Record of Decision Amendment (ROD).
1,1,1-Trichloroethane (TCA)	200 µg/L TBEL based on BPJ	<0.5 µg/L	56	0.425 µg/L	NA	Discharge monitoring with limitation is required to be consistent with the 2003 ACD and 2001 ROD.
1,1-Dichloroethene (DCE)	6 µg/L TBEL based on BPJ	<0.5 µg/L	56	0.425 µg/L	NA	Discharge monitoring with limitation is required to be consistent with the 2003 ACD and 2001 ROD.
Tetrachloroethylene (PCE)	5 µg/L / FC TBEL based on BPJ	<0.5 µg/L	56	0.425 µg/L	NA	Discharge monitoring with limitation is required to be consistent with the 2003 ACD and 2001 ROD.
Trichloroethylene (TCE)	5 µg/L TBEL based on BPJ	0.85 µg/L	56	1.53 µg/L	NA	Discharge monitoring with limitation is required to be consistent with the 2003 ACD and 2001 ROD.
Antimony	30 µg/L / A&Ww chronic	3 µg/L	15	7.8 µg/L	No RP	Monitoring required for effluent characterization.
Arsenic	80 µg/L / FC	10 µg/L	17	24 µg/L	No RP	Monitoring required for effluent characterization.
Beryllium	5.3 µg/L / A&Ww chronic	<1.0 µg/L	10	1.5 µg/L	No RP	Monitoring required for effluent characterization.
Boron	1,000 µg/L / AgI	200 µg/L	12	560 µg/L	No RP	Monitoring required for effluent characterization.
Cadmium	4.07 µg/L / A&Ww chronic	<1.0 µg/L	15	2.6 µg/L	No RP	Monitoring required for effluent characterization.
Chromium, total	100 µg/L / PBC	19 µg/L	48	32.3 µg/L	No RP	Monitoring required for effluent characterization.
Chromium VI	11 µg/L / A&Ww chronic	12 µg/L	69	19.2 µg/L	RP exists	Monitoring required and a WQBEL is set.
Copper	17.9 µg/L / A&Ww chronic	8 µg/L	45	14.4 µg/L	No RP	Monitoring required for effluent characterization.
Hardness (as CaCO3) Receiving Water (4)	No Applicable Standard. Hardness is used to determine standards for specific metal parameters.	Maximum: 261 mg/L Average: 192 mg/L	12	NA	NA	Receiving water (McKellips Park Lake) monitoring without limitations or assessment levels is required once per month for determination of the applicable A&W standard for hardness-dependent metals. A&W standards for cadmium, chromium III, copper, lead, nickel, silver and zinc used for RP determinations were based on McKellips Park Lake's average hardness of 225 mg/L.
Lead	6.01 µg/L / A&Ww chronic	0.5 µg/L	15	1.25 µg/L	No RP	Monitoring required for effluent characterization.
Mercury	0.01 µg/L / A&Ww chronic	< 0.2 µg/L	14	0.26 µg/L	RP Indeterminate (high LOQ)	Monitoring required for effluent characterization. Permit requires low-level mercury monitoring.

Table 3: Permit Limits/Assessment Levels and Monitoring Requirements							
Parameter	**Lowest Standard/ Designated Use**		**Maximum Reported Daily Value**	**No. of Samples**	**Estimated Maximum Value (1)**	**RP Determination**	**Proposed Monitoring Requirement/ Rationale (2) (3)(7)**
Nickel	103.3 µg/L / A&Ww chronic		3.9 µg/L	17	9.36 µg/L	No RP	Monitoring required for effluent characterization.
Nitrogen, total	No Applicable Standards		NA	NA	NA	NA	Monitoring required for effluent characterization.
Oxygen, dissolved (5)	Single sample minimum: 6 mg/L A&Ww (urban lake)		Min.: 6.33 mg/L Max.: 14.6 mg/L	48	NA	NA	Monitoring required for effluent characterization.
pH (5)	Minimum: 6.5; Maximum: 9.0 A&Ww, and PBC A.A.C.R 18-11-109(B)		Min.: 6.69 S.U. Max.: 8.96 S.U.	50	NA	Limit is always included.	Monitoring required and a WQBEL is set.
Phosphorus, total	No Applicable Standards		NA	NA	NA	NA	Monitoring required for effluent characterization.
Selenium	2.0 µg/L / A&Ww chronic		6.2 µg/L	40	11.2 µg/L	RP exists	Monitoring required and a WQBEL is set.
Silver	13 µg/L / A&Ww acute		<1.0 µg/L	4	2.35 µg/L	No RP	Monitoring required for effluent characterization.
Temperature (5)	No applicable standard		Ave.: 24.5º C Max.: 29.3º C	40	NA	NA	Monitoring required for effluent characterization.
Thallium	7.2 µg/L / FC		<1.0 µg/L	15	1.3 µg/L	No RP	Monitoring required for effluent characterization.
Zinc	232 µg/L / A&Ww chronic		74 µg/L	17	177.6 µg/L	No RP	Monitoring required for effluent characterization.
Whole Effluent Toxicity (WET)	No toxicity (A.A.C. R18-11-108.A.6)	*Raphidocelis subcapitata*	1.0	3	N/A	RP Indeterminate	Discharge monitoring with action levels is required.
		Pimephales promelas	1.0	3	N/A	RP Indeterminate	Discharge monitoring with action levels is required.
		Ceriodaphnia dubia	1.0	3	N/A	RP Indeterminate	Discharge monitoring with action levels is required.

Footnotes:

(1) Estimated maximum value is the product of the maximum observed value and the RP multiplier.
(2) The monitoring frequencies above are required when the facility is discharging through Outfall 001. If the facility is not discharging during a monitoring period, no sampling is required during that period.
(3) At least one sample must coincide with WET sampling to aid in the determination of the cause of toxicity if toxicity is detected.
(4) Receiving water samples for hardness shall be taken at the time discharge samples are taken for cadmium, copper, lead, nickel, silver, and zinc. The samples shall be taken at a depth approximately half way from the surface to bottom of the McKellips Park Lake and within 100 feet radius of the discharge (effluent water inlet) point to the lake.
(5) Dissolved oxygen, pH, and temperature must be measured at the time of sampling and do not require use of a certified laboratory.
(6) Receiving water samples for chromium VI shall be taken in the McKellips Park Lake (See Part X, Special Conditions for detail).
(7) Monitoring for all parameters shall be conducted using discrete samples.

VIII. NARRATIVE WATER QUALITY STANDARDS

All narrative limitations in A.A.C. R18-11-108 that are applicable to the receiving water are included in Part I, Sections E and F of the draft permit.

IX. MONITORING AND REPORTING REQUIREMENTS (Part II of Permit)

Section 308 of the Clean Water Act and 40 CFR Part 122.44(i) require that monitoring be included in permits to determine compliance with effluent limitations. Additionally, monitoring may be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality.

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Monitoring frequencies for some parameters may be reduced in second term permits if all monitoring requirements have been met and the limits or ALs for those parameters have not been exceeded during the first permit term.

Discrete (i.e., grab) samples are specified in the permit for all parameters. The quality of the discharge is not expected to be highly variable.

Monitoring locations are specified in the permit (Part I.A and Part I.J) in order to ensure that representative samples of the influent and effluent are consistently obtained.

The requirements in the permit pertaining to Part II, Monitoring and Reporting, are included to ensure that the monitoring data submitted under this permit is accurate in accordance with 40 CFR 122.41(e). The permittee has the responsibility to determine that all data collected for purposes of this permit meet the requirements specified in this permit and is collected, analyzed, and properly reported to ADEQ.

The permit (Part II.A.2) requires the permittee to keep a Quality Assurance (QA) manual at the facility, describing sample collection and analysis processes; the required elements of the QA manual are outlined.

Reporting requirements for monitoring results are detailed in Part II, Sections B.1 and 2 of the permit, including completion and submittal of Discharge Monitoring Reports (DMRs), and AZPDES Flow Record forms.
The permittee is responsible for conducting all required monitoring and reporting the results to ADEQ on DMRs or as otherwise specified in the permit.

Electronic reporting. The US EPA has published a final regulation that requires electronic reporting and sharing of Clean Water Act National Pollutant Discharge Elimination System (NPDES) program information instead of the current paper-based reporting (Federal Register, Vol. 80, No. 204, October 22, 2015). Beginning December 21, 2016 (one year after the effective date of the regulation), the Federal rule requires permittees to make electronic submittals of any monitoring reports and forms called for in their permits. ADEQ will provide advance notification about specific requirements and procedures for electronic reporting before these requirements take effect.
ADEQ will continue to post new information about electronic reporting on the ADEQ web site (http://www.azdeq.gov/).

Requirements for retention of monitoring records are detailed in Part II.D of the permit.

X. BIOSOLIDS REQUIREMENTS

Not applicable.

XI. SPECIAL CONDITIONS

Operation

Not applicable.

Permit Reopener

This permit may be modified based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if assessment levels in this permit are exceeded [A.A.C. R18-9-B906 and 40 CFR Part 122.62 (a) and (b)].

XII. ANTIDEGRADATION

Antidegradation rules have been established under A.A.C. R18-11-107 to ensure that existing surface water quality is maintained and protected. The discharge from this facility will be to a canal which is subject to Tier 1 antidegradation protection. Effluent quality limitations and monitoring requirements have been established under the proposed permit to ensure that the discharge will meet the applicable water quality standards. As long as the permittee maintains consistent compliance with these provisions, the designated uses of the receiving water will be presumed protected, and the facility will be deemed to meet currently applicable antidegradation requirements under A.A.C. R18-11-107.

XIII. STANDARD CONDITIONS

Conditions applicable to all NPDES permits in accordance with 40 CFR, Part 122 are attached as an appendix to this permit.

XIV. ADMINISTRATIVE INFORMATION

Public Notice (A.A.C. R18-9-A907)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft AZPDES permit or other significant action with respect to an AZPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

Public Comment Period (A.A.C. R18-9-A908)

Rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to ADEQ. After the closing of the public comment period, ADEQ is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

Public Hearing (A.A.C R18-9-A908(B))

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant

new issues arise that were not considered during the permitting process.

EPA Review (A.A.C. R18-9-A908(C))

A copy of this draft permit and any revisions made to this draft as a result of public comments received will be sent to EPA Region 9 for review. If EPA objects to a provision of the draft, ADEQ will not issue the permit until the objection is resolved.

XV. ADDITIONAL INFORMATION

Additional information relating to this proposed permit may be obtained from:

Arizona Department of Environmental Quality
Water Quality Division – AZPDES Individual Permits Unit
Attn: Richard Mendolia
1110 West Washington Street – Mail Code 5415B-3
Phoenix, Arizona 85007

Or by contacting Richard Mendolia at (602) 771 – 4374 or by e-mail at rjm@azdeq.gov.

XVI. INFORMATION SOURCES

While developing effluent limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

1. AZPDES Permit Application Forms 1 and 2C, received November 16, 2015, along with supporting data, facility diagram, and maps submitted by the applicant with the application forms.

2. ADEQ files on North Indian Bend Wash – Area 12 Groundwater Extraction and Treatment System

3. ADEQ Geographic Information System (GIS) Web site

4. Arizona Administrative Code (AAC) Title 18, Chapter 11, Article 1, *Water Quality Standards for Surface Waters,* adopted January 31, 2009.

5. A.A.C. Title 18, Chapter 9, Article 9. *Arizona Pollutant Discharge Elimination System* rules.

6. Code of Federal Regulations (CFR) Title 40:
   Part 122, *EPA Administered Permit Programs: The National Pollutant Discharge Elimination System.*
   Part 124, *Procedures for Decision Making*.
   Part 133. *Secondary Treatment Regulation.*
   Part 503. *Standards for the Use or Disposal of Sewage Sludge*.

7. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.

8. *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*, US EPA, May 31, 1996.

9. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA /821-R-02-013).

10. U.S. EPA NPDES Permit Writers' Manual, September 2010.