STATE OF ARIZONA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PHOENIX, ARIZONA 85007

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM

GENERAL PERMIT FOR TREATMENT WORKS TREATING DOMESTIC SEWAGE AS BIOSOLIDS FOR LAND APPLICATION (BIOSOLIDS GENERAL PERMIT)

This permit provides authorization for the treatment of domestic sewage and preparation of biosolids for land application under the Arizona Pollutant Discharge Elimination System program, in compliance with the provisions of the Arizona Revised Statutes, Title 49, Chapter 2, Article 3.1 and Arizona Administrative Code, Title 18, Chapter 9, Articles 9 and 10, and the Clean Water Act as amended (33 U.S.C. 1251 *et seq*.)

This general permit becomes effective on _____2022.

This general permit and the authorization to prepare biosolids expire at midnight,_____2027.

Signed this _____ day of _____2022.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Trevor Baggiore, Water Quality Division Director

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PART I. COVERAGE UNDER THIS GENERAL PERMIT

A. Permit Area and Applicability

This general permit is applicable to the following treatment works treating domestic sewage (TWTDSs):

1. Privately and publicly owned wastewater treatment plants (WWTPs) which prepare biosolids for land application and which do not have coverage under an Arizona Pollutant Discharge Elimination System (AZPDES) individual or general permit containing provisions for the treatment of biosolids, and
2. TWTDS which are not WWTPs and prepare biosolids for land application.

B. This general permit is <u>not applicable</u> to the following:

1. TWTDSs located in Indian Country[1];
2. WWTPs which send untreated sewage sludge to another WWTP for treatment; or
3. WWTPs which send sewage sludge to a landfill or to a surface disposal site.

PART II. AUTHORIZATION UNDER THIS GENERAL PERMIT

A. Application for Coverage under this Permit

1. A Notice of Intent (NOI) for authorization to prepare biosolids for land application under this general permit is required for each person or facility seeking coverage under this general permit and meeting the requirements under Part I. A facility meeting the requirements under Part I has the option to request an individual AZPDES permit in lieu of a general permit. The general permit may cover all applicable biosolids treatment, preparation, and use practices as described in Part I.
2. The applicant submitting an NOI must be a person having control of those activities necessary to ensure compliance with the conditions of this permit and who takes responsibility for such compliance. Signatory requirements are specified in Appendix D of this permit. NOTE: the applicant, as the person in control of said activities, is liable for adherence to the conditions of the permit, which include potential civil and criminal penalties for noncompliance (see Appendix D of this permit).

B. Authorization to Prepare Biosolids for Land Application and Timeframes

1. A person who submits a complete and accurate NOI for authorization under this general permit as required by A.A.C. R18-9-C901(B) is authorized to treat sewage sludge for the preparation of biosolids for beneficial use after receiving written approval from the Arizona Department of Environmental Quality (ADEQ) in the form of a certificate of authorization. The certificate of authorization will specify the effective date of coverage.
2. If the Director notifies an applicant that an activity is ineligible for coverage under this general permit, the person may apply for an individual AZPDES permit or alternative general permit, if applicable.

C. Modification of Coverage

The NOI and certificate of authorization may not be modified except for minor modifications such as typographical errors or clarifications. In requesting an amendment, a revised NOI form clearly identified as “AMENDED” must be submitted to ADEQ with a cover letter referencing the original authorization number describing the changes and the reasons they are needed. ADEQ will evaluate the modifications requested and determine whether a new certificate of authorization will be issued. The request shall be submitted as specified in Part III.D. below.

[1] The State of Arizona, Department of Environmental Quality, Water Quality Division, does not have permitting authority for Indian Country. Authorization for the preparation of biosolids in Indian Country must be obtained through EPA Region IX or other appropriate authority.

D. Terminating Coverage

1. A permittee shall end coverage under this general permit by submitting a Notice of Termination (NOT) form for the existing certificate of authorization to ADEQ. Authorization to prepare biosolids terminates at midnight on the day the NOT is received by ADEQ. The NOT shall be submitted as specified in Part III.D. below.
2. A permittee shall submit an NOT to ADEQ within 30 days after the permittee transfers ownership of, or responsibility for, the facilities or activities addressed in the certificate of authorization.
3. The permittee shall continue to submit the results of monitoring required by this permit until the submittal date of the NOT.

E. Transfer of Permit Coverage

Authorization to prepare biosolids under this general permit is not transferable to any person (see definition of person in Appendix B). When there is a change in the responsible permittee for compliance with this permit (i.e. the original permittee/signer of the NOI), the new responsible permittee shall submit a new NOI. The original permittee shall also submit an NOT (see Part II.D.2).

F. Continuation of this Permit

If this permit is not reissued or replaced prior to the expiration date, it is administratively continued in accordance with A.A.C. R18-9-C903(A)(2) and remains in force and effect. Any activity authorized under this permit will automatically remain covered by this permit until the earliest of the following:

1. the permittee submits a timely, complete, and accurate NOI requesting authorization to prepare biosolids under a renewal or revision of this permit and ADEQ issues a certificate of authorization. This timely submission is limited to 90 calendar days from the date of issuance of the new general permit and includes applicable fees; or
2. the permittee submits an NOT; or
3. ADEQ denies coverage under this general permit or denies or issues coverage under an individual permit or other alternative permit for the facility's activities; or
4. a formal permit decision is made by ADEQ not to reissue this general permit, at which time ADEQ will identify a reasonable time period for covered TWTDSs to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

G. Alternative Permits

1. ADEQ may require a TWTDS to obtain authorization to prepare biosolids under either an individual AZPDES permit or an alternative AZPDES general permit in accordance with A.A.C. R18-9-C902(A). If ADEQ requires a TWTDS to apply for an individual permit, any applications shall be submitted within 90 calendar days unless ADEQ provides an extended deadline. For TWTDS already covered under this permit, coverage will continue until the individual permit is issued unless the permittee fails to submit the individual AZPDES permit application by the specified deadline. ADEQ may take appropriate enforcement action for any unpermitted activity.
2. An applicant may elect to forego coverage under this general permit by applying for an individual permit. In such a case, the applicant must submit an individual permit application in accordance with the requirements of A.A.C. R18-9-B901(B)(2) to the Department. The request shall be submitted as specified in Part III.D and shall include reasons supporting the request. The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit if the Department finds that the reasons are adequate to support the request.

   When an individual AZPDES permit is issued to the applicant or the applicant is authorized to prepare biosolids under an alternative AZPDES general permit, the authorization to prepare biosolids under this permit is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit. However, an NOT must still be submitted per Part II.D.2.

PART III. NOI REQUIREMENTS

A. Deadlines for Notification

New facilities are not authorized to prepare biosolids for land application until written authorization is received from ADEQ, and no biosolids preparation activities shall be conducted until such authorization is received unless the activities are currently authorized by another permit. Therefore, for new facilities, the NOI should be submitted at least 90 calendar days prior to beginning biosolids preparation activities. Facilities that are in operation prior to the effective date of this permit and do not have coverage under another permit shall submit a complete and accurate NOI within 90 days of the effective date of this permit.

B. Contents of an AZPDES General Permit NOI

Persons seeking authorization to prepare biosolids for land application under this general permit must submit a complete and accurate NOI to ADEQ (see Part II.B.) on a form provided by the Department. A complete NOI must contain the following information:

1. name, address, and telephone number of the owner of the biosolids preparation facility;
2. name, address, and telephone number of the operator of the biosolids preparation facility, if different from the owner;
3. name, address, and telephone number of an agent or contact person, if different from Part III.B.1. and 2. above;
4. name and address of the owner of land where the biosolids preparation facility is located, if different from Part III.B.1. above;
5. latitude and longitude of the facility;
6. a topographic map of the biosolids preparation facility which shows the location of all areas of the property where the treatment, preparation, and storage of biosolids and process materials occurs and identifies all surface water bodies;
7. permit or issuance number for all individual or general environmental permits currently held by the applicant which are directly associated with the facility;
8. if the facility is a WWTP, provide the design capacity and information on municipalities and areas served by the facility, type of collection system (combined vs. separate), and ownership (municipal, private, etc.). If the WWTP accepts processed wastewater from any significant industrial user (SIU), has or is required to have a pretreatment program, or receives RCRA, CERCLA, or other remediation wastes (including WQARF or UST remediations), provide all applicable details (e.g., number, names, SIU codes, processes, flow rate, treatment, pretreatment standards, pollutants).
9. A complete description of the proposed on-site management practices, including:
    a. a description of the type and size of the facility generating and/or receiving and treating/preparing the biosolids;
    b. a description of the biosolids treatment and preparation processes including the estimated volume of biosolids generated in dry metric tons per year;
    c. a description of the pathogen reduction method used to comply with A.A.C. R18-9-1006;
    d. a description of the vector attraction reduction method used to comply with A.A.C. R18-9-1010;
    e. a description of the materials used for composting, if applicable;
    f. sampling and testing procedures, including monitoring frequencies and analytical methods, and a summary of available monitoring data indicating the detected concentrations of metals and pathogens in the prepared biosolids;
    g. a list of all off-site generators, if any, with the amounts received annually in dry metric tons, and a description of all testing requirements and the method used to track the materials coming into the facility;
    h. location and volume of on-site and off-site biosolids storage, if applicable;

i. transportation methods and spill prevention plan, if applicable;

j. except for a facility producing Exceptional Quality (EQ) biosolids, a list of current land application sites.

10. Applicant certification: The name, title, and signature of the applicant or the official certifying the NOI information and compliance with this permit (see Appendix D, section 2. Signatory Requirements).

C. Initial Fees

The initial fee shall be submitted with the NOI. The initial and annual fees for AZPDES General Permits are based on the fee levels specified in A.A.C. R18-14-109, Table 6, AZPDES Water Quality Protection Services Flat Fees. The fee levels assigned are based on the amount of biosolids prepared annually as follows:

Amount of Biosolids Prepared per Calendar Year (dry metric tons)	**Initial and Annual Fee (see R18-14-109, Table 6)**
> 0 to < 290	Level 1B
≥ 290 to < 1,500	Level 2
≥ 1500 to < 15,000	Level 3
≥ 15,000	Level 4A

D. Where to Submit

ADEQ is developing an electronic reporting portal where the permittee shall submit the NOI, NOT, applicable fees and any other associated documents. At such time when the electronic portal becomes available all NOIs, NOTs, fees and any other associated documents shall be submitted electronically using the portal myDEQ. Prior to the portal availability, the permittee shall submit annual reports, NOTs, and any associated documents to biosolids@azdeq.gov, and NOIs and any fees by mail, delivery service, or hand-delivery to the following address:

Arizona Department of Environmental Quality
Surface Water Protection - Permits
1110 West Washington Street, 5415A-1
Phoenix, Arizona 85007

PART IV. BIOSOLIDS TREATMENT AND PREPARATION REQUIREMENTS

Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 C.F.R. 503.9 and Arizona Administrative Code (A.A.C.) R18-9-1001(7) that are prepared for the purpose of beneficial use. Sewage sludge that is hazardous as defined in 40 C.F.R. 261 must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA). Sludge with polychlorinated biphenyls (PCB) levels greater than 50 mg/kg must be disposed of in accordance with 40 C.F.R. 761. For purposes of this permit, the term "biosolids" may be used interchangeably with "sewage sludge."

A. General Use or Disposal Requirements

1. All biosolids generated and/or prepared at the facility shall be used or disposed of in compliance with the applicable portions of 18 A.A.C. Chapter 9, Article 10; and
    a. 40 C.F.R. 503 Subpart C: for biosolids that are placed on the land for the purpose of disposal (surface disposal, dedicated and disposal sites, lagoons or monofills);
    b. 40 C.F.R. 258: for biosolids disposed of in municipal solid waste landfills; and
    c. 40 C.F.R. 257: for all biosolids use and disposal practices not covered under 40 C.F.R. 258 or 503.
2. The permittee shall ensure that:
    a. biosolids treatment, preparation, and storage for land application do not contribute to a violation of water quality standards;
    b. biosolids treatment, storage, and use or disposal does not create a nuisance such as malodorous smell or attraction of flies or other disease carrying vectors;
    c. biosolids generated and/or prepared at the facility are not applied to the land if the biosolids are likely to adversely affect a threatened or endangered species as listed under Section 4 of the Endangered Species Act (16 U.S.C. 1533), or its designated critical habitat as defined in 16 U.S.C. 1532;
    d. land application sites receiving bulk biosolids generated and/or prepared at this facility are registered with ADEQ in accordance with A.A.C. R18-9-1004.
    e. no biosolids generated and/or prepared at the facility are incinerated in the state of Arizona.

B. Biosolids Preparer's Responsibility

The permittee is responsible for ensuring that all biosolids produced or accepted at the facility are used or disposed of in accordance with 40 C.F.R. 503 Subpart C, 40 C.F.R. 257, 40 C.F.R. 258, and 18 A.A.C. Chapter 9, Article 10, as applicable, whether the permittee uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal. The permittee is responsible for informing any subsequent transporters, preparers, applicators, and disposers of the requirements that they must meet under 18 A.A.C. Chapter 9, Article 10.

C. Duty to Mitigate

The permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal, which has a likelihood of adversely affecting human health or the environment.

D. Surface Water Protection

1. No biosolids generated and/or prepared at this facility shall enter protected state waters.
2. The permittee must design and operate all on-site treatment, preparation, or storage areas for biosolids to:
    a. divert surface run-on from adjacent areas to prevent contact with biosolids;
    b. protect the site boundaries from erosion; and
    c. prevent any drainage that has contacted biosolids from escaping the site.

    These features shall be designed to be protective for at least a 25-year 24-hour storm event. If the permittee sends biosolids off-site that are not exceptional quality biosolids (EQB), the permittee shall ensure all treatment, preparation, or storage areas that receive those biosolids have the same level of protection.

E. Inspection and Entry

The permittee shall allow, directly or through contractual arrangements with their biosolids management contractors, authorized representatives of ADEQ and EPA to:

1. enter upon all premises where biosolids are treated, used, or disposed, either by the permittee or by another party to whom the permittee transfers the biosolids for treatment, storage, use, or disposal;
2. have access to and copy any records that must be kept under the conditions of this permit and per 18 A.A.C. Chapter 9 Article 10 (including those in 40 C.F.R. 503 Subpart C) by the permittee or by another party to whom the permittee transfers the biosolids for further treatment, storage, use, or disposal; and
3. inspect any facilities, equipment including monitoring and control equipment, practices, or operations used in biosolids treatment, storage, use, or disposal by the permittee or by another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

F. General Biosolids Monitoring Requirements

1. Biosolids Self-monitoring Frequency

Unless otherwise specified in this permit, the permittee shall conduct self-monitoring events at least at the frequency listed in the table below for any sampling required in this permit.

Biosolids Monitoring Frequency

Amount of Biosolids Prepared per Calendar Year (dry metric tons)	**Minimum Monitoring Frequency**
> 0 to < 290	One sampling event per year
≥ 290 to < 1,500	One sampling event per quarter
≥ 1,500 to < 15,000	One sampling event per 60 days
≥ 15,000	One sampling event per month

2. Sampling and Analysis Methods

The permittee shall ensure biosolids are tested using the methods specified in 40 C.F.R. 503.8, as required in A.A.C. R18-9-1012(G), or by the wastewater sample methods and solid, liquid, and hazardous waste sample methods established in A.A.C. R9-14-612 and A.A.C. R9-14-613 as applicable. Testing shall be performed at a laboratory operating in compliance with A.R.S. §36-495. Because of the potential for re-growth of pathogens, for Class A or EQ biosolids, samples demonstrating pathogen reduction shall be taken within 30 days before biosolids are shipped off-site, so verification that requirements are met is obtained before the biosolids leave the site.

3. Representative Sampling

The permittee shall ensure that sampling conducted during a monitoring period adequately represents the quality of all biosolids used/treated/disposed over the monitoring period. This may entail taking several samples per sampling event and/or sampling more frequently than the minimum specified.

4. Testing Stockpiled/Accumulated Biosolids Prior to Distribution or Use

If, after treatment, biosolids classified as EQ or Class A, or as Class B demonstrated through A.A.C. R18-9-1006.(E.)(1) (Alternative 1), are stockpiled or accumulated on-site prior to reuse/disposal, the permittee shall develop a sampling plan that ensures samples representative of the entire stockpile are collected and analyzed for pathogens within 30 days before distribution or use. The plan shall detail the number and location of samples to be taken from a cross section of **each** pile or area. The plan must include at least one (1) sample for each 0 - 290 metric dry ton increments. More sampling is appropriate when the biosolids are inconsistent in nature or non-uniformly treated.

The permittee must collect and analyze representative samples per the sampling plan. Distribution or use shall not occur until the permittee verifies that the biosolids sampled meet all applicable requirements for its use.

5. Testing for Hazardous Waste Determination

   The permittee shall test the biosolids for purposes of hazardous waste determination at least annually as described in Appendix C.

6. Testing Requirements for WWTPs with Pretreatment Programs

   A POTW or other WWTP that is required to implement a pretreatment program under 40 C.F.R. Part 403 or A.A.C. R 18-9-A906 shall:

   a. sample and analyze biosolids for all the priority pollutants listed under section 307 (a)(1) of the Clean Water Act except asbestos. This shall consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan;
   b. sample and analyze biosolids quarterly for the following Pollutants of Concern:

Arsenic	Copper	Mercury	Selenium
Cadmium	Cyanide	Molybdenum	Silver
Chromium	Lead	Nickel	Zinc

   and

   c. design local limits to achieve the ceiling and monthly average pollutant concentration levels for pollutants given in Table 1 of section G.1.a. below. If pollutants in the biosolids exceed any of these monthly average pollutant concentration levels, the permittee shall revise its local limits as necessary in order to meet these levels.

7. Testing Requirements for Incoming Biosolids Received from Off-site Generators

   a. The permittee shall monitor or obtain monitoring results from each generator for all biosolids accepted for processing at the facility from that generator as specified in Table 1 of section G.1.a. below. The permittee shall not accept biosolids for processing that exceed any of the metals ceiling concentrations given in the table. The minimum monitoring frequency for metals ceiling concentrations required is based upon the amount of biosolids accepted from each generator in a calendar year as specified in the table.
   b. The permittee shall test or obtain monitoring results from each generator for the incoming biosolids received from that generator at least annually to determine if the biosolids received are hazardous as described in Appendix C.

G. Biosolids Limitations and Monitoring Requirements for Land Application

The permittee shall monitor biosolids generated and/or prepared at this facility for land application and limit their use as follows:

1. Metals Concentrations

   a. Biosolids shall be sampled for the metals listed in Table 1 below at a frequency not less than the minimum indicated for the amount of biosolids prepared annually. Samples shall be taken after all treatment and blending processes, but prior to land application.

Table 1. Metals Ceiling Concentrations and Monthly Average Pollutant Concentrations

Pollutant	**Ceiling Concentrations** (mg/kg, dry weight basis)	**Monthly Average Pollutant Concentrations** (mg/kg, dry weight basis)	**Minimum Monitoring Frequency per Volume Prepared Annually**
Arsenic	75.0	41.0	0 to < 290 dry metric tons: One (1) sampling event per year. ≥ 290 to < 1500 dry metric tons: One (1) sampling event per quarter. ≥ 1500 to < 15,000 dry metric tons: One (1) sampling event per 60 days. ≥ 15,000 dry metric tons: One (1) sampling event per month.
Cadmium	85.0	39.0	
Chromium	3,000.0	Not Applicable	
Copper	4,300.0	1,500.0	
Lead	840.0	300.0	
Mercury	57.0	17.0	
Molybdenum	75.0	Not Applicable	
Nickel	420.0	420.0	
Selenium	100.0	100.0	
Zinc	7,500.0	2,800.0	

b. The permittee shall not land apply biosolids that exceed any of the ceiling concentrations in Table 1, above. The permittee shall not land apply biosolids with pollutant concentrations that exceed any of the ceiling concentrations in the preceding table. The permittee shall not sell or give away biosolids for land application if pollutant concentrations exceed any of the ceiling concentrations in the preceding table.

c. If biosolids exceed any ceiling concentration in Table 1, the permittee must:
   - notify the ADEQ (see Part III.D.;)
   - find alternative disposal methods other than land application for the biosolids represented by that sampling event; and
   - identify the source of the pollutants and take appropriate source control measures to reduce the presence of the pollutant(s) of concern.

d. If biosolids exceed a monthly average pollutant concentration listed in Table 1, the following conditions apply:
   - the biosolids shall not be applied as bulk biosolids to a lawn or garden;
   - the biosolids shall not be sold or given away if any annual pollutant loading rate listed in Table 3 of A.A.C. R18-9-1005(D) will be exceeded. The annual pollutant loading rate shall be determined using the methodology in 18 A.A.C. Chapter 9, Article 10, Appendix A;
   - the biosolids shall not be applied to a site if any cumulative pollutant loading rate in Table 4 of A.A.C. R18-9-1005(D) will be exceeded. The cumulative pollutant loading rate shall be determined using the methodology in A.A.C. R18-9-1005(D).

e. The permittee shall not apply, sell, or give away biosolids for application to a lawn or garden unless they are Exceptional Quality (EQ) biosolids.

f. The permittee shall be able to demonstrate that all biosolids meet the definition of EQ biosolids in order to claim exemption from the management practices in A.A.C. R18-9-1007 and R18-9-1008. If claiming biosolids are EQ, during the first two (2) years of EQ biosolids preparation, the permittee shall submit the results of all biosolids testing and details about the pathogen and vector control treatment processes to ADEQ. The permittee shall receive written confirmation from ADEQ that the results demonstrate the biosolids meet EQ requirements prior to selling or giving away or land applying any biosolids for uses requiring

an EQ biosolids classification.

2. Pathogen Reduction Requirements

   a. Biosolids must meet Class A or Class B pathogen reduction requirements established in A.A.C. R18-9-1006 at the time the biosolids are land applied and, if stored uncovered prior to land application, at the time the biosolids are stored. The permittee shall also verify that the reduction is met within 30 days prior to distribution (see section F.4.). The permittee shall document and retain records of the treatment used to achieve Class A or Class B pathogen reduction levels and, if demonstrating treatment to Class A, the fecal coliform or *Salmonella sp*. density. Retesting is required within 30 days of distribution for EQ and Class A biosolids and for Class B biosolids if pathogen reduction was demonstrated through Alternative 1.

   b. Biosolids sold or given away in a bag or other container for land application, or applied on a lawn or home garden, shall meet the Class A pathogen reduction requirements established in A.A.C. R18-9-1006(D).

   c. The permittee shall maintain daily records of the operating parameters for the pathogen reduction treatment alternative used as necessary to demonstrate the treatment requirements have been met. If using A.A.C. R18-9-1006(D) Alternative 4, the permittee shall demonstrate acceptable levels of enteric virus and viable helminth ova through monitoring.

   d. Microbiological monitoring for fecal coliforms or *Salmonella sp.* to demonstrate pathogen reduction during a given monitoring period shall be conducted as close to the actual distribution or disposal of the biosolids as feasible. The analytical results must demonstrate effective pathogen reduction is achieved prior to distributing or disposing of the biosolids. If the permittee stores biosolids before they are distributed for use or disposal, microbiological testing must take place within 30 days prior to distribution or disposal.

   e. In order to demonstrate Class B pathogen reduction using A.A.C. R18-9-1006(E) Alternative 1:

      - at least seven (7) individual grab samples must be taken and analyzed for fecal coliform during each monitoring event (unless an alternate sampling plan has been approved by ADEQ);
      - the geometric mean of the results must be < 2,000,000 MPN/gram or CFU/gram of total solids (dry-weight basis); and
      - samples are to be taken over a 14-day period to adequately represent sludge variability.

   (Note: A ‘monitoring event’ includes the period of time that samples are collected, analyzed, and the sample results provided to the permittee.)

   f. In order to demonstrate Class A pathogen reduction, in addition to meeting one of the alternative pathogen treatment options in A.A.C. R18-9-1006(D):

      - at least seven (7) individual grab samples must be collected and analyzed for fecal coliform during each monitoring event (unless an alternate sampling plan has been approved by ADEQ) and all seven samples must be < 1,000 MPN/gram; or
      - at least seven (7) individual grab samples must be collected and analyzed for *Salmonella sp*. during each monitoring event (unless an alternate sampling plan has been approved by ADEQ) and each must be < 3 MPN/4 grams total solids (dry-weight basis); or
      - samples are to be taken over a 14-day period to adequately represent sludge variability.

   g. If demonstrating Class A pathogen reduction using A.A.C. R18-9-1006(D) Alternative 4:

- One composite sample consisting of at least seven (7) grab samples must be collected and analyzed for enteric virus during each monitoring event and the arithmetic mean of four (4) duplicate analyses of that composite must be < 1 PFU/4 grams total solids (dry-weight basis). Grab samples are to be taken over a 14-day period prior to compositing them to adequately represent sludge variability, and the maximum holding time is two (2) weeks.
- One composite sample consisting of at least seven (7) grab samples must be collected and analyzed for viable helminth ova during each monitoring event and the arithmetic mean of four (4) duplicate analyses of that composite must be < 1 viable ova/4 grams total solids (dry-weight basis). Grab samples are to be taken over a 14-day period prior to compositing them to adequately represent sludge variability.

3. Vector Attraction Reduction Requirements

   a. The permittee shall ensure that all biosolids generated and/or prepared at this facility meet the vector attraction reduction requirements established in A.A.C. R18-9-1010 when the biosolids are land-applied. If biosolids are stored uncovered prior to land application, one of the vector attraction reduction alternatives established in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8) must be met prior to storage. The permittee shall document and retain records of the operational parameters or application methods used to achieve the vector attraction reduction requirements.

   b. The permittee shall ensure that all biosolids generated and/or prepared at this facility that are sold or given away in a bag or other container, or applied to a lawn or home garden, meet one of the vector attraction reduction alternatives established in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8). The permittee shall document and retain records of the operational parameters or application methods used to achieve the vector attraction reduction requirements.

4. Nitrogen Testing

   The permittee shall ensure that biosolids generated and/or prepared at this facility for land application are tested for organic-N, ammonium-N, and nitrate-N at least at the applicable minimum frequency in Table 1, Part G, and that the most recent test results are provided to any subsequent preparer, user, or disposer.

5. Composting Requirements

   The permit will limit the type of bulking agents to non-hazardous, organic, compostable materials such as animal bedding material (including de minimis amounts of manure), grass clippings, hay, straw, leaves, weeds, wood chips, sawdust, twigs, tree prunings, other vegetative matter from crop residues or clearing activities, and food processing residuals.

H. Management Practices for Land Application

The permittee shall ensure that all non-EQ bulk biosolids generated and/or prepared at this facility are land applied in accordance with the management practices in A.A.C. R18-9-1007, unless the bulk biosolids are land applied for reclamation.

If the permittee generates or prepares non-EQ bulk biosolids that are land applied for reclamation, the permittee shall ensure that the biosolids are land applied in accordance with the management practices in A.A.C. R18-9-1008.

If the permittee generates or prepares EQ biosolids placed in a bag or other container for distribution/land application or reclamation, the permittee shall distribute a label or information sheet to the person receiving the material. This label or information sheet shall contain, at a minimum, the following information:

1. the identity and address of the person who prepared the biosolids;
2. instructions on the proper use of the material, including agronomic rates and an annual application rate that ensures that the annual pollutant rates established in A.A.C. R18-9-1005 are not exceeded; and

3. a statement that application of biosolids to the land shall not exceed application rates described in the instructions on the label or information sheet.

I. Biosolids Storage

1. Biosolids shall not be stored on land for over two (2) years from the time they are generated or prepared for land application unless an individual permit for surface disposal is obtained per 18 A.A.C. Chapter 9, Article 10 and 40 C.F.R. 503 Subpart C, or written notification has been submitted to the ADEQ with the information in 40 C.F.R. 503.20(b) that sufficiently demonstrates the need for longer temporary storage.
2. For the protection of public health, biosolids shall not be stored uncovered on-site or off-site unless the permittee can demonstrate that prior to placement in storage:
    a. the biosolids meet Class A or B pathogen reduction requirements established in A.A.C. R18-9-1006(D) or (E), and
    b. the biosolids meet one of the vector attraction reduction alternatives in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8).
    c. For biosolids which are classified as EQ, or Class A, or as Class B through pathogen reduction Alternative 1, the permittee must also sample for pathogen reduction following storage and within 30 days prior to reuse/disposal or distribution. Sampling before storage shall occur at least at the minimum frequencies given in the table in Part IV.F.1., and sampling after storage shall be conducted as specified in Part IV.F.4.
3. Prior to storing biosolids at an off-site storage location, the permittee shall notify the ADEQ in writing where the biosolids will be stored and the expected date of final use or disposal. Note: this does not apply to biosolids which have been sold or transferred to another person.

J. On-site Management Plan

1. The permittee shall develop and maintain an On-site Management Plan (Plan). The Plan shall be submitted to ADEQ within 90 days of receiving the authorization certificate for coverage under this permit unless previously submitted.
2. This Plan shall:
    a. detail how biosolids are managed from the time that they are generated at the facility until they are shipped off-site;
    b. include a professional diagram of facilities/areas used in the operation and the area surrounding the operation;
    c. give specific protocols to be followed to ensure that the material generated at this facility will consistently meet all applicable requirements in 18 A.A.C. Chapter 9, Article 10 and 40 C.F.R. Part 503 Subpart C and the provisions of this permit;
    d. specify how and when representative samples of biosolids will be taken and contain a contingency plan for managing biosolids that exceed the requirements for the expected end use/disposal; and
    e. address issues of potential concern such as storage areas; run-on and run-off control; odor and dust control.
3. This Plan shall include Standard Operating Procedures (SOPs) for all routine operations, including (but not limited to) monitoring and recording windrow temperatures, if applicable. SOPs for biosolids sampling and all details regarding sample collection and analysis information shall be included in the QA Manual as specified in Part V.A.2. The QA Manual shall be referenced in the Plan as appropriate and attached as an appendix to the Plan.

K. Record Keeping Requirements

1. The permittee shall collect and retain all biosolids information required by this permit and A.A.C. R18-9-1013(A)(1) through (A)(6) for at least five (5) years.
2. The permittee shall keep analytical test results and all documentation that supports the biosolids classification on-site and available for review for at least five (5) years.

3. All biosolid records are subject to periodic inspection and copying by ADEQ.

L. Notification Requirements

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

1. Notification of Noncompliance

   a. The permittee shall notify ADEQ of any noncompliance with the biosolids provisions of this permit or with 18 A.A.C. Chapter 9 Article 10, which may endanger health or the environment. The permittee shall provide the information orally within 24 hours from the time the permittee becomes aware of the circumstances (see Part V.C.).

   b. For other instances of noncompliance with the biosolids provisions, the permittee shall notify the ADEQ in writing within five (5) working days of becoming aware of the circumstances.

   c. Permittees shall require their biosolids management contractors to notify ADEQ of any noncompliance within the time-frames specified in Part V.C.

2. Notification of Shipment to another State

   Except for EQ Biosolids, if biosolids are shipped to another State or to Indian Lands, the permittee shall send a notice of the shipment to the NPDES permitting authorities in the receiving State or Indian Land (the EPA Regional Office for that area and the State/Indian authorities) with a copy to the ADEQ. The notice shall be sent at least 60 days before the biosolids are planned to be shipped.

3. Notification of Change in Land Application Sites, Applicators, or Disposal Methods

    a. Prior to sending, placing or applying any bulk biosolids generated and/or prepared at this facility to a site that the permittee has not previously utilized for biosolids use/disposal within the last three (3) years, the permittee shall verify that the application site has been registered in accordance with A.A.C. R18-9-1004 and shall notify the ADEQ of the planned change. The notification shall include a description and topographic map of the proposed site(s), latitude and longitude coordinates at the center of each field/site, slope of land surface, names and addresses of the applicator(s) and site owner(s), a listing of any state or local permits which must be obtained, a description of the crops or vegetation to be grown at each site, proposed loading rates and determination of agronomic rates.

    b. Prior to transferring bulk biosolids for land application to an applicator that the permittee has not transferred biosolids to within the last three (3) years, the permittee shall notify the ADEQ of the planned change. The notification shall include: the name, address, and telephone number of the applicator and any agent of the applicator; the name and telephone number of a primary contact person who has specific knowledge of the land application activities of the applicator; and whether the applicator holds a NPDES or AZPDES permit, and, if so, the permit number.

    c. Prior to changing the method of biosolids use, treatment or disposal that was identified in the permittee's application for this permit, the permittee shall notify the ADEQ of the planned change in writing. If ADEQ determines that the newly proposed practice is not covered under this permit, the permittee shall request and receive a permit modification prior to making the change.

    d. The permittee shall keep records of site registration verifications and of all notifications made to ADEQ.

4. Notification of Land Application of Biosolids that Exceed Monthly Average Pollutant Concentrations

    The permittee shall notify the ADEQ and any subsequent biosolids handlers if biosolids generated and/or prepared at this facility do not meet any of the monthly average pollutant concentration values listed in Table 1 Part IV. G. The permittee shall ensure that bulk biosolids exceeding a monthly average pollutant concentration will not be applied to a site if any cumulative pollutant loading rate in A.A.C. R18-9-1005, Table 4, will be exceeded per A.A.C. R18-9-1005(D)(2).

5. Notification to Subsequent Land Applicators

    The permittee shall notify the applicator of all the applicator's requirements under Title 18 Chapter 9 Article 10 including the requirement that the applicator certify that management practices, site restrictions, and any applicable vector attraction reduction requirements have been met.

M. Annual Report

The permittee shall submit an annual biosolids report to the ADEQ by **February 19 of each year** for the period covering the previous calendar year. Unless informed otherwise, the annual report can be found on the ADEQ website by searching "Biosolids Annual Report" in the search field. The report shall be electronically completed and shall include:

1. the amount of biosolids prepared during the previous calendar year; the amount stored at the beginning and end of the previous calendar year, in dry tons or dry metric tons (prefer metric tons); and the amount distributed;

2. if biosolids are obtained from off-site generators, the amounts obtained from each generator during the previous calendar year and all testing data received from those generators;

3. the results of all biosolids monitoring conducted during the previous calendar year and copies of the associated laboratory analytical reports. Metals (other than TCLP metals) shall be reported on a 100% dry weight basis. Note: All testing including microbiological testing must meet required holding times;

4 descriptions of pathogen reduction methods and vector attraction reduction methods used during the previous calendar year. The permittee must submit sludge processing data used to demonstrate how treatment alternative(s) in A.A.C. R18-9-1006 and R18-9-1010 were attained, (such as time, temperature, percent solids, pH etc.) as applicable;

5. names, mailing addresses, and street addresses of all persons who received biosolids generated and/or prepared at this facility for storage, further treatment, disposal in a municipal waste landfill, or for other use/disposal methods not covered under 40 C.F.R. 258 or 40 C.F.R. 503, and the amount delivered to each.

6. except for biosolids that are demonstrated to be EQ, the following information shall be submitted by the permittee for land application sites, unless the permittee requires its biosolids management contractors to report this information directly to ADEQ:

   i. locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner;

   ii. volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;

   iii. crop(s) planted, date of planting, harvesting;

   iv. for any biosolids exceeding A.A.C. R18-9-1005 Table 2 metals concentrations, the locations of sites where applied and cumulative metals loading at each of these sites to date;

   v. certifications of management practices in A.A.C. R18-9-1007 or A.A.C. R18-9-1008; and

   vi. certifications of site restrictions in A.A.C. R18-9-1009.

N. Reporting Location

ADEQ will be developing an electronic reporting portal through myDEQ where all annual reports shall be submitted. ADEQ will notify the permittee that all reports shall be submitted through the electronic portal in accordance with the U.S. EPA's electronic reporting requirements when the myDEQ portal becomes available. Until such time, the annual report shall be submitted to the following email address: biosolids@azdeq.gov

PART V. MONITORING AND REPORTING REQUIREMENTS

A. Sample Collection and Analysis

1. The permittee is responsible for the quality and accuracy of all data required under this permit.
2. Quality Assurance (QA) Manual

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:

- purpose of sample collection and sample frequency;
- when and where samples will be collected;
- how samples will be collected;
- who will collect samples and their qualifications;
- laboratory(s) that will perform analyses;
- any field tests to be conducted (detail methods and specify equipment, including a

description of any needed calibrations); and

- pollutants or analytes being measured and for each, the permit-specific limits, laboratory reporting levels, or thresholds, (e.g. the associated detection limits needed).

b. Sample collection procedures including:

- equipment to be used;
- number and location of samples to be taken from a cross section of **each** stockpile, or area to ensure representative samples are consistently obtained;
- type and number of QA/QC samples to be collected (i.e., background samples, duplicates, and equipment or field blanks);
- types, sizes, and number of sample containers needed;
- preservatives and holding times for the samples (see methods under 40 C.F.R. 136 or 9 A.A.C. 14, Article 6 or any condition within this permit that specifies a particular test method); and
- chain of custody procedures.

c. Specify approved analytical method(s) to be used and include:

- Limits of Detection (LOD) and Limits of Quantitation (LOQs);
- 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
- corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.

d. Calibration requirements and frequency of calibrations for field testing equipment including temperature probes and how these calibrations will be documented.

e. How the permittee will perform data review; complete records used to report results to ADEQ; resolve data quality issues; and identify limitations on the use of the data.

3. Sample collection, preservation and handling shall be performed on solids, liquid, and hazardous waste as established in A.A.C. R9-14-612 and R9-14-613. The permittee shall outline the proper procedures in the QA Manual, and samples taken to meet the monitoring requirements in this permit must conform to these procedures whether collection and handling is performed directly by the permittee or contracted to a third-party.

4. Analytical requirements

a. The permittee shall use a laboratory licensed by the Arizona Department of Health Services (ADHS) Office of Laboratory Licensure and Certification that has demonstrated proficiency within the last 12 months under 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 collection as long as the testing methods used are approved by ADHS and ADEQ. (These parameters may include temperature.)

b. The permittee must utilize analytical methods specified in this permit. If no test procedure is specified, the permittee shall analyze the pollutant using a test procedure listed in 40 C.F.R. 503.8, July 1, 2001 edition, or by the wastewater sample methods and solid, liquid, and hazardous waste sample methods established in A.A.C. R9-14-612 and R9-14-613.

c. For results to be considered valid, all analytical work, including those conducted by the permittee at the time of sampling (see section 4.a. above), 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 pollutant limitations or other monitoring criteria specified in this permit. If all methods have LOQs higher than applicable monitoring 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.

B. Reporting of Monitoring Results

1. The permittee shall report all metals and pathogen monitoring results from the processed biosolids in the annual report as specified in section C below. 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.

2. The permittee shall maintain copies of all monitoring records and laboratory reports, incoming biosolids sampling results, and window time and temperature logs on-site and available for review by ADEQ.

3. For all field testing, or if the information below is not included on the laboratory reports required by Part III.B., the permittee shall provide the following with all analytical results obtained during the reporting period:

a. the number or title of the approved analytical method, preparation and analytical procedure utilized by the field personnel or laboratory;
b. the LOD and the LOQ for the analytical method for the pollutant, if applicable; and
c. any applicable data qualifiers using the most current revision of the Arizona Data Qualifiers available on-line at the ADHS - Laboratory Licensure & Certification.

C. Twenty-four Hour Reporting of Noncompliance

1. The permittee shall orally report to the Emergency Response Unit hotline at (602) 771-2330 any noncompliance that poses imminent threat to the environment or human health within 24 hours from the time the permittee becomes aware of the circumstances. The permittee shall also submit an electronic notification within 5 days of the noncompliance event using the myDEQ electronic portal provided by ADEQ or, if myDEQ portal is not available, email to biosolids@azdeq.gov. The permittee shall include in the written notification: a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following instances of noncompliance are subject to the 24-hour and 5-day reporting requirements and must be reported orally to the Emergency Response Unit hotline:

a. Any unanticipated bypass which exceeds any effluent limitations in the permit,
b. Any upset which exceeds any effluent limitation in the permit, or
c. Any spill or discharge that poses an imminent threat to human health or the environment.

2. All other instances of noncompliance remain subject to the 24-hour and 5-day reporting requirements, and must call the ADEQ AZPDES hotline at (602) 771-1440. For example, an exceedance of any maximum daily limit for the parameters listed in Part 1.A Table 1 that does not poses an imminent threat to human health or the environment.

3. The permittee shall retain records the following monitoring records:

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.

D. Monitoring Records

The permittee shall retain records of the following monitoring information:

1. date, exact location and time of sampling or measurements performed, preservatives used;
2. individual(s) who performed the sampling or measurements;
3. date(s) the analyses were performed;
4. laboratory(s) which performed the analyses;
5. analytical techniques or methods used;
6. chain of custody forms;
7. any comments, case narrative or summary of results produced by the laboratory. These comments should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether analyses met project requirements and the method requirements in A.A.C. R9-14-612 and R9-14-613. 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; and
8. summary of data interpretation and any corrective action taken by the permittee.

PART VI. SPECIAL CONDITIONS

A. Operation

If the facility is a WWTP, the permittee shall ensure that it is operated by or under the supervision of an operator currently certified by ADEQ at the level appropriate.

B. Permit Fee Requirements

In accordance with A.A.C R18-14-109, the permittee shall pay the initial fee for coverage under this permit at the time the NOI is submitted, and the permittee shall pay the annual fee when billed unless a notice of termination has been filed. The annual fee is due on the anniversary of the date the certificate of authorization is issued. See A.A.C. R18-14-109, Table 6, AZPDES Water Quality Protection Services Flat Fees and Part III.C. of this permit for details.

C. Permit Reopener

This permit may be modified per the provisions of A.A.C. R18-9-C905. This permit may be reopened based on newly available information or as needed to incorporate new regulatory

requirements.

APPENDIX A: ACRONYMS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
EQ	Exceptional Quality (biosolids)
AZPDES	Arizona Pollutant Discharge Elimination System
A.R.S.	Arizona Revised Statutes
C.F.R.	Code of Federal Regulations
CFU	Colony Forming Units
Director	The Director of ADEQ or any authorized representative thereof
EPA	The U.S. Environmental Protection Agency
g/day	grams per day
kg/day	kilograms per day
mgd	Million Gallons per Day
mg/L	milligrams per Liter, also equal to parts per million (ppm)
MPN	Most Probable Number
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
PFU	Plaque-Forming Unit
QA	Quality Assurance
POTW	Publicly Owned Treatment Works
SSU	Sewage Sludge Unit
TWTDS	Treatment Works Treating Domestic Sewage
µg/L	micrograms per Liter, also equal to parts per billion (ppb)
WWTP	Wastewater Treatment Plant

APPENDIX B: DEFINITIONS

ACTIVE SEWAGE SLUDGE UNIT means a sewage sludge unit that has not closed.

AGRONOMIC RATE means the whole biosolids application rate on a dry-weight basis that meets the following conditions: a.) the amount of nitrogen needed by existing vegetation or a planned or actual crop has been provided, and b.) the amount of nitrogen that passes below the root zone of the crop or vegetation is minimized.

ANNUAL POLLUTANT LOADING RATE means the maximum amount of a pollutant that can be applied to an acre or hectare of land during a 365-day period.

APPLICATOR means a person who arranges for and controls the site-specific land application of biosolids in Arizona.

BASE FLOOD means 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).

BIOSOLIDS means sewage sludge, including exceptional quality biosolids that is placed on, or applied to the land to use the beneficial properties of the material as a soil amendment, conditioner, or fertilizer. Biosolids do not include any of the following:

a. sludge determined to be hazardous under A.R.S. Title 49, Chapter 5, Article 2 and 40 C.F.R. 261;

b. sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry-weight basis);

c. grit (for example, sand, gravel, cinders, or other materials with a high specific gravity) or screenings generated during preliminary treatment of domestic sewage by a treatment works;

d. sludge generated during the treatment of either surface water or groundwater used for drinking water;

e. sludge generated at an industrial facility during the treatment of industrial wastewater, including industrial wastewater combined with domestic sewage;

f. commercial septage, industrial septage, or domestic septage combined with commercial or industrial septage; or

g. special wastes as defined and controlled under A.R.S. Title 49, Chapter 4, Article 9.

BULK BIOSOLIDS means biosolids that are transported and land-applied in a manner other than in a bag or other container holding biosolids of 1.102 short tons or 1 metric ton or less.

COMPOSITE SAMPLE [Effluent] means a sample that is formed by combining a series of individual, discrete samples of specific volumes or weights.

CUMULATIVE POLLUTANT LOADING RATE means the maximum amount of a pollutant applied to land application site.

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

DOMESTIC SEWAGE means waste or wastewater from humans or household operations that is discharged to a publicly or privately owned treatment works. Domestic sewage also includes commercial and industrial wastewaters that are discharged into a publicly-owned or privately-owned treatment works if the industrial or commercial wastewater combines with human excreta and other household and nonindustrial wastewaters before treatment.

DRY-WEIGHT BASIS means the weight of biosolids calculated after the material has been dried at 105 ˚C until reaching a constant mass.

EXCEPTIONAL QUALITY BIOSOLIDS means biosolids certified under R18-9-1013(A)(6) as meeting the pollutant concentrations in R18-9-1005 Table 2, Class A pathogen reduction in R18-9-1006, and one of the vector attraction reduction requirements in subsections R-18-9-1010(A)(1) through R18-9-1010(A)(8).

INDIAN COUNTRY as defined in U. S. Code Title 18 § 1151, includes all land within the limits of any Indian reservation under the jurisdiction of the United States government.

LAND APPLICATION or LAND APPLY means spraying or spreading biosolids on the surface of the land, injecting biosolids below the land's surface, or incorporating biosolids into the soil to amend, condition, or fertilize the soil.

LAND TREATMENT FACILITY means an operation designed to treat and improve the quality of waste, wastewater, or both, by placement wholly or in part on the land surface to perform part or all of the treatment. A land treatment facility includes a facility that performs biosolids drying, processing, or composting, but not land application performed in compliance with 18 A.A.C. 9, Article 10.

LIMIT OF QUANTITATION (LOQ) means 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) means 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 R9-14-615(C)(7).

METHOD DETECTION LIMIT (MDL) - See LOD.

NOTICE OF INTENT means a Notice of Intent for coverage of to prepare biosolids for land application under this general permit using the form specified for this purpose by ADEQ.

NOTICE OF TERMINATION means a Notice of Termination for the preparation of biosolids for land application under this general permit using the form specified for this purpose by ADEQ.

PARAMETER for purposes of this permit means a constituent, property, or characteristic that can be measured, quantified, and/or analyzed.

PATHOGEN means a disease-causing organism.

PERSON means an individual, employee, officer, managing body, trust, firm, joint stock company, consortium, public or private corporation, including a government corporation, partnership, association or state, a political subdivision of this state, a commission, the United States government or a federal facility, interstate body or other entity [A.R.S. §49-201(26)].

PLAQUE-FORMING UNITS (PFU) means a measure of number of infectious virus particles. It is determined by plaque forming assay.

RUNOFF means rainwater, leachate, or other liquid that drains over any part of a land surface and runs off of the land surface.

SEWAGE SLUDGE UNIT means land on which only sewage sludge is placed for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include navigable waters.

SIGNIFICANT INDUSTRIAL USER (SIU) means an indirect discharger that is the focus of control efforts under the national pretreatment program; includes all indirect dischargers subject to national categorical pretreatment standards, and all other indirect dischargers that contribute 25,000 gpd or more of process wastewater, or which make up five percent or more of the hydraulic or organic loading to the municipal treatment plant, subject to certain exceptions (40 C.F.R. 403).

STORE BIOSOLIDS or STORAGE OF BIOSOLIDS means the temporary holding or placement of biosolids on land before land application.

SURFACE DISPOSAL SITE means an area of land that contains one or more active sewage sludge units.

SUBMIT, as used in this permit, means email to the address biosolids@azdeq.gov, or post-marked, documented by other mailing receipt, hand-delivered, or submitted using the ADEQ electronic portal. **Note**: as once available, the on-line portal will replace all forms of submittal and become the primary submittal site for all required forms which must be e-signed in the myDEQ online permitting system.

TON means a net weight of 2000 pounds and is known as a short ton.

TOTAL SOLIDS means the biosolids material that remains when sewage sludge is dried at 103° C to 105° C.

TREATMENT OF BIOSOLIDS means the thickening, stabilization, dewatering, and other preparation of biosolids for land application. Storage is not a treatment of biosolids.

TREATMENT WORKS TREATING DOMESTIC SEWAGE means a POTW or any other sewage sludge or waste water treatment device or system, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, "domestic sewage" includes waste and wastewater from humans or household operations that are discharged to or otherwise enter a treatment works.

VECTORS means rodents, flies, mosquitoes, or other organisms capable of transporting pathogens.

APPENDIX C: TESTING FOR HAZARDOUS WASTE DETERMINATION

The permittee shall test biosolids at least annually, and more frequently as necessary, to determine if biosolids are hazardous in accordance with 40 C.F.R. 261. Initial screening of the biosolids may be conducted by analyzing biosolids for the total amount of a pollutant. This screening test is all that is required each monitoring period if the total amount does not exceed the 20X TCLP screening value in the table below. If the total amount of a pollutant exceeds the 20X TCLP screening value, then the leachable amount must be determined using the Toxicity Characteristic Leaching Procedure (TCLP). The disposal of biosolids that test hazardous is not covered under this permit, and all such biosolids must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).

Toxicity Characteristic Leaching Procedure Test

Parameter	TCLP Limit (mg/L)	20 X TCLP Screening Value (mg/kg)	Minimal Monitoring Frequency per Generator
Metals			
Arsenic	5	100	Once / year
Barium	100	2000	Once / year
Cadmium	1	20	Once / year
Chromium	5	100	Once / year
Lead	5	100	Once / year
Mercury	0.2	4	Once / year
Selenium	1	20	Once / year
Silver	5	100	Once / year
Volatiles and Semi-Volatiles			
Benzene	0.5	10	Once / year
Carbon Tetrachloride	0.5	10	Once / year
Chlorobenzene	100	2000	Once / year
Chloroform	6	120	Once / year
1,2-Dichloroethane	0.5	10	Once / year
1,1-Dichloroethylene	0.7	14	Once / year
Methyl ethyl ketone	200	4000	Once / year
Tetrachloroethylene	0.7	14	Once / year
Trichloroethylene	0.5	10	Once / year
Vinyl Chloride	0.2	4	Once / year
1,4-Dichlorobenzene	7.5	150	Once / year
o-cresol (1)	200	4000	Once / year
m-cresol (1)	200	4000	Once / year
p-cresol (1)	200	4000	Once / year
Cresol (total) (1)	200	4000	Once / year
2,4-Dinitrotoluene	0.13	2.6	Once / year
Hexachlorobenzene	0.13	2.6	Once / year
Hexachlorobutadiene	0.5	10	Once / year
Hexachloroethane	3	60	Once / year
Nitrobenzene	2	40	Once / year
Pentachlorophenol	100	2000	Once / year
Pyridine	5	100	Once / year
2,4,5-Trichlorophenol	400	8000	Once / year

2,4,6-Trichlorophenol	2	40	Once / year
Herbicides / Pesticides			
2,4-D	10	200	Once / year
2,4,5-TP (Silvex)	1	20	Once / year
Chlordane	0.03	0.6	Once / year
Endrin	0.02	0.4	Once / year
Heptachlor	0.008	0.16	Once / year
Heptachlor epoxide	0.008	0.16	Once / year
Lindane	0.44	8.8	Once / year
Methoxychlor	10	200	Once / year
Toxaphene	0.5	10	Once / year

Footnote:

(1) If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.

Appendix D. Standard AZPDES Permit Conditions & Notifications from 40 CFR 122.41

§ 122.41 Conditions applicable to all permits

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in § 122.42. All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

(a) ***Duty to comply.*** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

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

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

(b) ***Duty to reapply.*** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

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

(d) ***Duty to mitigate.*** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) ***Proper operation and maintenance.*** 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.

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

(g) ***Property rights.*** This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) ***Duty to provide information.*** 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.

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

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

(j) ***Monitoring and records.***

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR subchapters N or O.

(5) 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 under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(k) ***Signatory requirement.***

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

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

(l) ***Reporting requirements*** -

(1) ***Planned changes.*** The permittee shall give notice to the Director as soon as possible of any planned physical alterations or 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 § 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under § 122.42(a)(1).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(2) ***Anticipated noncompliance.*** The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) ***Transfers.*** This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See § 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) ***Monitoring reports.*** Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

(5) ***Compliance schedules.*** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) ***Twenty-four hour reporting.***

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (*e.g.,* manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2025 or an EPA-approved alternative date (*see* 40 CFR 127.24(e) or (f)), all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. 40 CFR part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of 40 CFR part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See § 122.41(g).

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See § 122.44(g).)

(iii) The Director may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(ii) of this section if the oral report has been received within 24 hours.

(7) ***Other noncompliance.*** The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6). For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in paragraph (l)(6) and the applicable required data in appendix A to 40 CFR part 127. As of December 21, 2025 or an EPA-approved alternative date (see 40 CFR 127.24(e) or (f)), all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in

compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. 40 CFR part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of 40 CFR part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

(8) ***Other information.*** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

(9) ***Identification of the initial recipient for NPDES electronic reporting data.*** The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in appendix A to 40 CFR part 127) to the appropriate initial recipient, as determined by EPA, and as defined in § 127.2(b) of this chapter. EPA will identify and publish the list of initial recipients on its Web site and in the FEDERAL REGISTER, by state and by NPDES data group [see § 127.2(c) of this chapter]. EPA will update and maintain this listing.

(m) ***Bypass*** -

(1) ***Definitions.***

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

(ii) ***Severe property damage*** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

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

(3) ***Notice*** -

(i) ***Anticipated bypass.*** If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass. As of December 21, 2025 or an EPA-approved alternative date (*see* 40 CFR 127.24(e) or (f)), all notices submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. 40 CFR part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of 40 CFR part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

(ii) ***Unanticipated bypass.*** The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice). As of December 21, 2025 or an EPA-approved alternative date (see 40 CFR 127.24(e) or (f)), all notices submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. 40 CFR part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of 40 CFR part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

(4) ***Prohibition of bypass.***

(i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

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

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

(n) ***Upset*** **-**

(1) ***Definition. Upset*** means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(2) ***Effect of an upset.*** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) ***Conditions necessary for a demonstration of upset.*** A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous 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 (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) ***Burden of proof.*** In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.