ENGINEERING REVIEW
NOTICE OF INTENT TO DISCHARGE
ON-SITE WASTEWATER TREATMENT FACILITY
INSTRUCTIONS

INSTRUCTIONS

Please fill out and submit this Notice of Intent to Discharge (NOI) to obtain authorization to construct and operate an on-site wastewater treatment facility. ADEQ currently has 22 General Aquifer Protection Permits for on-site systems. An on-site system is a system that treats and disposes of domestic wastewater on the same property where it was generated. The most common type of on-site system is the septic tank and leach field, which is sometimes called a conventional system (4.02 General Permit). Other types of on-site wastewater treatment facilities are called alternative systems. These include technologies such as Wisconsin mounds, composting toilets, and pressurized systems, just to name a few. As required by A.A.C. R18-9-A309(E), the Arizona Department of Environmental Quality maintains a list of proprietary treatment products for use in Arizona. This form can be used for any on-site wastewater treatment facility with a design flow less than 24,000 gallons per day (gpd). Wastewater treatment facilities with a design flow greater than or equal to 24,000 gpd must obtain an Individual Aquifer Protection Permit.

Type 4 General Permits can be combined if the general permit conditions prescribed in rule are met. For example, a 4.02 general permit for a septic tank may be combined with a pressure distribution system (4.04) and Wisconsin Mound (4.08).

GENERAL APPLICATION PROCESS

1. Submit this NOI and appropriate supplemental information and forms, which are identified in this form. Only one copy of the NOI and associated documents is needed. Please see the document entitled Application Submittal Locations to determine where to submit your application (county, city, regional office).
2. Ensure that email addresses are provided in the NOI, as all permits are sent to applicants via email.
3. Remit the applicable non-refundable general permit fee (see the instructions on fees listed below). Review fees established by delegated counties or cities may differ.
4. Satisfy any deficiency requests arising from the Department's pre-construction review of the application.
5. Receive a "Construction Authorization" from the Department authorizing construction of the on-site wastewater treatment facility.
6. Construct the on-site wastewater treatment facility within two years.
7. Upon completion of construction, submit the Request for Discharge Authorization and any additional required information to the Department to initiate the Department's post-construction review and inspection.
8. Satisfy any deficiency request arising from the Department's post-construction review of the facility.
9. Receive a "Discharge Authorization" from the Department, which authorizes operation of the on-site system(s) in accordance with the terms of the Type 4.02 to 4.23 General Permits and applicable requirements of statute and rule.

FEES

Fees for Type 4 General Permits (4.02 through 4.22) are calculated by $1,200 for the first Type 4 General Permit plus $500 for each additional General Permit used in the design, and any additional fees up to a maximum fee of $3,700. For example, if a site limiting conditions require an applicant to install a 4.02, 4.04, 4.12 and 4.22, the applicable fee is $2,700 ($1,200 + 3 * $500).

Additional Fees:

1. A request for an alternative design (A312 (G)), installation, or operational feature, $250 per change.
2. A design requiring an interceptor, $100 per interceptor.

Fees for a Type 4.23 General Aquifer Permit is calculated by the following:

On-site wastewater treatment facility with up to: ▪ Three treatment technologies and disposal methods consisting of technologies or designs that are covered under other Type 4 general permits; and, ▪ Two on-site wastewater treatment facilities	$3,600
Maximum fee (cumulative)	$7,500
Each additional on-site wastewater treatment facility on same Notice of Intent to Discharge up to maximum fee	$1,200
Each additional treatment technology or disposal method consisting of technologies or designs that are covered under other type 4 general permits on same Notice of Intent to Discharge up to maximum fee	$500
An annual report is required for type 4.23 general permits, in accordance with AAC R18-9-E323(G), submitted annually on the anniversary date of the Departments issuance of the Discharge Authorization.	$200

Maximum priority review fee (Double maximum fee)	$15,000

If an applicant requests priority review, the Department shall approve or deny the request. When determining whether to approve a priority review request, the Department shall consider the complexity of the project and the Department's current work load. The priority review fee is double the applicable fee.

LICENSING TIME FRAMES

Licensing Time Frames (LTFs) are specified by the Arizona Department of Environmental Quality in A.A.C. R18-1-525. The following LTFs limit the number of business days ADEQ can review your project without a penalty:

License Type	Administrative Completeness Review	Substantive Review	Overall Time Frame
Single 4.02, 4.03, 4.13, and 4.14 General Permits	42	31	73
4.23 General Permit	42	94	136
Combined Two or Three Type 4 General Permits	42	53	95
Combined Four or More Type 4 General Permits	42	94	136

Note: Each request for an alternative design, installation, or operational feature under A.A.C. R18-9-A312(G) to a type 4 general permit adds eight business days to the substantive review time-frame.

DESIGN REVIEW UPDATE FOR ALTERNATIVE SYSTEMS

System design for alternative type 4 general permits require compliance with the provisions of A.A.C R18-9-A312(B)(4)(a-g), as applicable. A design review will focus attention on overall system design to ensure all applicable requirements are met, regardless of any manufacturer's claim or restriction.

ENGINEERING REVIEW
NOTICE OF INTENT TO DISCHARGE
ON-SITE WASTEWATER TREATMENT FACILITY
APPLICATION

GENERAL INFORMATION

1 Project Name

Project Name

Applicant (person responsible for overall compliance)

(Check One) ☐ Owner ☐ Operator

Name _____ Phone _____

Title _____ Firm Name _____

Mailing Address _____ City _____ State _____ Zip _____

Email Address*

3 Contact Person/Agent (if different from applicant)

Name _____ Phone _____

Title _____ Firm Name _____

Mailing Address _____ City _____ State _____ Zip _____

Email Address*

4 Site Information

County _____ City _____

Township _____ Range _____ Section _____ , _____

Latitude _____ º _____ ‘ _____ “ N _____ Longitude _____ º _____ ‘ _____ “ W

Address Parcel Number Size Acres

5 Existing Environmental Permits

List any other federal or state environmental permits issued for or needed by the facility, including any individual permit, Groundwater Quality Protection Permit, or Notice of Disposal that may have previously authorized the discharge (attach additional pages if necessary).

6 Review Fees

A) ☐ Standard Review Fee(See Instructions)

B) ☐ Request for priority review for this NOI and include double the Standard Review Fee.

*Email addresses are required as all permits will be sent to the applicant via e-mail.

DEPARTMENT USE ONLY		DATE STAMP
File Number		
Fee Paid for this Project		
Check Total		
Priority Review Requested?	YES / NO	

1110 WEST WASHINGTON, PHOENIX, AZ 85007
HTTP://WWW.AZDEQ.GOV/ENVIRON/WATER/PERMITS/DOWNLOAD/ONSITENOI.PDF

SUPPLEMENTAL INFORMATION

7 Information and Submission Requirements (Check All Completed Items)

☐ Site Investigation Report per A.A.C. R18-9-A309(B)(1)
☐ Site Plan per A.A.C. R18-9-A309(B)(2)

8 Design Flow and Strength of Wastewater

A) Design flow per A.A.C. R18-9-A309(B)(3) _____ gallons per day

B) The expected strength of the wastewater (if the strength exceeds the levels for typical sewage) is attached? ☐ Yes

C) For single family dwelling, a list of the number of bedrooms and plumbing fixtures and corresponding unit flows used to calculate the design flow of the facility per A.A.C. R18-9-A314.

Wastewater Source	Number	Unit Flows used to calculate the design flow of the facility
Bedrooms		
Plumbing Fixtures		

D) For a dwelling other than for a single family, a list of each wastewater source and corresponding unit flows used to calculate the design flow of the facility.

Wastewater Source	Number	Unit Flows used to calculate the design flow of the facility

9 List of Materials, Components, and Equipment

A list of materials, components, and equipment for constructing the on-site wastewater treatment facility is attached? ☐ Yes

10 Selected General Permits (Check All General Permits that Are being Applied for)

☐ **Interceptor(s) as Required under R18-9-A315**

A) Please enter the number of interceptors proposed for this project _____.

☐ **Alternative Request(s) are attached (A.A.C. R18-9-A312(G))**

A) Please indicate how many A312G requests are attached _____.

☐ **4.02 Septic Tank With Disposal by Trench, Bed, Chamber Technology or Seepage Pit, Less than 3,000 Gallons Per Day (GPD) Daily Flow**

A) This on-site wastewater treatment facility consists of a conventional septic tank system and disposal field sized for a design flow of _____ gallons per day. The septic tank conveys wastewater to a disposal field consisting of (check one):
   1. ☐ Trench
      a. ☐ Filled with aggregate [A.A.C. R18-9-101(1)], or
      b. ☐ Filled with crushed, recycled concrete [A.A.C. R18-9-E302(C)(2)(d)]
   2. ☐ Bed
   3. ☐ Chamber technology
   4. ☐ Seepage pit

B) The date the system is expected to start operation _____.

C) The sewage to the septic tank has the characteristics of: ☐ Typical household sewage or ☐ Typical household sewage and _____

D) This on-site wastewater treatment facility is for (check one):
   ☐ Conventional septic tank system serving a single-family residence.
   ☐ Conventional septic tank system serving other than a single-family residence.

☐ **4.03 Composting Toilet, Less than 3,000 GPD Daily Flow (Please select from Product List)**

A) Composting toilet system manufacturer name _____

B) Composting toilet system manufacturer address _____

C) A copy of the manufacturer's warranty, and the specifications for installation, operation, and maintenance has been provided? ☐ Yes

D) The product model number _____

E) Calculations for the composting rate, capacity, and waste accumulation volume are attached? ☐ Yes

F) Documentation of listing by a national listing organization indicating that the composting toilet meets the stated manufacturer's specifications for loading, treatment performance, and operation has been attached (unless the composting toilet is listed under R18-9-A309(E) or is a component of a reference design approved by the Department)? ☐ Yes

G) Describe the vector control method. _____

H) Describe the planned method and frequency for disposing of the composted human excrement residue.

_____

I) Describe the planned method for disposing of the drainage from the composting unit.

_____

J) The number of bedrooms in the dwelling or persons served on a daily basis, as applicable. _____

K) What is the corresponding design flow of the disposal works for the wastewater? _____

L) The results from soil evaluation or percolation testing that adequately characterize the soils into which the wastewater will be dispersed and the locations of soil evaluation and percolation testing on the site plan have been provided? ☐ Yes

M) The design for the disposal including the location of the interceptor, the location and configuration of the trench or bed used for wastewater dispersal, the location of connecting wastewater pipelines, and the location of the reserve area has been provided? ☐ Yes

☐ 4.04 Pressure Distribution System, Less than 3,000 GPD Daily Flow

A) A copy of operation, maintenance, and warranty materials for the principal components has been attached? ☐ Yes

B) A copy of dosing specifications, including pump curves, dispersing component curves, and float switch settings is attached? ☐ Yes

☐ 4.05 Gravelless Trench, Less than 3,000 GPD Daily Flow

A) The soil absorption area that would be required if a conventional disposal trench filled with aggregate was used at the site? ☐ Yes

B) The configuration and size of the proposed gravelless disposal field is attached? ☐ Yes

C) The manufacturer's installation instructions and warranty of performance for absorbing wastewater into the native soil is attached? ☐ Yes

☐ 4.06 Natural Seal Evapotranspiration Bed, Less than 3,000 GPD Daily Flow

A) Capillary rise potential test results for the media used to fill the evapotranspiration bed, unless sand meeting a D50 of 0.1 millimeter (50 percent by weight of grains equal to or smaller than 0.1 millimeter) is used? ☐ Yes

B) Water mass balance calculations were used to size the evapotranspiration bed? ☐ Yes

☐ 4.07 Lined Evapotranspiration Bed, Less than 3,000 GPD Daily Flow

A) Capillary rise potential test results for the media used to fill the evapotranspiration bed, unless sand meeting a D50 of 0.1 millimeter (50 percent by weight of grains equal to or smaller than 0.1 millimeter) is used? ☐ Yes

B) Water mass balance calculations were used to size the evapotranspiration bed? ☐ Yes

☐ 4.08 Wisconsin Mound, Less than 3,000 GPD Daily Flow

A) Specifications for the internal wastewater distribution system media proposed for use in the mound are attached? ☐ Yes

B) Two scaled or dimensioned cross sections of the mound (one of the shortest basal area footprint dimension and one of the lengthwise dimension) are attached? ☐ Yes

C) Design calculations following the "Wisconsin Mound Soil Absorption System: Siting, Design, and Construction Manual," published by the University of Wisconsin - Madison, January 1990 Edition have been provided? ☐ Yes

☐ 4.09 Engineered Pad, Less than 3,000 GPD Daily Flow (Please select from Product List)

A) Design materials and construction specifications for the engineered pad system are attached? ☐ Yes

☐ 4.10 Intermittent Sand Filter, Less than 3,000 GPD Daily Flow

A) Specifications for the media proposed for use as the sand filter are attached? ☐ Yes

☐ 4.11 Peat Filter, Less than 3,000 GPD Daily Flow (Please select from Product List)

A) Specifications for the peat media proposed for use in the filter or provided in the peat module, including the porosity, surface area, and moisture content are attached? ☐ Yes

B) A statement indicating whether the peat is air dried, and whether the peat is from sphagnum moss or bog cotton is attached? ☐ Yes

C) A description of the degree of decomposition is attached? ☐ Yes

D) Specifications for installing the peat media are attached? ☐ Yes

E) If a peat module is used, the name and address of the manufacturer, the model number, and a copy of the manufacturer's warranty are attached? ☐ Yes

☐ **4.12 Textile Filter, Less than 3,000 GPD Daily Flow (Please select from Product List)**

A) Filter manufacturer name _____

B) Filter manufacturer address _____

C) Filter model number _____

D) A copy of the manufacturer's filter warranty is attached? ☐ Yes

E) If the system is for nitrogen reduction to 15 milligrams per liter, five-month arithmetic mean, specifications on the nitrogen reduction performance of the filter system, and corroborating third-party test data is attached? ☐ Yes

F) The manufacturer's operation and maintenance recommendations to achieve a 20-year life are attached? ☐ Yes

G) If a pump or aerator is required for proper operation, the pump or aerator model number and a copy of the manufacturer's warranty is attached? ☐ Yes

H) The design report has demonstrated there is adequate storage for untreated wastewater above the high operating level for a 24 hour period per AAC R18-9-E312 (B)(4)(e)? ☐ Yes

I) The design provides fail-safe wastewater controls or operational processes to prevent the release of inadequately treated wastewater per AAC R18-9-E312 (B)(4)(g)? ☐ Yes

☐ **4.13 Denitrifying System Using Separated Wastewater Streams, Less than 3,000 GPD Daily Flow**

☐ **4.14 Sewage Vault, Less than 3,000 GPD Daily Flow**

☐ **4.15 Aerobic System, Less than 3,000 GPD Daily Flow (Please select from Product List)**

A) Aerobic system manufacturer name _____

B) Aerobic system manufacturer address _____

C) Aerobic system model number _____

D) Evidence of performance specified in AAC R18-9-E315(B) has been attached? ☐ Yes

E) A copy of the manufacturer's warranty and operation and maintenance recommendations to achieve performance for a 20-year life has been attached? ☐ Yes

F) If the aerobic system will be used for nitrogen removal from the wastewater, has evidence of a valid product listing under R18-9-E309(E) indicating nitrogen removal performance, or specifications and third party test data corroborating nitrogen reduction to the intended level been provided? ☐ Yes

G) A list of pretreatment components needed to meet performance requirements has been attached? ☐ Yes

H) The design report has demonstrated there is adequate storage for untreated wastewater above the high operating level for a 24 hour period per AAC R18-9-E312 (B)(4)(e)? ☐ Yes

I) The design provides fail-safe wastewater controls or operational processes to prevent the release of inadequately treated wastewater per AAC R18-9-E312 (B)(4)(g)? ☐ Yes

☐ **4.16 Nitrate-Reactive Media Filter, Less than 3,000 GPD Daily Flow (Please select from Product List)**

A) Filter manufacturer name _____

B) Filter manufacturer address _____

C) Filter model number _____

D) The manufacturer's requirements for pretreated wastewater supplied to the nitrate-reactive media filter have been attached? ☐ Yes

E) The manufacturer's specifications for design, installation, and operation for the nitrate-reactive media filter system and appurtenances have been attached? ☐ Yes

F) The manufacturer's warranty for the nitrate-reactive media filter system and appurtenances has been attached? ☐ Yes

G) The manufacturer's operation and maintenance recommendations to achieve a 20-year operational life for the nitrate-reactive media filter system and appurtenances have been attached? ☐ Yes

H) The manufacturer name and model number for all appurtenances that significantly contribute to achieving the performance have been attached? ☐ Yes

☐ **4.17 Cap System, Less than 3,000 GPD Daily Flow**

A) The specifications for the proposed cap fill material have been attached? ☐ Yes

☐ **4.18 Constructed Wetlands, Less than 3,000 GPD Design Flow**

☐ **4.19 Sand Lined Trench, Less than 3,000 GPD Design Flow**

A) Specifications for the proposed media in the trench are attached? ☐ Yes

☐ **4.20 Disinfection Devices, Less than 3,000 GPD Design Flow**

☐ **4.21 Surface Disposal, Less than 3,000 GPD Design Flow**

☐ **4.22 Subsurface Drip Irrigation, Less than 3,000 GPD Design Flow**

A) Documentation of the pretreatment method proposed to achieve the wastewater criteria specified in AAC R18-9-A322(B)(1), such as the type of pretreatment system and the manufacturer's warranty is attached? ☐ Yes
B) Initial filter and drip irrigation flushing settings are attached? ☐ Yes
C) Calculations of the site evaporation rate are attached? ☐ Yes
D) If supplemental irrigation water is introduced to the subsurface drip irrigation disposal works, an identification of the cross-connection controls, backflow controls, and supplemental water sources are attached? ☐ Yes

☐ **4.23 On-site Wastewater Treatment Facility, 3,000 to 24,000 GPD Design Flow (Check if complete or attached)**

A) A performance assurance plan consisting of tasks, schedules, and estimated annual costs for operating, maintaining, and monitoring performance over a 20-year useful service life is attached? ☐ Yes
B) Design documents and the performance assurance plan sealed by an **Arizona-registered professional engineer** are attached? ☐ Yes
C) Any documentation submitted under the alternative design procedure in R18-9-A312(G) that pertains to achievement of better performance levels than those specified in the general permit for the corresponding facility with a design flow of less than 3,000 gallons per day, or for any other alternative design, construction, or operational change proposed by the applicant is attached? ☐ Yes
D) A demonstration of total nitrogen discharge control specified in A.A.C. R18-9-E323(A)(4) is attached? ☐ Yes
E) A Water Quality Management (208) Consistency Review Form is attached? ☐ Yes
Note: A current 208 Consistency Review Form can be obtained by contacting the 208 Consistency Review Coordinator at (602) 771-4606.

11 Additional On-site Requirements (for Type 4.03 through 4.23 General Permits)

For a facility that includes treatment or disposal works permitted under a Type 4.03 to 4.23 General Aquifer Protection Permits (A.A.C. R18-9-E303 through R18-9-E323):

A) Construction quality drawings that show the items listed in A.A.C. R18-9-A309(B)(6)(a) is attached? ☐ Yes
B) Per A.A.C R18-9-A309(B)(6)(b) and R18-9-A313(B), a draft operation and maintenance manual for the on-site wastewater treatment facility consisting of the tasks and schedules for operating and maintaining performance over a 20-year operational life is attached? ☐ Yes

12 Certification (to be completed by Applicant in item 2)

I, _____, certify that this Notice of Intent to Discharge and all attachments were prepared under my direction or authorization and all information is, to the best of my knowledge, true, accurate and complete. I also certify that the on-site wastewater treatment facility described in this form is or will be designed, constructed, and operated in accordance with the terms and conditions the General Aquifer Protection Permit(s) (A.A.C. R18-9-E302 through R18-9-E323) and applicable requirements of Arizona Revised Statutes Title 49, Chapter 2, and Arizona Administrative Code Title 18, Chapter 9 regarding Aquifer Protection Permits. I am aware that there are significant penalties for submitting false information including permit revocation as well as the possibility of fine and imprisonment for knowing violations.

Signature _____ Date _____