



ENVIRONMENTAL SERVICES DEPARTMENT  
Swimming Pool Plan Review and Construction  
501 N. 44th St., Suite 200  
Phoenix, AZ 85008  
Phone (602) 506-0070 FAX (602) 506-1837  
[PoolPlanReview@Mail.Maricopa.Gov](mailto:PoolPlanReview@Mail.Maricopa.Gov)



Environmental Services  
Department

# Application Packet for Approval to Construct a Public or Semi-Public Swimming Pool



Revised: July 18, 2018

## CONTENTS:

**FEE AND CODE INFORMATION**

**APPLICATION FOR APPROVAL TO CONSTRUCT**

**CONSTRUCTION CERTIFICATION LETTER**

**INSPECTION REQUEST FORM**

**HYDRAULICS INFO SHEET**

## CONTACT INFORMATION:

**JAMES WALTERS, ENVIRONMENTAL ENGINEER**

**COMMERCIAL SWIMMING POOL CONSTRUCTION PROGRAM**

**TELEPHONE (602) 506-0070 FAX (602) 506-1837**

**EMAIL: [PoolPlanReview@Maricopa.Gov](mailto:PoolPlanReview@Maricopa.Gov)**



## PERMIT APPLICATION PROCESS NOTICE

### Swimming Pool Program

Steps required to obtain a bathing permit/approval are as follows:

1. Submit complete application along with applicable application fees.
2. After reviewing plans, the Department will issue you an approval to construct document that includes construction and inspection requirements.
3. Request required progress inspections (if any) using the attached form, and obtain Department approval.
4. When construction is complete and ready for final inspection, submit an inspection request form and a completed notarized construction certification form, using the attached form.
5. Upon Department approval of the final inspection, the Department will mail an invoice for the annual permit to the owner. Upon payment, the Department will issue the annual operating permit to the owner.

The Department will approve or deny the application for approval to construct in 93 business days or less, excluding any days the application is returned to the applicant for additional information. This overall licensing timeframe is set by delegation agreement between the Department and the Arizona Department of Environmental Quality.

#### Department contact information regarding your application

Telephone (application clerk):602-506-0070

E-mail: [PoolPlanReview@Maricopa.gov](mailto:PoolPlanReview@Maricopa.gov)

Website: [www.maricopa.gov/2584/Public-Swimming-Pools](http://www.maricopa.gov/2584/Public-Swimming-Pools)

You may request a clarification from the Department of its interpretation or application of a statute, ordinance, regulation, delegation agreement or authorized substantive policy statement as provided in A.R.S. §11-1609. Contact us by in by e-mail or telephone, or in person or mail at the address listed at the top of the page, marked attention Swimming Pool Program.

*In addition to obtaining a permit from Maricopa County Environmental Services Department, it may be necessary to obtain a permit from your local municipality or Maricopa County Planning and Development Department – if the property is on a County Island. Please contact these entities for additional information*



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All applications **MUST** contain the following information:

1. POOL NAME: Name of establishment and street address must read the same as was submitted for construction review / or as permit reads.
2. APPLICANT NAME: Print name of owner / or authorized agent (letter of authorization must be submitted if signed by agent).

### FEES FOR PLAN EXAMINATION, INSPECTIONS AND PERMITS

Fees are necessary to begin Plan Examination and Inspections. Fees are per body of water. The fees for Swimming Pool and Spa Plan Reviews and Inspections are:

<u>Size (ft<sup>2</sup>)</u>	<u>One time Fee</u>	<u>Expedited* Fee</u>
<1000	\$770.00	\$1,540.00
1001 –2000	\$1,180.00	\$2,360.00
2001 – 9999	\$2,205.00	\$4,410.00
>10,000	\$6,460.00	\$12,920.00
Pool Variance	\$200.00 per Variance	N/A
Pool Pump Test	\$335.00	N/A

\* - Plans submitted after the project has started or is completed **must be expedited**

### REGULATORY AUTHORITY

The Maricopa County Environmental Services Department (MCESD) regulates Public and Semipublic Pools and Spas under Delegation Agreements with the Arizona Department of Environmental Quality (ADEQ) and the Arizona Department of Health Services (ADHS) as authorized by the ARIZONA REVISED STATUTES (ARS) 49-107: Local delegation of state authority. The Delegation Agreements between the county (MCESD) and the state simply authorizes the county to regulate Public and Semipublic Pools and Spas using the State’s regulations in addition to the county’s own regulations (the Maricopa County Environmental Health Code (MCEHC)). However, any changes or comments concerning the state regulations should be addressed to the state (ADEQ, ADHS) as only those departments can effect changes to the state regulations, which they promulgate and administer. The Two State Arizona Administrative Codes (AAC) administered by MCESD are R18-5-200 (ADEQ) and R9-8-800 (ADHS).

In addition to regulating Public and Semipublic Pools and Spas by administering State of Arizona rules and regulations, MCESD also regulates Public and Semipublic Pools and Spas by administering the **MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE (MCEHC): Chapter VI; Bathing Places – Public and Semi-Public Swimming Pools** as authorized by ARS 49-112: County regulation; standards. This means that MCESD has established within the MCEHC additional rules and regulations for Public and Semipublic Pools and Spas. The main advantage of Maricopa County having its own rules is that it allows the county the flexibility to modify the rules to meet the ever-changing needs of the swimming pool industry. Maricopa County has updated its rules numerous times to meet the changing needs of the swimming pool industry.



Site Loc: \_\_\_\_\_

## APPLICATION FOR APPROVAL TO CONSTRUCT A PUBLIC OR SEMI-PUBLIC SWIMMING POOL OR SPA

- A: Check One**     **Semi-Public**                       **Public**
- 
- B: (Check all that apply)**     **Non-Diving**                       **Main**                       **Wader**  
                                           **Diving**                                       **Therapy**                       **Special Use**

### FACILITY INFORMATION

1. To Serve (Facility Name and Type): \_\_\_\_\_
2. Pool Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_
3. Pool Identifier: \_\_\_\_\_
4. Facility Contact Name: \_\_\_\_\_ Phone #: (    ) \_\_\_\_\_
5. Facility Entrance Code: \_\_\_\_\_ Pool Gate Code: \_\_\_\_\_
6. Email Address: \_\_\_\_\_

### OWNER INFORMATION

7. *OWNERSHIP* Name: \_\_\_\_\_ Phone #: (    ) \_\_\_\_\_
8. Authorized Agent's Name: \_\_\_\_\_ Title: \_\_\_\_\_
9. Address: \_\_\_\_\_ FAX: (    ) \_\_\_\_\_
10. City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
11. Email Address: \_\_\_\_\_

### CONTRACTOR/ENGINEER/ARCHITECT INFORMATION

12. *Pool Company* Name: \_\_\_\_\_ Phone #: (    ) \_\_\_\_\_
13. *POOL Contractor/Engineer/Architect's* Name: \_\_\_\_\_
14. If your ROC Registration/License # is A (General Engineering) or KA (Dual Engineering), we will **NOT** accept your application.  
     AZ Registration: \_\_\_\_\_ License #: \_\_\_\_\_ Phone #: (    ) \_\_\_\_\_
15. Address: \_\_\_\_\_ CELL: (    ) \_\_\_\_\_
16. City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
17. Email Address: \_\_\_\_\_  
     Email Address: \_\_\_\_\_



DESIGN DATA

18. Perimeter (ft): \_\_\_\_\_ Area (ft<sup>2</sup>): \_\_\_\_\_ Avg. Width (ft): \_\_\_\_\_ Length (ft): \_\_\_\_\_

19. Volume (gal): \_\_\_\_\_ Turnover Time Required (hours): \_\_\_\_\_ Turnover Rate Required (gpm): \_\_\_\_\_

20. Shell Material: \_\_\_\_\_

21. Fully Describe Finish (Plaster, PebbleTec, Color, etc.): \_\_\_\_\_

22. Skimmers (qty): \_\_\_\_\_ Make/Model: \_\_\_\_\_ Flow Required (# skimmers X27 gpm): \_\_\_\_\_

23. Returns/Inlets (qty): Wall: \_\_\_\_\_ Floor: \_\_\_\_\_

24. Surge Tank Capacity (For Gutter or Rim Flow Systems Only): \_\_\_\_\_ gallons

25. Filter Type: \_\_\_\_\_

26. Manufacturer: \_\_\_\_\_ Model #: \_\_\_\_\_

27. Filter Flow Capacity: 1) \_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_  
 (Lowest of #1 or #2 # of Filters Size (ft<sup>2</sup>) Max flow (gpm/ft<sup>2</sup>) Maximum filter capacity (gpm)  
 Governs) 2) \_\_\_\_\_ From Manufacturer's Specifications (NSF Listed Rating)  
 (max gpm)

28a. Chlorinator Make/Model: \_\_\_\_\_ Erosion  Liquid  Gas  Salt

28b. Secondary Disinfectant Make/Model: \_\_\_\_\_ Disinfectant Type: \_\_\_\_\_

29. Main Pump Make/Model: \_\_\_\_\_ # of Pumps: \_\_\_\_\_ Distance from Main Drain: \_\_\_\_\_ (ft) HP: \_\_\_\_\_  
 Main Drain Covers: Make: \_\_\_\_\_ Model: \_\_\_\_\_ Size: \_\_\_\_\_  
 Floor: \_\_\_\_\_ Wall: \_\_\_\_\_ TDH: \_\_\_\_\_ (ft) Flow: \_\_\_\_\_ (gpm)

Water Feature Pump Make/Model: \_\_\_\_\_ # of Pumps: \_\_\_\_\_ Distance from WF Drain: \_\_\_\_\_ (ft) HP: \_\_\_\_\_  
 Water Feature Drain Covers: Make: \_\_\_\_\_ Model: \_\_\_\_\_ Size: \_\_\_\_\_  
 Floor: \_\_\_\_\_ Wall: \_\_\_\_\_ TDH: \_\_\_\_\_ (ft) Flow: \_\_\_\_\_ (gpm)

Therapy Pump Make/Model: \_\_\_\_\_ # of Pumps: \_\_\_\_\_ Distance from Therapy Drain: \_\_\_\_\_ (ft) HP: \_\_\_\_\_  
 Therapy Drain Covers: Make: \_\_\_\_\_ Model: \_\_\_\_\_ Size: \_\_\_\_\_  
 Floor: \_\_\_\_\_ Wall: \_\_\_\_\_ TDH: \_\_\_\_\_ (ft) Flow: \_\_\_\_\_ (gpm)



**DESIGN DATA (CONTINUED)**

- 30. Waste Discharged to: \_\_\_\_\_
- 31. Cleaning Equipment: \_\_\_\_\_ Make/Model: \_\_\_\_\_
- 32. Vacuum System: \_\_\_\_\_
- 33. Fill Line: \_\_\_\_\_ Backflow Protection Method: \_\_\_\_\_
- 34. Do all doors/gates swing *AWAY* from the pool/spa area? \_\_\_\_\_
- 35a. Are there any windows in the pool enclosure or planters/water features within 4' of pool/spa? \_\_\_\_\_
- 35b. Are there any buildings with doors that open into the pool enclosure? \_\_\_\_\_
- 36. If answer is YES to the either parts of question 35, are detailed plans for each attached? \_\_\_\_\_
- 37. Walkways – Minimum Width: \_\_\_\_\_ (ft) Finish Type: \_\_\_\_\_
- 38. Safety Equipment: Ring Buoy with 50 ft Line  Shepherd's Crook with 16 ft Pole
- 39. Depth Markers: \_\_\_\_\_ ft. \_\_\_\_\_ ft.
- 40. Bathrooms: Are all dwellings within 300 feet of the pool? \_\_\_\_\_
- 41. Is this the result of an expired/revoked permit? \_\_\_\_\_
- 42. Is this pool/spa replacing/updating an existing body of water? \_\_\_\_\_
- 43. Have variances been submitted for this project? \_\_\_\_\_
- 44. Comments (Please include additional information as needed):



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**SIGNATURES**

By signing below, the Engineer, Architect or Contractor certifies that they are familiar with all State and County Code requirements applicable to this project and that this bathing place will be constructed and operated in accordance with the Maricopa County Environmental Health Code governing design, construction and operation of public and semi-public bathing places. By signing below as Owner, certification is made that the signor is an authorized agent for the true ownership, and that the ownership information above is correct.

By clicking "I agree", you agree and acknowledge that 1) your application will not be "Signed" in the sense of a traditional paper document, and 2) By signing in this alternate manner, you agree that your "electronic signature" is valid and binding upon you to the same effect as a handwritten signature.

I agree:

45. Architect, Engineer or Contractor's Signature: \_\_\_\_\_

46. Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

By clicking "I agree", you agree and acknowledge that 1) your application will not be "Signed" in the sense of a traditional paper document, and 2) By signing in this alternate manner, you agree that your "electronic signature" is valid and binding upon you to the same effect as a handwritten signature.

I agree:

47. Pool Owner's Signature: \_\_\_\_\_ Title: \_\_\_\_\_

48. Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Original and Two** legible copies each of the application, plans and additional specifications or calculations must be submitted. Pool layout drawings must be drawn to scale and be, at least, 18' by 24' in size. One original copy of manufacturer's specifications / cut sheets on each piece of equipment is required. *Signatures must be original* on one application and **ALL PLANS MUST HAVE ARCHITECT/ENGINEER/CONTRACTOR OF RECORD'S ORIGINAL SIGNATURE AND DATE.** Revised plans and applications must have the revision date, the word "REVISED" and an original signature for the Contractor/Architect/Engineer. *Architects and Engineers must be registered in Arizona and SEAL THE APPLICATION AND PLANS.* Certification that the pool is constructed in accordance with approved plans and specifications must be submitted when requesting final inspection. Permit will NOT be issued for operation of uncertified pools.



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## Inspection Request Form

*Incomplete or incorrect information may cause delays on the inspection time*

**Project Name:** \_\_\_\_\_

**Identifying Name (East, Casita, Office, etc)** \_\_\_\_\_

**Project Address:** \_\_\_\_\_

**Gate Code:** \_\_\_\_\_ **MCESD #:** \_\_\_\_\_

**Facility Contact Name:** \_\_\_\_\_ **Phone #:** \_\_\_\_\_

Pool       Spa       Wading       Splash Pad       Special Use

**Contractor:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Management Company to whom Operating Permit is to be mailed:**

**Company Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

### Type of Inspection

Rough Plumbing Inspection       Rough Plumbing Re-inspection

Pre-plaster Inspection       Pre-plaster Re-inspection

Final Inspection       Final Re-inspection

**Comments:**



## SWIMMING POOL/SPA HYDRAULIC DESIGN GUIDELINES

### TDH (skimmer pool with sand filter)

FEET FROM DRAIN:	1 – 25	26 – 50	51 – 75	76 – 100	101 – 125	126 - 150
HEAD (FT):	55	60	65	70	75	80

### MAX FLOW RATES (PVC: C=140)

<b>PIPE SIZE (IN):</b>	1.25	1.5	2.0	2.5	3.0	4.0	6.0
<b>PRESS SIDE (GPM):</b>	25	60	90	140	220	350	800
<b>SUCT. SIDE (GPM):</b>	15	35	50	80	130	220	450

### MAX VELOCITIES

**PRESSURE SIDE** - 10ft/sec                      **SUCTION SIDE** – 6 ft/sec

### TURNOVER RATES

**SPA** – 30 MIN              **SWIMMING POOL** – 8 HRS              **WADING POOL** – 1 HR

### NUMBER OF SKIMMERS REQUIRED

**SPA, WADING POOL:** 1 skimmer per 200 ft<sup>2</sup>

**SWIMMING POOL:** 1 skimmer per 400 ft<sup>2</sup> (min. of 2 skimmers)

**3 OR MORE SKIMMERS REQUIRES A CLOSED LOOP**

### MINIMUM PIPE SIZES (BASED ON SKIMMER FLOW CONTROLLING)

	<u>main drain</u>	<u>skimmer</u>	<u>return</u>	<u>flow (gpm)</u>
2 skimmer	1.5"	2"	1.5"	54
3 skimmer	2"	2.5"	2"	81
4 skimmer	2.5"	3"	2.5"	108
5 skimmer	2.5"	3"	3"	135
6 skimmer	3"	4"	3"	162

### NUMBER OF RETURNS (INLETS) REQUIRED

(SWIMMING POOLS – 6 MINIMUM ON CLOSED LOOP; SPA, WADING POOL – 1 PER 15 LF OF PERIPHERY; 3 OR MORE REQUIRES CLOSED LOOP)

<b>PERIMETER:</b>	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315
<b># RETURNS:</b>	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

**ALL PIPING MUST PASS A PRESSURE TEST @ 25 PSI FOR 30 MIN**



## SWIMMING POOL/SPA HYDRAULIC DESIGN GUIDELINES

### TDH (skimmer pool with sand filter)

FEET FROM DRAIN:	1 – 25	26 – 50	51 – 75	76 – 100	101 – 125	126 - 150
HEAD (FT):	55	60	65	70	75	80

### MAX FLOW RATES (PVC: C=140)

<b>PIPE SIZE (IN):</b>	1.25	1.5	2.0	2.5	3.0	4.0	6.0
<b>PRESS SIDE (GPM):</b>	25	60	90	140	220	350	800
<b>SUCT. SIDE (GPM):</b>	15	35	50	80	130	220	450

### MAX VELOCITIES

**PRESSURE SIDE** - 10ft/sec                      **SUCTION SIDE** – 6 ft/sec

### TURNOVER RATES

**SPA** – 30 MIN              **SWIMMING POOL** – 8 HRS              **WADING POOL** – 1 HR

### NUMBER OF SKIMMERS REQUIRED

**SPA, WADING POOL:** 1 skimmer per 200 ft<sup>2</sup>

**SWIMMING POOL:** 1 skimmer per 400 ft<sup>2</sup> (min. of 2 skimmers)

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4 skimmer	2.5"	3"	2.5"	108
5 skimmer	2.5"	3"	3"	135
6 skimmer	3"	4"	3"	162

### NUMBER OF RETURNS (INLETS) REQUIRED

(SWIMMING POOLS – 6 MINIMUM ON CLOSED LOOP; SPA, WADING POOL – 1 PER 15 LF OF PERIPHERY; 3 OR MORE REQUIRES CLOSED LOOP)

<b>PERIMETER:</b>	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315
<b># RETURNS:</b>	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

**ALL PIPING MUST PASS A PRESSURE TEST @ 25 PSI FOR 30 MIN**