

**ENVIRONMENTAL SERVICES  
DEPARTMENT**

John A. Power PE, MPA, Director  
1001 N. Central Avenue, Suite 200  
Phoenix, AZ 85004 - 1937



**WATER AND WASTE MANAGEMENT  
DIVISION**

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

Revised: March 12, 2008



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**CONTACT INFORMATION:**

**JAMES WALTERS, ENVIRONMENTAL ENGINEER**

**SWIMMING POOLS PROGRAM**

**TELEPHONE (602) 506-6616 FAX (602) 372-0788**

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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:

<b>Size (ft<sup>2</sup>)</b>	<b>One time Fee</b>	<b>Expedited* Fee</b>
<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	\$455.00	N/A

\* - Plans submitted for Expedited Review requires prior approval.

**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.

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**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, OWNER AND CONTRACTOR/ENGINEER/ARCHITECT INFORMATION**

1. To Serve (Facility Name and type): \_\_\_\_\_
2. Pool Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_
3. Facility Contact Name: \_\_\_\_\_ Phone #: ( ) \_\_\_\_\_
4. OWNERSHIP Name: \_\_\_\_\_ Phone #: ( ) \_\_\_\_\_
5. Authorized Agent's Name: \_\_\_\_\_ Title: \_\_\_\_\_
6. Address: \_\_\_\_\_ FAX #: ( ) \_\_\_\_\_
7. City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
8. CONTACT Name: \_\_\_\_\_ Phone #: ( ) \_\_\_\_\_
9. POOL Contractor/Engineer/Architect's Name: \_\_\_\_\_
10. AZ Registration/License # (Cont: A-9,19, KA-5,6): \_\_\_\_\_ Phone #: ( ) \_\_\_\_\_
11. Address: \_\_\_\_\_ FAX #: ( ) \_\_\_\_\_
12. City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**DESIGN DATA**

13. Perimeter (ft): \_\_\_\_\_ Area (ft<sup>2</sup>): \_\_\_\_\_ Avg. Width (ft): \_\_\_\_\_ Length (ft): \_\_\_\_\_
14. Volume (gal): \_\_\_\_\_ Turnover Time Required (hours): \_\_\_\_\_ Turnover Rate Required (gpm): \_\_\_\_\_
15. Structure: Gunitite  Poured Concrete  Fiberglass  Plastic  Other
16. Fully Describe Finish (Plaster, PebbleTec, Color, etc.): \_\_\_\_\_
17. Skimmers (qty): \_\_ Make/Model: \_\_\_\_\_ Flow Required (# skimmers X 27 gpm): \_\_\_\_\_
18. Returns/Inlets (qty): Wall: \_\_\_\_\_ Floor: \_\_\_\_\_
19. Surge Tank Capacity (For Gutter or Rim Flow Systems Only): \_\_\_\_\_ gallons
20. Filter Type: Sand  D.E.  Cartridge   
(20 gpm/ ft<sup>2</sup> max flow) (2 gpm/ ft<sup>2</sup> max flow) (0.375gpm/ ft<sup>2</sup> max flow)
21. Manufacturer: \_\_\_\_\_ Model #: \_\_\_\_\_

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DESIGN DATA (CONTINUED)

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

23. Chlorinator Make/Model: \_\_\_\_\_ Erosion  Liquid  Gas

24. Pump Make/Model: \_\_\_\_\_ # of pumps \_\_\_\_\_ Horsepower: \_\_\_\_\_

25. Distance From Main Drain: \_\_\_\_\_ (ft) TDH: \_\_\_\_\_ (ft) Flow: \_\_\_\_\_ (gpm) Turnover: \_\_\_\_\_ (hr)

26. Waste Discharged to: Sewer  (Requires 2X Pipe Diameter Air Gap) Irrigation  Wet Well

27. Cleaning Equipment: Manual  Automatic  Make/Model: \_\_\_\_\_

28. Vacuum System: Portable  Internal

29. Fill Line: Surface  Submerged  Backflow Protection Method: \_\_\_\_\_

30. Do all Doors/Gates swing AWAY from the pool/spa area? NO  YES

31. Are there any windows in the pool enclosure or planters/water features within 4' of pool/spa? NO  YES

32. If answer is YES to the above question, are detailed plans for each attached? NO  YES

33. Walkways - Minimum Width: \_\_\_\_\_ (ft) Finish Type: \_\_\_\_\_

34. Safety Equipment: Ring Buoy with 50 ft Line  Shepherd's Crook with 16ft Pole

35. Depth Markers: \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft. \_\_\_ft.

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.

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

37. Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

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

39. 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.** Revised plans and applications must have the revision date, the word "REVISED" and an original signature for the Contractor/Architect/Engineer. 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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**CONSTRUCTION CERTIFICATION LETTER**

**NOTE: ONLY ORIGINAL FORMS ACCEPTED - Required for Final Inspection**

**Re:** Serving: \_\_\_\_\_ (ie: Holiday Inn; Bellview Apts.; etc.)  
Pool name: \_\_\_\_\_ (ie: Main, Clubhouse #2, etc.)  
Address: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_  
City: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Owner of Record** to whom Operating Permit is to be issued: (**CANNOT BE CONTRACTOR**)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

As required in chapter VI, Section 1, Regulation 2i, I certify that the above referenced bathing place has been constructed in accordance with the plans and specifications submitted to and approved by the Maricopa County Environmental Services Department, Water and Waste Management Division, Swimming Pools Program. **In addition, I certify that I am familiar with all State and County Code requirements applicable to this project and that this bathing place was constructed in compliance with those Code requirements.**

**Engineer, Architect, or Contractor:**

Printed Name: \_\_\_\_\_  
Engineer or Architect Registration # or Contractor License # (A9, A19, KA5, or KA6): \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Signature: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

**Note: Signature by a contractor requires notarization below. Signature by a P.E. or R.A. requires seal below.**

PE seal

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss

Subscribed and sworn to (or affirmed) before me

this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by

Notary seal

\_\_\_\_\_  
name of signer (s)

\_\_\_\_\_  
signature of Notary Public

PLEASE SUBMIT WHEN FINAL INSPECTION IS REQUESTED

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**SWIMMING POOL/SPA HYDRAULIC DESIGN GUIDELINES**

**TDH (skimmer pool with sand filter)**

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

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

<b>PIPE SIZE (IN):</b>	<u>1.25</u>	<u>1.5</u>	<u>2.0</u>	<u>2.5</u>	<u>3.0</u>	<u>4.0</u>	<u>6.0</u>
<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**