

**ENVIRONMENTAL SERVICES  
DEPARTMENT**

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



**WATER AND WASTE MANAGEMENT  
DIVISION**

Kevin S. Chadwick, PE, Division Manager  
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**APPLICATION PACKET FOR  
APPROVAL TO REMODEL A  
PUBLIC OR SEMI-PUBLIC SWIMMING POOL**

Revised: March 1, 2007



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**CONTACT INFORMATION:**

**JAMES WALTERS, ENVIRONMENTAL ENGINEER**

**COMMERCIAL SWIMMING POOL CONSTRUCTION PROGRAM**

**TELEPHONE (602) 372-5450 FAX (602) 506-6925**

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## **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.

## **FEEES FOR REMODEL PLAN EXAMINATIONS**

<b>Type</b>	<b>One time Fee</b>	<b>Expedited* Fee</b>
Remodel Simple	\$165.00	\$330.00
Remodel Complex	\$250.00	\$500.00

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

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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	120	220	350	800
<b>SUCT. SIDE (GPM):</b>	15	35	50	80	120	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># of 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 AT 25 PSI FOR 30 MIN**

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**REMODEL CONSTRUCTION CERTIFICATION LETTER**

**NOTE: ONLY ORIGINAL FORMS ACCEPTED - NO PRE-DATED, FAX OR COPIES ACCEPTED**

**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 remodeled in accordance with the plans and specifications submitted to and approved by the Maricopa County Environmental Services Department, Division of Water and Waste Management, Swimming Pool Construction 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 remodeled in compliance with those Code requirements.**

**Contractor, responsible party or owner:**

Printed Name: \_\_\_\_\_  
If applicable 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

\_\_\_\_\_  
Name of signer (s)

Notary Seal

Signature of Notary Public

**PLEASE DO NOT SEND BEFORE FINAL INSPECTION REQUESTED**

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**APPLICATION FOR APPROVAL TO REMODEL  
A PUBLIC OR SEMI-PUBLIC SWIMMING POOL OR SPA**



Existing Permit No. \_\_\_\_\_ Assigned Remodel Permit No. \_\_\_\_\_

Check one  Semi-Public  Public  Variance

Check one  Non-Diving  Main  Wading Pool  
 Diving  Therapy  Special Use

*Please complete the following:*

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

1. To Serve (Facility Name and type): \_\_\_\_\_

2. Facility Contact Name: \_\_\_\_\_ Phone #: (\_\_\_\_) \_\_\_\_\_

3. Street Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

4. **OWNERSHIP** Name: \_\_\_\_\_ Phone #: (\_\_\_\_) \_\_\_\_\_

5. Authorized Agent's Name: \_\_\_\_\_ Title: \_\_\_\_\_

6. Address: \_\_\_\_\_ FAX #: (\_\_\_\_) \_\_\_\_\_

7. City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

8. **POOL CONTRACTOR/ENGINEER/ARCHITECT'S** Name: \_\_\_\_\_

9. CONTACT Name: \_\_\_\_\_ Phone #: (\_\_\_\_) \_\_\_\_\_

10. AZ Registration/License # (Cont: A-9,19, KA-5,6): \_\_\_\_\_ Phone #: (\_\_\_\_) \_\_\_\_\_

11. Address: \_\_\_\_\_ FAX #: (\_\_\_\_) \_\_\_\_\_

12. City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**DESIGN DATA**

A major modification includes a change to one or more of the following. Check each that applies and provide the following documentation.

13.  **CHANGE IN THE SIZE, SHAPE, OR DEPTH OF A POOL OR THE INSTALLATION OF DIVING EQUIPMENT. (MUST SUBMIT NEW CONSTRUCTION APPLICATION, COMPLETE PLANS AND FEES - SEE NEW CONSTRUCTION APPLICATION).**
14.  The enclosure - Submit fence details and a site plan showing the location of the new fence.
15.  Resurfacing the pool interior - Submit a dual main drain detail; describe type of finish and color of pool interior.
16.  Removal and replacement of the deck - Submit a deck plan and fully describe scope of all work to be done.
17.  Adding a water feature or planter or rock feature - Submit architectural plan profiles and plumbing schematics.
18.  Changing the disinfection system - Submit manufacturer's documentation on the proposed system.
19.  A change to the circulation system including pump, filter, and piping - Submit manufacturer data on pump and filter and drawings of the piping.

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**DESIGN DATA (CONTINUED)**

20. To Serve (Facility Name and type): \_\_\_\_\_

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

22. Skimmers (number of): \_\_\_\_\_

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

24. Volume (gal): \_\_\_\_\_

25. Walkways - Minimum Width: \_\_\_\_\_ (ft)

26. Description of work: (you may attach relevant documents, cut sheets, samples, plans, explanations,...etc)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SIGNATURES**

By signing below, the Engineer, Architect or Contractor certifies that he/she is 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 signer is an authorized agent for the true ownership, and that the ownership information above is correct.

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

28. Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

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

30. Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Three legible copies each of the application, plans and additional specifications or calculations must be submitted with the applicable Fee.** One original copy of manufacturers' 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 after final inspection is approved and before the permit to operate the pool for use is issued. **THE PERMIT TO OPERATE WILL NOT BE ISSUED FOR UNCERTIFIED POOLS.**

*(Application for Approval to Remodel a Bathing Place – Page 2 of 2)*