

**ENVIRONMENTAL SERVICES
DEPARTMENT**

John P Kolman, RS, MBA, Director
1001 N. Central Avenue
Phoenix, AZ 85004 - 1937



**WATER AND WASTE MANAGEMENT
DIVISION**

Kevin S. Chadwick, PE, Division Manager
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Application Packet for Approval to Construct a Public or Semi-Public Swimming Pool

Revised: July 14, 2010



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CONTACT INFORMATION:

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COMMERCIAL SWIMMING POOL CONSTRUCTION PROGRAM

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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:

Size (ft²)	One time Fee	Expedited* Fee
<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.

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MCESD #: _____

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, 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: _____
13. Email Address: _____

DESIGN DATA

14. Perimeter (ft): _____ Area (ft²): _____ Avg. Width (ft): _____ Length (ft): _____
15. Volume (gal): _____ Turnover Time Required (hours): _____ Turnover Rate Required (gpm): _____
16. Structure: Gunitite Poured Concrete Fiberglass Plastic Other
17. Fully Describe Finish (Plaster, PebbleTec, Color, etc.): _____
18. Skimmers (qty): __ Make/Model: _____ Flow Required (# skimmers X 27 gpm): _____
19. Returns/Inlets (qty): _____ Wall: _____ Floor: _____
20. Surge Tank Capacity (For Gutter or Rim Flow Systems Only): _____ gallons
21. Filter Type: Sand D.E. Cartridge
(20 gpm/ ft² max flow) (2 gpm/ ft² max flow) (0.375gpm/ ft² max flow)
22. Manufacturer: _____ Model #: _____

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DESIGN DATA (CONTINUED)

23. Filter Flow Capacity: 1) _____ X _____ X _____ = _____
(Lowest of #1 # of Filters size (ft²) max flow (gpm/ ft²) maximum filter capacity (gpm)
or #2 Governs) 2) _____ From Manufacturer's Specifications (NSF Listed Rating)
(max gpm)

24. Chlorinator Make/Model: _____ Erosion Liquid Gas Salt

25. Pump Make/Model: _____ # of pumps _____ Horsepower: _____

26. Distance From Main Drain: _____ (ft) TDH: _____ (ft) Flow: _____ (gpm) Turnover: _____ (hr)

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

28. Cleaning Equipment: Manual Automatic Make/Model: _____

29. Vacuum System: Portable Internal

30. Fill Line: Surface Submerged Backflow Protection Method: _____

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

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

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

34. Walkways - Minimum Width: _____ (ft) Finish Type: _____

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

36. 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.

37. Architect, Engineer or Contractor's Signature: _____

38. Printed Name: _____ Date: _____

39. Pool Owner's Signature: _____ Title: _____

40. 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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CONSTRUCTION CERTIFICATION LETTER

NOTE: ONLY ORIGINAL FORMS ACCEPTED - Required for Final Inspection

Re: Serving: _____ (ie: Holiday Inn; Belleview Apts., etc.)
Pool name: _____ (ie: Clubhouse, #2, etc.) **MCESD #:** _____
Address: _____
City: _____ Zip: _____
Contact Name: _____ Phone _____

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 Water and Waste Management Department, Division of Environmental Health, 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 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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Inspection Request Form

Project Name: _____

Identifying Name (East, Casita, Office, etc) _____

Project Address: _____

Gate Code: _____ **MCESD #:** _____

Contact Name: _____ **Phone #:** _____

Pool **Spa** **Wading** **Splash Pad** **Special Use**

Contractor: _____ **Fax:** _____

Type of Inspection

Rough Plumbing Inspection
 Rough Plumbing Re-inspection

Pre-plaster Inspection
 Pre-plaster Re-inspection

Final Inspection (Construction Certification Letter required for this inspection)

New Pool Resurface Fence
 Deck Circulation Disinfection
 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)

PIPE SIZE (IN):	<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>
PRESS SIDE (GPM):	25	60	90	140	220	350	800
SUCT. SIDE (GPM):	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 ft²
SWIMMING POOL: 1 skimmer per 400 ft² (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)

PERIMETER:	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315
# RETURNS:	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