



**COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
ENVIRONMENTAL HEALTH SERVICES DIVISION**

2156 SIERRA WAY STE. B / PO BOX 1489, SAN LUIS OBISPO, CA 93401

PHONE : (805)781-5544 FAX: (805)781-4211

EMAIL: EHS@CO.SLO.CA.US



Public Health
Prevent. Promote. Protect.

County of San Luis Obispo
Public Health Department

I. SPA POOL PLAN CHECK SHEET

Title 22 of the California Code of Regulations requires that any person constructing, reconstructing, or altering a swimming pool, auxiliary structure or equipment submit legible plans and specifications to the enforcing agent, San Luis Obispo County Environmental Health for review and written approval prior to commencing work or issuance of necessary building permits [Section 65505] **THIS CHECKLIST IS DESIGNED TO ASSIST THE APPLICANT IN THE PREPARATION OF SATISFACTORY PLANS.** As it does not become part of the completed plans, please ensure all required information appears on the plans.

Sec. 3103B.1 Title 24, CCR

- a. Spa Pool. A spa pool is a pool, not used under medical supervision, that incorporates a water jet system, an aeration system, or a combination of the two systems, and which may also utilize artificially heated water. The surface water area of a spa pool shall not exceed 250 square feet, and the water depth shall not exceed 4 ft.

The following must be submitted to Environmental Health in **duplicate**. One set will be returned with a list of corrections or stamped as approved.

- 1. Drawings to scale (spa: 1" = 1 foot) of the spa in both overhead plan view and longitudinal section.
- 2. Drawings to scale of the equipment room, equipment, plumbing and electrical with each item identified and piping sizes specified.
- 3. Drawings to scale of the deck area including drainage, fencing and gates, hose bibb and drinking fountain locations.
- 4. Drawings to scale of restrooms, shower and locker areas when appropriate.

The following must also be submitted at the time of application for each spa:

- 1. Specification sheets for all spa equipment including pumps (with pump curves), filters, skimmers, chlorinators, heaters, flow meters, separation tanks, lights, and hand rails.
- 2. The following list of items [pages 2-12] must be completed, signed and dated by the pool contractor/designer.

All spa and equipment data must be shown on plans submitted.

IDENTIFICATION:

Name of Facility Where Spa to be constructed:	Location/Address	City
---	------------------	------

Owner	Address	Phone
-------	---------	-------

Contractor/Designer	Address	Phone
---------------------	---------	-------

Person to Contact Regarding Plans	Phone
-----------------------------------	-------

SPA DATA – Part I of II

ANSWER THE FOLLOWING QUESTIONS WHERE APPLICABLE AND CHECK THE APPROPRIATE BOX(s):

1. SPA DIMENSIONS:

- Shape _____
- Length _____
- Width _____
- Diameter _____
- Surface Area _____ sq. ft.
- Maximum Depth _____
- Average Depth _____

2. SPA SHELL MATERIAL: _____

3. SPA CAPACITY: _____

4. SPA COLOR: _____

5. VOLUME (GALS.): _____

6. RETURN INLETS: (Provide spec sheet)

- # of inlets _____
- # of jet returns _____
- Size of inlets _____
- Inlets adjustable _____

7. RECIRCULATION PUMP: (Provide spec sheet)

- Manufacturer _____
- Model # _____
- Horsepower _____
- # of pumps _____
- Ft. of head in system _____
- GPM @ system head loss _____
- Turnover rate _____
- Hair & Lint catcher ___ Yes ___ No

8. JET PUMP (Provide spec sheet)

- Manufacturer _____
- Model # _____
- Horsepower _____
- # of pumps _____

9. SUCTION LINE SIZE: _____

10. OUTLET BOTTOM DRAIN: (Provide spec sheet)

- Safety type dual main drains
- Diameter or open area of each drain cover _____ sq. in. = _____ sq. ft.
- Size of piping: _____
- GPM (from pump curve) per grate (1/2 of GPM if 2 grates) _____ ÷ 7.48 gal./cu. ft. = _____ cfm ÷ 60 sec/min = _____ cfs ÷ grate opening in sq. ft. (sq. in ÷ 144) = _____ fps. (Must be less than 2 ft./sec)

11. FILTER: (Provide spec sheet)

- Type _____
- Manufacturer _____
- Model # _____

- Area in sq. ft. _____
- # of filters _____
- Total Area _____ sq. ft.

12. HYDROSTATIC RELIEF VALVE/ASSEMBLY:

- ___ Yes ___ No
- Depth to groundwater _____

13. CHLORINATION OR DISINFECTION UNIT (Provide spec sheet)

- Type of unit _____
- Manufacturer _____
- Model # _____

14. SKIMMER/GUTTER SYSTEM: (Provide spec sheet)

- # of skimmers _____
- Manufacturer _____
- Model _____
- Gutter system with surge tank at _____ Gallons

15. FLOWMETER: (Provide spec sheet)

- # of flow meters _____
- Manufacturer _____
- Model # _____

16. RANGE OF PRESSURE GAUGE:

Influent _____ Effluent _____

17. VACUUM GAUGE: _____

18. SPA STEPS/STAIRS/LADDERS/RAILS:

- Riser height of stair _____
- # of safety rails _____ (Provide spec sheet)
- Height of rail above deck _____ in.
- Clearance between ladder and stair riser _____ in.

19. DEPTH MARKERS:

- _____ # of maximum depth markers (minimum of 2)
- _____ vertical wall of spa
- _____ on deck surface
- _____ Markers are _____ in. in ht.
- _____ "Ft." abbreviation after each depth marker

20. DECK:

- Deck is made of _____
- Deck is _____ ft. wide
- Deck is _____ ft. wide between pool and spa
- Deck is sloped ¼"/ft. to deck drain
- Deck drains to _____

21. FENCING:

- Indoor spa with walls/door
___ Yes ___ No

SPA DATA – Part 1 OF II (continued)

- What is its height? _____
Are any openings greater than 4 in. in any dimension? _____
- Does the gate have a self-closing self-latching lock? _____

22. EQUIPMENT ROOM:

- The floor is made of _____
- Is there easy access to all equipment and gauges? _____
- Have provisions been made for a back wash sight glass? _____
- Is floor sloped ¼"/ft. to a drain? _____

23. DRESSING ROOM/TOILET/SHOWER:

- Straight line distance from these facilities to farthest point of the farthest living unit _____ ft.
- Are public showers, toilets and dressing rooms provided? _____
- Total # of bathers is _____
- Is one shower per 50 bathers provided?
- Is one lavatory per 80 bathers provided?
- Separate toilet facilities for men and women are provided as follows:
 - # of women toilets _____
 - # of men toilets _____
 - # of men urinals _____
 - # of women showers _____
 - # of men showers _____
 - # of women lavatories _____
 - # of men lavatories _____
- Hot water max. temp. is _____ °F.

24. DRESSING ROOM/TOILET/SHOWER FLOOR PLAN REQUIREMENTS:

- Dressing room/toilet/shower floor plan provided
- Room finish schedule provided
 - Wall material
 - Floor material, floor must be covered
 - Ceiling material
- Samples of flooring and wainscot materials are provided
- Hot & cold running water to each faucet
- Hot water must reach 110 °F minimum

25. HOSE BIBBS/DRINKING FOUNTAIN:

- Does fencing separately enclose spa? (pool/spa combo) _____
- Has a hose bibb been provided that is located so that all portions of the deck can be reached with 75 ft. of hose? _____
- There is/are _____ drinking fountain(s).

26. SIGNS: The following signs will be posted at spa side:

- _____ Spa Caution Sign
- _____ Artificial Respiration
- _____ Emergency Phone Numbers
- _____ Spa Occupancy Capacity
- _____ No Lifeguard on Duty
- _____ Emergency Shut Off Switch

27. SAFETY EQUIPMENT:

- _____ Emergency Shutoff switch with restart on timer
- _____ First aid kit
- _____ Test kit (pH, free chlorine & cyanuric acid)

26. BACKWASH: (For D.E. and Sand Filter Systems)

- Separation tank ___ Yes ___ No
- Make/model _____ capacity to _____ sq. ft. of filter area
- Wastewater from the separation tank cannot be returned to the spa.
- Air gap filter backwash to public sewer ___ Yes ___ No
- Backwash receptacle size _____ p-trap size _____
- Backwash valve ___ Yes ___ No
_____ size Make/Model _____
Backwash water goes to _____

27. When emptied, spa water goes to _____

28. HEATER: (Provide spec sheet)

- Manufacturer _____
- Model _____
- Connection pipe size _____ in.
- Max. flow _____
- Internal bypass valve ___ Yes ___ No
- External bypass valve ___ Yes ___ No
Size of bypass _____ in.

29. Recirculation Pipe Size _____

SPA DATA – Part I of II (continued)

**ANSWER THE FOLLOWING QUESTIONS WHERE APPLICABLE
AND CHECK THE APPROPRIATE BOX(s):**

DO THE FOLLOWING CALCULATIONS; SHOW ALL WORK; ATTACH SEPARATE PAGE AS NEEDED:

I. GALLONAGE CALCULATION:

- length (ft) x width (ft) x average depth (ft) x (times) 7.5 gal/ft³ = # of gallons
Answer: _____ gal.

- For Round Spas:**

- 3.14 x R² (ft) x average depth (ft) x 7.5 gal/ft³ = # of gallons
Answer: _____ gal.

II. PUMP CURVE CALCULATIONS:

_____ gpm from pump curve at _____ ft. of head

- 60 ft. of head for pressure D.E., high rate sand & cartridges
- 45 ft. of head for rapid sand
- 40 ft. of head for vacuum D.E.

III. TURNOVER CALCULATIONS:

Pump must provide a complete turnover of spa water in 30 minute period.

- gallons in spa** = min. gpm of pump 30 min.
- _____ = _____ 30 min. (answer)
- Gallons in spa x 30 min. ÷ pump curve gpm x 30 min. _____ turnover rate in min.

IV. MAX. FILTRATION FLOW RATE CALCULATIONS:

(Complete for your filter type)

- Rapid sand: 3 gpm/ft²
_____ gpm (pump curve) +25%
3 gmp/ft²
= _____ ft.² filter required

(answer)

- D.E.: 2 gpm/ft²
_____ gpm (pump curve) +25%
2 gpm/ft²
= _____ ft.² filter required
(answer)

- High Rate Sand: 15 gpm/ft²
_____ gpm (pump curve) +25%
15 gmp/ft²
= _____ ft.² filter required
(answer)

- Cartridge: 0.375 gpm/ft²
_____ gpm (pump curve) +25%
0.375
= _____ ft.² filter required
(answer)

V. SKIMMER CALCULATIONS:

- 1 Skimmer/500 ft² surface area
_____ ft² (pool surface)
500 ft²/skimmer
= _____
(# of skimmers)
- _____ gpm (pump curve) x .75
= _____ gpm from skimmer

note: if answer is >40 gpm, additional skimmer required

PART II OF II

ANSWER THE FOLLOWING QUESTIONS:

3103B	#1	Spa is not over 4 feet in depth. ___ Yes ___ No Show on plans
3106B	#2	Spa to be finished in white or in a light pastel color approved by the Environmental Health Service. ___ Yes ___ No Note on plans
3106B	#3	Spa pool bench and step edges have contrasting colors. ___ Yes ___ No Note on plans
3106B	#4	Spa has benches, depth of water over bench not exceeding 24 inches. ___ Yes ___ No Show on plans
3109B	#5	There can be no designs resembling a human form on the walls or bottom of the spa. Are any graphics planned on the interior finish? ___ Yes Show on plans ___ No
3109B	#6	Minimum of two depth markers at least 3 in. in height, of contrasting color, made of durable material that resists weathering (slip resistant if located on the deck). Also, the abbreviation "Ft" (3 inches in height) must appear after each depth marker. ___ Yes Show on plans
3110B	#7	Spa: (circle letter which applies) <ul style="list-style-type: none"> • Has 12 inch riser and requires 2 handrails • Has 9 inch riser and requires 1 handrail • Leading railing edge extends to a point not less than 12 inches from plane of bottom riser.
3111B	#8	Handholds will be installed. They will be located not more than 9 inches above water level. ___ Yes Show or note on plans
3111B	#9	Handholds are bullnosed coping or cantilevered decking that is not over 2 ½ inches thick (overhang shall not exceed 2 inches nor be less than 1 inch). ___ Yes ___ No Show or note on plans
3111B	#10	Handholds other than the above are to be installed. ___ Yes ___ Not Applicable Show or note on plans
3111B	#11	The deck is made of concrete or similar material and is slip-resistant and non-abrasive. ___ Yes Note on plans
3113B	#12	Spa: The deck is 4 feet wide and extends at least 50% or more around the spa. It is made of _____. ___ Yes Show or note on plans
3113B	#13	The deck width separating the spa from any adjacent pool or spa is 6 ft. or greater. ___ Yes ___ Not Applicable Show or note on plans

PART II OF II (continued)

3113B	#14	The deck has a minimum slope of ¼ in. per ft. to deck drains and doesn't drain into spa. <input type="checkbox"/> Yes Show or note on plans
3113B	#15	Spa: Landscape planters, flowerbed or similar unpaved areas adjacent to the spa are located 4 feet or more away from spa. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show or note on plans
3115B	#16	Public showers, toilets and dressing rooms will be provided. <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans
3115B	#17	Adjacent living facilities or accommodations are to be used (300 ft. or less). <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans
3116B	#18	There is 1 drinking fountain for first 250 bathers and 1 for each 200 thereafter (exception: when drinking water is available in living quarters or clubhouse). <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans
3117B	#19	Hose bibb available so that all portions of deck can be reached with 75 ft. hose. <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans
3119B & 116045	#20	The following signs will be posted in a conspicuous place at the spa and required information added (circle letters which apply): a. Occupant Load sign (4 inch letters) b. Spa Caution Sign. (The word caution shall be in 4 inch letters) c. Emergency Phone Number sign d. Artificial Respiration Procedures sign e. Warning – No Lifeguard on Duty sign (4 inch letters) f. Emergency Shutoff Switch Sign (1 inch letters) <input type="checkbox"/> Yes Show on plans
3120B	#21	Spa is located indoors and is ventilated according to Section 605 of the Uniform Building Code. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show or note on plans
3121B	#22	Spa equipment room is mounted on a Portland cement concrete or similar floor material and slopes ¼ in./ft. to floor drain. <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans
3123B	#23	Recirculation system: (Answer a-j) a. Discharge flow velocity does not exceed 10 ft./second on inlet piping and 8 ft./second on suction pipe <input type="checkbox"/> Yes <input type="checkbox"/> No Note on plans b. All filters, valves, pumps, strainers and equipment requiring adjustments are readily accessible for repair and replacement <input type="checkbox"/> Yes <input type="checkbox"/> No Note on plans c. Pressure gauge on influent and effluent lines <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans

PART II OF II (continued)

		<p>d. Flowmeter <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans</p> <p>e. Vacuum gauge on suction type filters <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show on plans</p> <p>f. Spa: Two spas are on one recirculation system with individually metered and adjustable flow and chlorination <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show on plans</p> <p>g. Hair and lint strainer is provided on the suction side of the recirculation pump <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans</p> <p>h. Hair & lint strainer is integral with recirculation pump. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>i. Backwash piping and valves to be installed. The backwash will go to _____ . Septic disposal not allowed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show or note on plans</p> <p>j. Valves area easily accessible and not located under decking. They are marked for identification. <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans</p>
3126B	#24	<p>The recirculation pump capacity is designed at which of the following heads? (please circle the letter)</p> <p>a. Pressure D.E. – 60 ft. head b. Vacuum D.F. – 40 ft. head c. Rapid Sand – 45 ft. head d. Hi rate sand – 60 ft. head e. Cartridge filter – min 60 ft. head</p>
3127B	#25	<p>Spa refill inlets not less than 1 inch or less than 2 pipe diameters above overflow rim for air-gap separation. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show or note on plans</p>
3127B	#26	<p>Spa refill inlet is protected with a backflow prevention device. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show or note on plans</p>
3129B	#27	<p>A <u>rapid sand filter</u> is being installed. If filtration rate does not exceed 3 gpm/sq. ft. Backwash is not less than 12 gpm/sq. ft. of filter area. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show & note on plans</p>
3130B	#28	<p>A <u>diatomaceous earth filter</u> is being installed. If filtration rate does not exceed 2 gpm /sq. ft. or 2 ½ gpm for continuous feeding for filter aid for pools 2000 sq. ft. or more. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show & note on plans</p>
3131B	#29	<p>A <u>high rate sand filter</u> is being installed. If filtration rate does not exceed 15 gpm/sq. ft.; its backwash minimum is 15 gpm/sq. ft. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show & note on plans</p>
3131B	#30	<p>A <u>cartridge filter</u> is being installed. If filtration rate does not exceed 0.375 gpm/sq. ft. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show & note on plans</p>
3132B	#31	<p>The chemical feeders comply with Section 3132B. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Note on plans</p>

PART II OF II (continued)

3133B	#32	The disinfectant feeders comply with Section 3133B. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Note on plans
3134B	#33	<u>Skimmers:</u> (surface area less than 250 sq. ft.) (Answer a-e if applicable) a. Minimum one skimmer is provided and capable of withdrawing 75% of required recirculation capacity <input type="checkbox"/> Yes <input type="checkbox"/> No Show & note on plans b. Skimmer is built-in type, recessed into spa wall, individually adjustable for rate of flow, automatically adjusts to variations in spa level within 4 inches, has a removable and cleanable screen or basket, and is provided with an air lock protective device to prevent air leakage into recirculation system <input type="checkbox"/> Yes <input type="checkbox"/> No Show & note on plans c. Skimmer located in relation to spa inlets so as to aid recirculation and skimming <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans d. Skimmer flow rate does not exceed 40 gpm (if exceeds 40 gpm, then need 2 skimmers) <input type="checkbox"/> Yes <input type="checkbox"/> No Note on plans e. Anti-hair catching equalizer line covers provided <input type="checkbox"/> Yes <input type="checkbox"/> No Note on plans
3134B & 3108B	#34	<u>Bottom Drains:</u> a. Spa can be drained through bottom drains. It goes to _____. <input type="checkbox"/> Yes Note on plans b. They are covered by a protective cover whose opening does not exceed ½ inch in its smaller dimension <input type="checkbox"/> Yes Show or note on plans c. Grates removable only with tools <input type="checkbox"/> Yes Note on plans d. Must have 2 main drains with at least 2 feet of separation to prevent a suction hazard. The jet system must have separate duplicate bottom drains. <input type="checkbox"/> Yes <input type="checkbox"/> No Note on plans
3134B	#35	<u>Return Inlets:</u> a. Minimum of one provided <input type="checkbox"/> Yes Show on plans b. Inlets do not protrude greater than 1 ¼ inch into spa and are rounded or smooth <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans c. Inlets are separated by at least 10 ft. and are located so as to ensure uniform circulation <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans d. Provisions have been made for adjusting the volume and direction of flow from the wall inlets <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans
3135B	#36	The aeration and/or jet system is completely separate from its filtration system and not interconnected with any non-spa pool. <input type="checkbox"/> Yes Show or note on plans

PART II OF II (continued)

3137B	#37	<p><u>Waste Disposal:</u></p> <p>a. The backwash goes to _____ (septic systems not allowed)</p> <p>b. If D.E. filter, there is a receiving chamber, e.g. floor sink, which catches waste D.E. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show on plans</p> <p>c. Sumps and drain piping have sufficient capacity to receive spa system backwash without overflowing the sump receiver <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Note on plans</p> <p>d. A sight glass on waste discharge line from filter provided. Exception: air gap visible to operator during backwash operation <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Show or note on plans</p> <p>e. There is no direct connection of the spa or its recirculation system with the sanitary sewer or drainage system <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans</p>
3-680-6	#38	<p><u>Electrical Requirements:</u></p> <p>a. Electrical receptacles are located at least 10 ft. from the inside walls of the spa <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Note on plans</p> <p>b. Electrical receptacles located within 15 ft. of the inside walls are protected by ground-fault circuit interrupter <input type="checkbox"/> Yes <input type="checkbox"/> No Note on plans</p> <p>c. A receptacle that provides power to permanently installed spa recirculating pump motor is located between 5 and 10 ft. from the inside wall of a pool or spa but is a single, locking grounding type. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Note on plans</p> <p>d. A clearly labeled emergency shut off switch for control of both the recirculating system and the aeration and/or jet system is located <u>within 5 feet</u> of the spa. <input type="checkbox"/> Yes <input type="checkbox"/> No Show on plans</p> <p>e. Underwater lighting and area lighting is provided. It meets all electrical provisions of Article #680 of the <u>National Electrical Code</u>. <input type="checkbox"/> Yes <input type="checkbox"/> No Show or note on plans</p>
	#39	<p>Have provisions for accessibility to the physically handicapped been made. <input type="checkbox"/> Yes Show on plans</p>
3118B	#40	<p>Fencing and gates at least 5 ft. in height enclose spa. No opening greater than 4 inches in any dimension exists. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show on plans</p>
3118B	#41	<p>Gate is equipped with self-closing and self latching-device located 3 ½ ft. or higher above deck. <input type="checkbox"/> Yes <input type="checkbox"/> Not Applicable Show on plans</p>
3118B	#42	<p>The bottom of the enclosure is within 2 inches of the finished grade. <input type="checkbox"/> Yes Show on plans</p>
3118B	#43	<p>Any horizontal bars are spaced a minimum of 48" apart. <input type="checkbox"/> Yes Show on plans</p>

PART II OF II (continued)

Contractor/Designer Signature

License Number

Date

Plans checked by

Approved Yes No

Date