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



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#### SPA 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 <u>plan view</u> and <u>longitudinal section</u>.
- 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 Regardi	ng Plans	Phone	

#### SPA DATA - Part I of II

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

1.	SPA DIMENSIONS:	•	Area in sq. ft	
	• Shape	•	# of filters	
	• Length	•	_	sq. ft.
	• Width			
	• Diameter	12. H	YDROSTATIC RELIEF VAL	VE/ASSEMBLY:
	Surface Area sq. ft.		Yes No	
	Maximum Depth	•	Depth to groundwater	
	Average Depth	13. CH	HLORINATION OR DISIN	FECTION UNIT (Provide
2.	SPA SHELL MATERIAL:	sp	ec sheet)	
3.	SPA CAPACITY:	•	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
4.	SPA COLOR:	•	Manufacturer	
5.		•	Model #	
6.	<b>RETURN INLETS:</b> (Provide spec sheet)	14. SK	IMMER/GUTTER SYSTER	M: (Provide spec sheet)
	• # of inlets	•	# of skimmers	
	# of jet returns	•	Manufacturer	
	Size of inlets	•		
	Inlets adjustable	•	Gutter system with su	
7.	RECIRCULATION PUMP: (Provide spec sheet)		Ga	allons
	Manufacturer	15. FL	OWMETER: (Provide sp	ec sheet)
	<ul><li>Model #</li></ul>	•	# of flow meters	
	Horsepower	•	Manufacturer	
	• # of pumps	•	Model #	
	Ft. of head in system	16. RA	ANGE OF PRESSURE GAU	JGE:
	GPM @ system head loss		Influent Effl	
	Turnover rate	17. VA	ACUUM GAUGE:	
	<ul> <li>Hair &amp; Lint catcher Yes No</li> </ul>	18. SP	PA STEPS/STAIRS/LADDE	
8.		•	Riser height of stair	
	Manufacturer	•	# of safety rails	(Provide
	<ul><li>Model #</li></ul>		spec sheet)	
	Horsepower	•	Height of rail above de	eck in.
	• # of pumps	•	Clearance between lac	dder and stair riser
	SUCTION LINE SIZE:		in.	
10.	OUTLET BOTTOM DRAIN: (Provide spec sheet)	19. DE	EPTH MARKERS:	
	<ul> <li>Safety type dual main drains</li> </ul>	•		depth markers (minimum
	<ul> <li>Diameter or open area of each drain cover</li> </ul>		of 2)	
	sq. in. = sq. ft.	•	vertical wall of s	
	Size of piping:	•	on deck surface	
	<ul> <li>GPM (from pump curve) per grate (1/2 of GPM</li> </ul>	•	Markers are	
	if 2 grates) ÷ 7.48 gal./cu. ft. = cfm	•	"Ft." abbreviati	
	$\div$ 60 sec/min = cfs $\div$ grate opening in sq.		depth marker	
	ft. (sq. in ÷144) =fps. (Must be less	20. DE		
	than 2 ft./sec)	•	Deck is made of	
11.	FILTER: (Provide spec sheet)	•	Deck is ft. wide	
	• Type	•	Deck is ft. wide	-
	Manufacturer	•	Deck is sloped ¼"/ft. to	
	• Model #	•	Deck drains to	

21. FENCING:	<ul> <li>Does fencing separately enclose spa?</li> </ul>
<ul> <li>Indoor spa with walls/door</li> </ul>	(pool/spa combo)
Yes No	
	<ul> <li>Has a hose bibb been provided that is located</li> </ul>
SPA DATA – Part 1 OF II (continued)	so that all portions of the deck can be reached
	with 75 ft. of hose?
<ul><li>What is its height?</li></ul>	<ul> <li>There is/are drinking fountain(s).</li> </ul>
Are any openings greater than 4 in. in	
any dimension?	26. SIGNS: The following signs will be posted at spa
<ul> <li>Does the gate have a self-closing self-latching</li> </ul>	side:
lock?	<ul> <li> Spa Caution Sign</li> </ul>
22. EQUIPMENT ROOM:	Artificial Respiration
The floor is made of	Emergency Phone Numbers
<ul> <li>Is there easy access to all equipment and</li> </ul>	<ul><li>Spa Occupancy Capacity</li></ul>
gauges?	No Lifeguard on Duty
Have provisions been made for a back wash	Emergency Shut Off Switch
sight glass?	27. SAFETY EQUIPMENT:
• Is floor sloped ¼"/ft. to a drain?	Emergency Shutoff switch with
23. DRESSING ROOM/TOILET/SHOWER:	restart on timer
<ul> <li>Straight line distance from these facilities to</li> </ul>	First aid kit
farthest point of the farthest living unit	Test kit (pH, free chlorine &
ft.	cyanuric acid)
<ul> <li>Are public showers, toilets and dressing rooms</li> </ul>	26. BACKWASH: (For D.E. and Sand Filter
provided?	Systems)
Total # of bathers is	Separation tank Yes No
<ul> <li>Is one shower per 50 bathers provided?</li> </ul>	Make/model capacity to
<ul> <li>Is one lavatory per 80 bathers provided?</li> </ul>	sq. ft. of filter area
<ul> <li>Separate toilet facilities for men and women are</li> </ul>	<ul> <li>Wastewater from the separation tank cannot be</li> </ul>
provided as follows:	returned to the spa.
# of women toilets	<ul> <li>Air gap filter backwash to public sewer Yes</li> </ul>
# of men toilets	No
# of men urinals	Backwash receptacle size p-trap size
# of women showers	backwasii receptacie size p-trap size
• # of men showers	Backwash valve Yes No
# of men showers      # of women lavatories	size Make/Model
	Backwash water goes to
# of men lavatories  Note: The transfer of the second	27. When emptied, spa water goes to
Hot water max. temp. is °F.  24. DRESSING ROOM/TOWET (SUDWER FLOOR RIAN)	27. When emplied, spa water goes to
24. DRESSING ROOM/TOILET/SHOWER FLOOR PLAN REQUIREMENTS:	28. HEATER: (Provide spec sheet)
·	Manufacturer
<ul> <li>Dressing room/toilet/shower floor plan</li> </ul>	• Model
provided	<del></del>
Room finish schedule provided	Connection pipe size in.
Wall material	Max. flow  Internal by mass value Yes No
Floor material, floor must be coved	Internal bypass valve Yes No
Ceiling material	External bypass valve Yes No     Size of bypass
Samples of flooring and wainscot materials are	Size of bypass in.
provided	20 Regimentation Ring Circ
<ul> <li>Hot &amp; cold running water to each faucet</li> </ul>	29. Recirculation Pipe Size

Hot water must reach 110  $^{\circ}\text{F}$  minimum

25. HOSE BIBBS/DRINKING FOUNTAIN:

# 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:	(answer)
	<ul> <li>length (ft) x width (ft) x average depth (ft) x</li> </ul>	• D.E.: 2 gpm/ft <sup>2</sup>
	(times) 7.5 gal/ft <sup>3</sup> = # of gallons	gpm (pump curve) +25%
	Answer: gal.	gpm (pump curve) +25% 2 gpm/ft <sup>2</sup>
		= ft.² filter required (answer)
	• For Round Spas:	(answer)
	$3.14 \times R^2$ (ft) x average depth (ft) x 7.5	<ul> <li>High Rate Sand: 15 gpm/ft<sup>2</sup></li> </ul>
	gal/ft <sup>3</sup> = # of gallons	gpm (pump curve) +25%
	Answer: gal.	gpm (pump curve) +25%
		= ft.² filter required
II.	PUMP CURVE CALCULATIONS:	(answer)
	gpm from pump curve at	<ul> <li>Cartridge: 0.375 gpm/ft<sup>2</sup></li> </ul>
	ft. of head	gpm (pump curve) +25%
		0.375
	• 60 ft. of head for pressure D.E., high rate	= ft.² filter required
	sand & cartridges	(answer)
	<ul> <li>45 ft. of head for rapid sand</li> </ul>	
	• 40 ft. of head for vacuum D.E.	V. SKIMMER CALCULATIONS:
III.	TURNOVER CALCULATIONS:	• 1 Skimmer/500 ft <sup>2</sup> surface area
	Pump must provide a complete turnover of spa	ft² (pool surface)
	water in 30 minute period.	500 ft <sup>2</sup> /skimmer
	• gallons in spa = min. gpm of pump	
	30 min.	=
	30 min.	= (# of skimmers)
		= (# of skimmers)
	30 min.	= (# of skimmers)  • gpm (pump curve) x .75
	30 min. = (answer)	
IV.	30 min.  • = = (answer)  • Gallons in spa x 30 min. ÷ pump curve gpm	
IV.	30 min.  = 30 min. = (answer)  Gallons in spa x 30 min. ÷ pump curve gpm x 30 min turnover rate in min.	• gpm (pump curve) x .75
IV.	30 min.  • = 30 min.	• gpm (pump curve) x .75  = gpm from skimmer  note: if answer is >40 gpm, additional
IV.	30 min.  • = 30 min.	• gpm (pump curve) x .75 = gpm from skimmer
IV.	30 min.  • = 30 min. (answer)  • Gallons in spa x 30 min. ÷ pump curve gpm x 30 min turnover rate in min.  MAX. FILTRATION FLOW RATE CALCULATIONS: (Complete for your filter type)	• gpm (pump curve) x .75  = gpm from skimmer  note: if answer is >40 gpm, additional

#### **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	<ul> <li>Spa: (circle letter which applies)</li> <li>Has 12 inch riser and requires 2 handrails</li> <li>Has 9 inch riser and requires 1 handrail</li> <li>Leading railing edge extends to a point not less than 12 inches from plane of bottom riser.</li> </ul>
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

3113B	#14	The deck has a minimum slope of ¼ in. per ft. to deck drains and doesn't drain into spa.  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.  Yes No Not Applicable Show or note on plans
3115B	#16	Public showers, toilets and dressing rooms will be provided.  Yes No Show on plans
3115B	#17	Adjacent living facilities or accommodations are to be used (300 ft. or less).  Yes 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).  Yes No Show on plans
3117B	#19	Hose bibb available so that all portions of deck can be reached with 75 ft. hose.  Yes 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 sigh (4 inch letters)  f. Emergency Shutoff Switch Sign (1 inch letters)  Yes Show on plans
3120B	#21	Spa is located indoors and is ventilated according to Section 605 of the Uniform Building Code.  Yes 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.  Yes 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 Yes No Note on plans  b. All filters, valves, pumps, strainers and equipment requiring adjustments are readily accessible for repair and replacement Yes No Note on plans  c. Pressure gauge on influent and effluent lines Yes No Show on plans

		d. Flowmeter
		Yes No Show on plans
		e. Vacuum gauge on suction type filters Yes No Not Applicable Show on plans
		f. Spa: Two spas are on one recirculation system with individually metered and adjustable
		flow and chlorination
		Yes No Not Applicable Show on plans
		g. Hair and lint strainer is provided on the suction side of the recirculation pump
		YesNo Show or note on plans
		h. Hair & lint strainer is integral with recirculation pump. Yes No
		i. Backwash piping and valves to be installed. The backwash will go to
		Septic disposal not allowed
		Yes No Not Applicable Show or note on plans
		j. Valves area easily accessible and not located under decking. They are marked for
		identification.
		Yes No Show or note on plans
3126B	#24	The recirculation pump capacity is designed at which of the following heads? (please <b>circle</b> the letter)
		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
		er saranage meet min oo ta mead
3127B	#25	Spa refill inlets not less than 1 inch or less than 2 pipe diameters above overflow rim for air-gap
		separation.
		Yes No Not Applicable Show or note on plans
3127B	#26	Spa refill inlet is protected with a backflow prevention device.
31270	1120	Yes No Not Applicable Show or note on plans
		res res recrippineasie enem en note en plane
3129B	#27	A rapid sand filter is being installed. If filtration rate does not exceed 3 gpm/sq. ft. Backwash is not
		less that 12 gpm/sq. ft. of filter area.
		Yes Not Applicable Show & note on plans
21200	#20	A distance serve could filter in being installed. If filteration note does not exceed 2 mms /or ft. or 2.1/
3130B	#28	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.
		Yes Not Applicable Show & note on plans
3131B		
	#29	A high rate sand filter is being installed. If filtration rate does not exceed 15 gpm/sq. ft.; its
	#29	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.
	#29	backwash minimum is 15 gpm/sq. ft.
	#29	backwash minimum is 15 gpm/sq. ft.
3131B	#29	backwash minimum is 15 gpm/sq. ft.  Yes Not Applicable Show & note on plans  A cartridge filter is being installed. If filtration rate does not exceed 0.375 gpm/sq. ft.
3131B		backwash minimum is 15 gpm/sq. ft Yes Not Applicable Show & note on plans
	#30	backwash minimum is 15 gpm/sq. ft.  Yes Not Applicable Show & note on plans  A cartridge filter is being installed. If filtration rate does not exceed 0.375 gpm/sq. ft.  Yes Not Applicable Show & note on plans  Show & note on plans
3131B 3132B		backwash minimum is 15 gpm/sq. ft.  Yes Not Applicable Show & note on plans  A cartridge filter is being installed. If filtration rate does not exceed 0.375 gpm/sq. ft.  Yes Not Applicable Show & note on plans  The chemical feeders comply with Section 3132B.
	#30	backwash minimum is 15 gpm/sq. ft.  Yes Not Applicable Show & note on plans  A cartridge filter is being installed. If filtration rate does not exceed 0.375 gpm/sq. ft.  Yes Not Applicable Show & note on plans  Show & note on plans

3133B	#32	The disinfectant feeders comply with Section 3133B.
		Yes Not Applicable Note on plans
3134B	#33	Skimmers: (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  Yes 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  Yes No Show & note on plans  c. Skimmer located in relation to spa inlets so as to aid recirculation and skimming  Yes No Show on plans  d. Skimmer flow rate does not exceed 40 gpm (if exceeds 40 gpm, then need 2 skimmers)  Yes No Note on plans  e. Anti-hair catching equalizer line covers provided
		Yes No Note on plans
3134B & 3108B	#34	Bottom Drains:  a. Spa can be drained through bottom drains. It goes to Yes Note on plans  b. They are covered by a protective cover whose opening does not exceed ½ inch in its smaller dimension Yes Show or note on plans  c. Grates removable only with tools 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 Yes No Note on plans
3134B	#35	Return Inlets:  a. Minimum of one provided  Yes Show on plans  b. Inlets do not protrude greater than 1 ¼ inch into spa and are rounded or smooth  Yes No Show or note on plans  c. Inlets are separated by at least 10 ft. and are located so as to ensure uniform  Yes No Show or note on plans  d. Provisions have been made for adjusting the volume and direction of flow from the wall inlets  Yes 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.  Yes Show or note on plans

3137B	#37	Waste Disposal:
		a. The backwash goes to(septic systems not allowed)
		b. If D.E. filter, there is a receiving chamber, e.g. floor sink, which catches waste D.E.
		Yes No Not Applicable Show on plans
		c. Sumps and drain piping have sufficient capacity to receive spa system backwash without
		overflowing the sump receiver
		Yes No Not Applicable Note on plans
		d. A sight glass on waste discharge line from filter provided. Exception: air gap visible to
		operator during backwash operation
		Yes No Not Applicable Show or note on plans
		e. There is no direct connection of the spa or its recirculation system with the sanitary
		sewer or drainage system
		YesNo Show or note on plans
		vos no
3-680-6	#38	Electrical Requirements:
		a. Electrical receptacles are located at least 10 ft. from the inside walls of the spa
		Yes No Not Applicable <b>Note on plans</b>
		b. Electrical receptacles located within 15 ft. of the inside walls are protected by ground-
		fault circuit interrupter
		Yes No Note on plans
		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.
		Yes No Not Applicable Note on plans
		d. A clearly labeled emergency shut off switch for control of both the recirculating system
		and the aeration and/or jet system is located within 5 feet of the spa.
		Yes No Show on plans
		e. Underwater lighting and area lighting is provided. It meets all electrical provisions of
		Article #680 of the National Electrical Code.
		Yes No Show or note on plans
	#39	Have provisions for accessibility to the physically handicapped been made.
		Yes Show on plans
24400	#40	Farsing and aster at least 5 ft in height analyses are. No against another than 4 inches in any
3118B	#40	Fencing and gates at least 5 ft. in height enclose spa. No opening greater than 4 inches in any
		dimension exists.
		Yes Not Applicable Show on plans
3118B	#41	Gate is equipped with self-closing and self latching-device located 3 ½ ft. or higher above deck.
31100	11-1-1	Yes Not Applicable Show on plans
		Not Applicable Show on plans
3118B	#42	The bottom of the enclosure is within 2 inches of the finished grade.
01101		Yes Show on plans
3118B	#43	Any horizontal bars are spaced a minimum of 48" apart.
<b></b>		Yes Show on plans
		·

# Contractor/Designer Signature License Number Date

Approved \_\_ Yes \_\_ No

Date

PART II OF II (continued)

Plans checked by