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Pool Pages

Upcoming Training Opportunities

For Water Treatment Operators

Under State Law, owners must ensure an individual known as a Water Treatment Operator routinely monitors the pool/spa. This individual must have the knowledge:

- to operate the pool or spa's mechanical and other equipment;
- to perform water quality testing/monitoring; and
- to do the recordkeeping.

The one day workshop/training options that follow help you meet this requirement. A one day workshop/training is being pre-

sent by the Washington State Environmental Health Association in conjunction with a number of interested parties in two locations this year, the nearest one on April 27th in Lakewood. See the enclosed brochure for further details. Also, you may wish to check with pool/spa chemical suppliers, pool/spa industry companies and larger Counties or Health Districts since many of them offer one day workshops as well.

It is your responsibility to provide us with your CPO Certificate as soon as you receive it.

For Participation in Thurston County's Pool/Spa Facility Operator's Certification Program

Many operators take a CPO (Certified Pool Operator) course to qualify their work at a particular facility as "certified" under the Thurston County Sanitary Code. Taking a course such as the one offered by the National Swimming Pool Foundation (NSPF), or its equivalent (check with us first) and passing the course's test is the first of two major steps under this Program. The second major step is to undergo a probationary period for a minimum of three months. During the probationary period, you must demonstrate that you can apply your training and operate the pool/spa responsibly and according to the rules and regulations. You must also com-

plete and submit a facility self-inspection report to us on a monthly basis. Once completed, you must continue to operate the pool/spa responsibly and submit the monthly facility self-inspection report in a timely manner. For more information, see Article VII of the Thurston County Sanitary Code or give our office a call at (360)867-2667. See the enclosed registration forms and the List of Courses offered in Washington and Oregon west of the Cascades for the next few months. Additional course offerings may be found at the NSPF website: www.nspf.com

DATE	CITY/STATE	CONTACT	PHONE	E-MAIL
<u>Washington</u>				
May 13 & 14	Bellevue	Helena Barton	912-247-8474	hbrenbar@yahoo.com
May 13 & 14	Kent	Michael Dilley	425-641-2995	mikedilley@comcast.net
May 13 & 14	Vancouver	Phil Oaks	360-241-7665	propools@comcast.net
June 3 & 4	Bellevue	Michael Dilley	425-641-2995	mikedilley@comcast.net
<u>Oregon</u>				
April 26 & 27	Salem	John Mason	541-610-8818	poolschooloregon@q.com
May 18 & 19	Lincoln City	Lee Engvall	503-620-9200	lee@thepoolandschoolhouse.com

Annual Operating Permit and Re-inspection Fees

As you may recall, the annual operating permit fee increased significantly this year because we no longer have a General Fund allocation to cover a significant portion of the costs of the pool/spa program. The program's budget is based on both administrative costs and direct program activity costs such as inspections, complaint investigations, and technical and regulatory training/education requests/needs. In general, the annual operating permit fees should cover the cost of the routine activities above.

The Washington Administrative Code requires that owners monitor the conditions of pools/spas and to close them to use if they are in an unsafe, unhealthy or unsanitary condition. In an ideal world, we would never find a pool or spa open and out of compliance. In the less than ideal world, we would find a small percentage open but a little out of compliance due to use or "the situation". In the real world, most of the pools/spas fall into one of these two categories. However, we occasionally find a pool/spa that is significantly out of compliance or is repeatedly allowed to be used by owners or operators when out of compli-

ance. Additional time, effort and resources are expended on these facilities, the cost needing to be recovered in a fair and equitable way. Therefore, the fee schedule includes a re-inspection fee that we charge to the facility requiring this additional work. In practice, this is how it generally works:

1. Let's say a pool is only a little out of compliance, e.g., the free chlorine for the pool is found to be 1.5 ppm but should be 2.0 ppm to be suitable for use. However, the pool had been **heavily** used just before the inspection. In this case, we would advise that the levels be monitored for the next few hours, but also would require that the violation be corrected within 24 hours.
2. Let's say that the pool is a little more out of compliance, e.g., the free chlorine is found to be 1.0 ppm but should be 2.0 ppm to be suitable for use and no one had been using it. Here we would ask that the pool/spa be closed to use immediately, the violation be corrected and notify us with a phone call as to the time, date and test results when re-opened for use.

3. If we find that the pool is significantly out of compliance, e.g., the free chlorine is 0.5 ppm, but it is possible for the violation to be corrected **and** we are able to re-visit the site to verify the correction before the end of the day, we generally consider this a follow-up inspection and do not charge a re-inspection fee.
4. If the pool is significantly out of compliance as in #3, but it is not possible for the violation to be corrected by the end of the day **or** we cannot return to verify the correction that day, we generally consider the verification inspection occurring on another day to be a re-inspection and will send a bill for the inspection.

To avoid a re-inspection fee, always make sure your pool/spa is in compliance before opening it to use.

Check your Test Kit

Your test kit reagents have a shelf life of about one (1) year only. Yes, the reagents left from last summer are out-of-date. The use of out-of-date reagents can result in inaccurate and erroneous test results. Proper use of liquid reagents includes:

- Store them properly, out of the sunlight and out of extreme temperature areas;
- Re-cap the bottle after each use, using the right cap;
- Re-cap the bottle tightly; and
- Hold the bottle straight up & down, out of contact with the sample vial or sample, when adding reagents to the test sample.

Proper use of tablets includes:

- Immediately add the tablet to the test sample upon

opening the tablet pouch; and

- Don't touch the tablets when adding them to the test sample.



Proposed Washington Regulation Changes

The Washington State Department of Health has begun the process to make changes to Chapter 246-260, "Water Recreation Facilities" and Chapter 246-262, "Recreational Water Contact Facilities" of the Washington Administrative Code (WAC). For the most part, the changes being proposed are to align the existing State regulations with the "new" Federal regulations. There is also some discussion about modifying the WAC with respect to facilities with balconies, outdoor walkways, landings, etc. "overlooking" pools/spas.

Multi-story buildings with those characteristics have been a problem for a number of parties. That portion of the WAC needs better definition and acceptable barriers/modifications need to be identified to prohibit access from these features by unsupervised children. If you want further information, please use the following link: www.doh.wa.gov/ehp/wr/rulerevision.htm

Current Signage and Diaper Changing Station/Area Requirements

As some of you recognized when the rules were revised in 2004, the signage requirements were changed in a couple of places and the need to provide a diaper changing station or area was added. We applaud those of you who picked up on these changes and have upgraded your signage and facilities accordingly. For those of you who have not, this is a reminder to do so as soon as possible.

WAC 246-260-031 (22), "Diaper changing stations" states:

"Owners shall provide a diaper changing station, including a handwashing sink conforming to the requirements in subsection (21)(f) of this section, accessible to all bathers, if children in diapers are allowed in the pool facility and the facility is:

1. A general use pool facility; or
2. A limited use pool facility located more than one hundred feet away from living units served."

Exception: although we encourage all facilities to comply with this requirement, facilities built and permitted before October 31, 2004, are given a compliance exemption to fully meet this requirement unless reconstruction of the facility occurs. If you have further questions or need assistance with this matter, please give me a call (360) 867-2574 or speak to me about it during my next routine inspection.

WAC 246-260-131 (5), "Signage for user rules", and -131 (6), "Required personnel", provides the detailed requirements for the rules and safety information to be provided

to all swimming, wading, spa and spray pool users. A copy of these sections is enclosed for your use. For most facilities, requirements identified under section (5) as iii, vi and vii have been the ones that operators have needed to upgrade. If you have further questions or need assistance with this matter, please call Bob Poole at (360)867-2574 or ask about it during your next routine inspection.

Please see included handout for Signage for users rules and required personnel

Revised Pool Contamination Response Guideline

A Revised Pool Response Guideline is enclosed. Please recycle the old guidelines and refer to the enclosed revised copy, but if you have questions, please do not hesitate to call or ask the inspector at time of their visit.





Pool Season Approaches...

Whether you have a year-round or seasonal, indoor or outdoor pool, Memorial Day seems to mark the beginning of the "busy season". Pool use increases because it is summer-time and the livin' is easy.....except for pool operators. Here is a partial pre-opening checklist to use to get ready for "the rush" and help make the livin' a little easier for you. Opening is usually *not* as simple as pulling the cover off and adding a little water.

- You may need a commercial pump to remove excess water and debris that have collected on the cover over the winter. Keep these out of the pool unless you like to create a lot of additional work for yourself.
- Clean, treat and repair your pool cover before rolling or folding it for storage.
- Where are your surface brushes and vacuum cleaner parts? Are they in good enough shape to last the season?
- When filling the pool, it is best to open the water line valve only 1/2 to 3/4. This reduces the chance of rust or other particles from being flushed from the main water line into your pool.
- Plugs may need to be removed from skimmers and recirculation inlets and outlets.
- Wiers, skimmer baskets and all their associated parts should be checked.
- Filters.....is it time to change the sand in your sand filter and check the condition of the parts located in/under the sand? DE Filter.....check the elements for holes or tears, then backwash and apply new Diatomaceous Earth. If you have a cartridge filter, check the integrity of the cartridge. You are required to have a second set of filter cartridges on-site.
- Clean and fire up the heater.
- Clean and fill the chlorinator. Check the valve and tubing for blockage or leaks.

- Flow meters and pressure gauges clog easily and may need repeated cleaning.
- Check the entire system for leaks.
- Once the water becomes clear and has circulated for 24 hours, begin testing and balancing the water quality. Remember to do the total alkalinity first, and yes, water temperature does matter.
- Check barriers and gates (self closing and self latching).
- Is the 911 emergency phone still operable?
- Check you test kit. Is it complete and usable? Are your reagents fresh?
- Do you have log sheets to record your daily testing and maintenance activities?
- Are the drain grates still in place and secure?
- Locate the reaching pole (with double hook) and ring buoy (with rope attached).
- Are all your signs intact, readable, *current* and up to code?
- Check your first aid kit and restock as necessary.
- Call Thurston County Environmental Health if you are new to the facility.
- Opening your pool may entail other processes not covered here, like painting, re-plastering, acid washes, tile re-grouting, depth mark paintings, etc. *Allow time for those tasks as well.*



THURSTON COUNTY PUBLIC HEALTH & SOCIAL SERVICES DEPARTMENT FOOD & ENVIRONMENTAL SERVICES SECTION

412 Lilly Rd NE, Olympia WA 98506
Phone (360) 867-2667, TDD (360) 867-2603 Fax (360) 867-2600
www.co.thurston.wa.us/health/ehle/pools.html

To request this newsletter in an alternative format, please contact us (360) 867-2667.

CPO Training

May 13-14, 2010 (Vancouver WA)

Name: _____

Agency: _____

Position: _____

Address: _____

Telephone: _____

Fax #: _____

CPO Cert#: _____

Registration deadline: 10 days prior to school. You may also register at the door; please call to confirm space.

FULL COURSE FEE: \$320

Payable to:

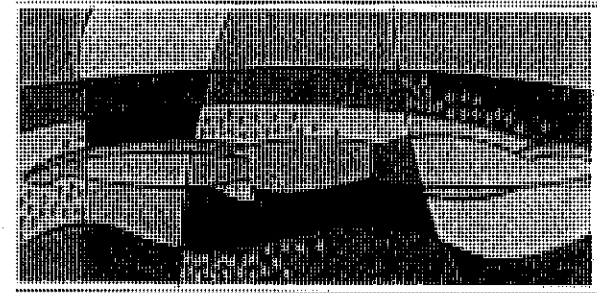
Pro Pools
1503 NE 332nd
Washougal, WA 98671

For more information contact

Phil Oaks
360-241-7665
Propools@comcast.net

PRO POOLS
1503 NE 332nd
Washougal, WA 98671
Propools@comcast.net
CPO TRAINING

Certified Pool-Spa
Operator
National
Training Program



May 13-14, 2010
Vancouver WA



Certified Pool-SPA Operator® Course



REGISTRATION

PLEASE MAIL OR FAX TO:

NW Synergy Enterprises LLC, PO Box 160, Oak Harbor, WA 98277
Phone: 425-641-2995, Fax: 888-315-9795

Company: _____ Phone: _____
 Address: _____ City: _____ State/Zip: _____
 Attendee: 1 _____ 2 _____
 3 _____ 4 _____

_____ 2 day class at \$330.00*	= _____
_____ 2 day class 2+ students at \$300.00	= _____
_____ Spanish Version upgrade \$20 ea	= _____
_____ Pool Math Workbook \$19.95 ea	= _____
_____ Fusion Online/One Day at \$325.00	= _____
Total Due	_____

DATES	LOCATION
Feb 4 & 5, '10	Lynnwood, WA
March 11 & 12, '10	Mt Vernon, WA
April 8 & 9, '10	Tacoma, WA
May 13 & 14, '10	Kent, WA
June 3 & 4, '10	Bellevue, WA
November 4 & 5 '10	Lynnwood, WA

*10% discount if paid on or before first class day.

Check # _____ PO # _____

Classes are Thur/Fri 8 am to 5:30 pm

Fee includes: book, handouts, lunch and snacks. Date Requested: _____

There is an additional upgrade fee of \$20.00 per copy of the *Guia para el Certified Pool-Spa Operator* version of the book instead of the Standard English version.

The Pool Math Book (Spanish available) helps to prepare you for the course, only \$19.95.

Fusion is the online Pool Operator Training with a one day review, codes and written test.

All fees must be paid or PO received 5 days before the course begins. In order to receive a refund, cancellations must be made 5 days before the course date.

GENERAL INFORMATION

Manuals, map of area, directions and hotel locations will be mailed to attendees about 10 days before class starts. Attendees must bring the manual to class. The CPO® course is taught using the 2009 manual and will be used as a reference during the written test. Attendees should also bring a calculator to class.

Class size is limited so register early. Classes with less than 10 applicants, may be canceled, rescheduled or combined with another existing class. Class size will not be greater than 25.

Contract/Corporate Classes are available for 10 to 25 students. Please call for information.

INSTRUCTOR

Michael Dilley has been in the pool management and operations field for over 30 years and a Red Cross Instructor/Instructor trainer for over 40 years. He has operated private, YMCA, city, county and state aquatic facilities. He was first trained as a pool operator in 1967 at Ft Hood, Texas, has been a Certified Pool Operator for 19 years and teaching the CPO class for 9 years. Mike's last employment was the Facility Superintendent of a private club that had 4 bodies of water - 25 yard outdoor pool, 25 meter indoor pool, hot tub and wading pool.

He is available for consulting, seminars, facility inspections and training for individuals or groups.

For further information call, go to www.synergyenterprises.com, or e-mail us cpoinfo@synergyenterprises.com

(Please see reverse for an additional class provided by another trainer.)



The Thirty Third Annual WASHINGTON STATE SWIMMING POOL AND SPA CONFERENCE

April 27, 2010
Clover Park Technical College
Building 3 Rotunda
4500 Steilacoom Blvd SW
Lakewood, WA 98499-4098

April 29, 2010
Benton Franklin Health District
Training Room
7102 W Okanogan Pl
Kennewick, WA 99336



WSEHA POOL CONFERENCE
103 Sea Pines Lane
Bellingham, WA 98229-9363

Registration Information

Registration Fee: \$50 per person. This fee includes a *Pool Operator's Manual*.

Conference Times: Check-in and on-site registration will be from 8:00 a.m. to 8:25 a.m. The conference sessions begin at 8:30 a.m. and end at 4:00 p.m. Lunch will not be provided.

Registration Questions:

Kerri Wagner (360) 738-8946
Registration information is posted on
WSEHA's website www.wseha.org
WSEHA's Federal Tax ID # 91-1312779

Course Content Questions:

Gary Fraser	Olympia	(360) 236-3073
Rick Dawson	Kennewick	(509) 460-4205
Dave DeLong	Tacoma	(253) 798-6499

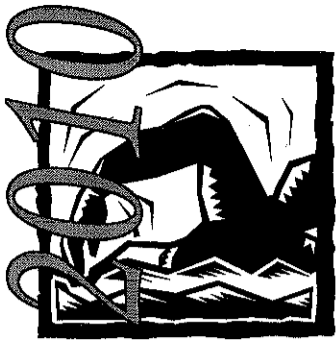
Special Accommodations: Any person with a disability who needs special accommodations may make arrangements at least one week prior to the conference date by calling (360) 236-3392. TDD Relay: 1-800-833-6388.

To Register: Send completed registration form and payment (check or money order) or purchase order to: WSEHA, 103 Sea Pines Lane, Bellingham, WA 98229-9363. A separate form should be completed for each registrant. Registrations may be faxed to (360) 738-8949. Invoicing is available to organizations only. Please include full billing information for invoices and purchase orders, including those submitted by fax. All registrants will receive a confirmation letter and map, provided registration is received in time for processing. In addition, receipts will be mailed to pre-paid registrants. Certificates will be made and available at the conference for attendees whose registration is received no less than one week in advance.

No Partial Payments Accepted: Organizations requiring their employees to make a partial payment must have this payment submitted with the registration and organization payment. Checks, money orders and purchase orders must reflect payment in full.

Refund Policy: Cancellation must be made in writing. Those received by WSEHA at least five days prior to the conference will be subject to a \$10 cancellation fee. No refunds will be given after that date. **NO EXCEPTIONS!**

Please bring your confirmation letter to the registration desk upon arrival, thank you!



The Thirty Third Annual WASHINGTON STATE SWIMMING POOL AND SPA CONFERENCE

The Washington State Environmental Health Association, in cooperation with your local health jurisdiction, is pleased to announce the 33rd Annual Swimming Pool and Spa Conference. We encourage everyone who operates a pool or spa to participate in this informative conference.



Conference Sessions 8:30 a.m. - 4:00 p.m.
Registration 7:45 a.m. - 8:25 a.m.

Swimming Pool and Spa Chemistry

Come to our most popular session! It covers pH, disinfection, alkalinity, hardness, TDS and corrosion control with a brief section on pool testing.

Illnesses Associated with Water Recreation

Provides brief discussion of illnesses associated with water recreation facilities and the types of microorganisms and their treatment.

Spas, Wading Pools, and Recirculating Spray Features:

Discussing ways these facilities differ from swimming pools and some critical health and safety features.

Pool Water Testing:

Overview of basic pool water testing and monitoring requirements.

Pool Equipment Operation:

Pumps, Motors, and Filters

Explore the operation and maintenance of your mechanical room equipment and pool components and seasonal care.

Pool Rules and General Health and Safety

Provide an overview of the rules and discuss general health and safety conditions at pools.

Registration Form

2010 WASHINGTON STATE SWIMMING POOL AND SPA CONFERENCE

Conference I am registering for (check one): **Lakewood on April 27** **Kennewick on April 29**

Name (Print Clearly): _____ E-Mail Address: _____

Confirmation letter to be sent to (check one): E-Mail address above or Mailing address below

MAILING ADDRESS

Organization: _____

Address: _____ City/State/Zip: _____

Phone: (____) _____ Fax: (____) _____

BILLING ADDRESS (if different than above; for invoicing registrations only)

Organization: _____

Address: _____ City/State/Zip: _____

Phone: (____) _____ Fax: (____) _____

Purchase Order Number: _____ Purchase Order Date: _____

Mail or FAX registration form with payment or purchase order to:

WSEHA POOL CONFERENCE

103 Sea Pines Lane, Bellingham, WA 98229-9363

Phone number (360) 738-8946

Fax number (360) 738-8949

Excerpt from: Washington State Administrative Code, WAC 246-260-131 (22)

“(5) Signage for user rules.

- (a) Owners shall provide and maintain signage specifying user rules and safety information required by this section in a conspicuous place in the pool area with easily readable lettering at least three-eighths of an inch high. All swimming, spa and wading pool facilities must have signs stating pool rules:
 - (i.) Prohibiting use by anyone running or participating in horseplay;
 - (ii.) Prohibiting use by anyone under the influence of alcohol or drugs;
 - (iii.) Prohibiting use by anyone with a communicable disease or anyone who has been ill with vomiting or diarrhea within the last two weeks;
 - (iv.) Prohibiting anyone from bringing food or drink into the pool water;
 - (v.) Requiring everyone to have a cleansing shower before entering the pool;
 - (vi.) Requiring anyone in diapers to wear protective covering to prevent contamination;
 - (vii.) Requiring diapers to be changed at designated diaper change areas;
 - (viii.) Warning patrons that anyone refusing to obey the pool rules is subject to removal from the premises;
 - (ix.) Directing patrons to the location of the nearest telephone and first-aid kit for emergency use;
 - (x.) Advising patrons that anyone with seizure, heart, or circulatory problems should swim with a buddy; and
 - (xi.) Where diving boards are used, provide signs for proper use.
- (b) All swimming, spa, and wading pool facilities where lifeguards or attendants are not present shall have signs stating additional pool rules that:
 - (i.) If a child twelve years of age or less is using the pool, a responsible adult eighteen years of age or older must accompany the child and be at the pool or pool deck at all times the child uses the facility; and
 - (ii.) If an individual between thirteen years of age and seventeen years of age is using the pool, at least one other person must be at the pool facility.
- (c) All spa pool facilities must have signs stating additional pool rules:
 - (i.) Cautioning that children under the age of six should not use a spa pool;
 - (ii.) Cautioning that persons suffering from heart disease, diabetes, or high blood pressure should consult a physician before using a spa pool;
 - (iii.) Cautioning that women who are or might be pregnant seek physician's advice regarding using a spa pool;
 - (iv.) Cautioning everyone to limit the stay in the spa pool to fifteen minutes at any one session; and
 - (v.) Posting the maximum bather capacity of each spa pool.
- (d) All spray pool facilities must have signs stating pool rules as specified in (a)(i), (ii), (iii), (iv), (v), (vi), and (viii) of this subsection.

(6) Required personnel.

- (a) Owners shall ensure appropriate personnel specified in this subsection provide monitoring at pool facilities.
- (b) General use swimming pool facilities shall have lifeguards present at all times pools are in use; except:
 - (i.) If swim or dive teams are facility users, the owner may allow substitution of a qualified coach properly credentialed by the sponsoring organization furnishing the swim or dive coach; and
 - (ii.) Owners may substitute persons with Master Scuba Diver Trainer or Master Scuba Diver Instructor certification through PADI or SCUBA instructor, assistant instructor or divemaster through NAUI or other department-approved training in lieu of lifeguards for SCUBA training.
 - (iii.) PADI or NAUI certified scuba instructing staff shall maintain the following conditions:
 - (A.) Limit number of persons training to ten persons per instructor.
 - (B.) Ensure all persons being instructed are monitored at all times while in the pool to ensure thirty-second response time can be provided.
 - (iv.) Private club swimming pool facilities must have lifeguards present at all times persons sixteen years of age and younger are using the pool facilities, except:
 - (A.) Attendants or shallow water lifeguards may supervise persons thirteen through sixteen years of age when these users are restricted to a pool depth less than or equal to five feet; and
 - (B.) Attendants or shallow water lifeguards may supervise all persons sixteen years of age and under if the entire pool depth is less than four and one-half feet.
- (c) If a spa or wading pool is in same enclosure as a swimming pool, all pools are subject to the most stringent monitoring personnel requirements applicable for any pool in the enclosure unless barriers that conform to WAC 246-260-031 (4) restrict access between pools.
- (d) The use of spas or wading pools not requiring lifeguards or attendants is subject to the following conditions:
 - (i.) If the pool is used by children twelve years of age or under, a responsible adult eighteen years of age or older must accompany the children and be at the pool or pool deck at all times the children use the facility;
 - (ii.) If the pool is used by persons seventeen years of age or under, a minimum of two people must be at the pool facility at all times the pool is in use;
 - (iii.) The owner shall post the requirements of this subsection to assure the responsible person is notified of conditions for use of the facility.
- (e) Limited use pool facilities must have an equivalent or greater level of supervision as specified for private clubs in (b)(iv) of this subsection during any times when activities are provided that put the pools into the category of general use pools.
- (f) At limited use pool facilities, if alcohol is sold within the pool facility, the owner must provide a lifeguard or attendant at the pool area.
- (g) All pool facilities must have a water treatment operator.”

Pool Contamination Response Guidelines

A. Feces and Vomitus

Pool and spa operators should be aware that fecal matter (stool) or vomitus in the pool poses a potential health risk for all pool users. The following is a general guide developed by the Washington State Department of Health for pool operators to assist them in responding to this kind of contamination event.

Step 1. Evacuation

Instruct bathers to exit the pool. Close the pool until all steps in this guideline are completed.

Step 2. Evaluation

Determine who contaminated the pool.

a) GO TO STEP 3 IF **ALL** THESE CONDITIONS ARE MET:

The stool or vomitus is intact, easily picked up and illness is not suspected.

b) GO TO STEP 4 IF **ONE OR MORE** OF THESE CONDITIONS IS MET:

The stool is loose, the stool or vomitus is not easily picked up, or illness is suspected.

Step 3. Removal and Disinfection Procedures for Conditions Listed in Step 2a.

- a) Remove as much of the feces or vomitus as possible. Use of leaf catchers or leaf rakes is helpful.
- b) Vacuum the remaining visible material.
- c) Small material that is floating on the surface and cannot be removed by the use of the leaf catchers or leaf rakes should be pushed toward the overflow or skimmers until all visible material is removed.
- d) Spot disinfect the area of contamination with a small quantity of available disinfectant.
 - Add one ounce of calcium hypochlorite (or 4 to 5 ounces of sodium hypochlorite) which has been mixed in a small bucket of water to the affected area.
 - Brush the walls and bottom of the pool in the contaminated area.
- e) **Wait approximately 30 minutes**, then check the chlorine levels and pH level to ensure they meet the minimum requirements outlined by the water recreation facility regulations, especially in the area where chemicals have been added.
- f) Backwash the filter. (Pool operators with vacuum DE (Diatomaceous earth) filters may use the Vacuum DE.)
- g) Reopen the pool.

Step 4. Removal and Disinfection Procedures for Conditions Listed in Step 2b.

- a) Follow all the measures outlined in Steps 3 a, b and c above.
- b) **Swimming pools:** raise the chlorine to a **minimum maintained** free chlorine residual of 5 PPM and let the water recirculate for a **minimum** of 24 hours; **Spas and Wading pools:** it is recommended that the spa (and small wading pools) be drained, the sides and bottom brushed with 100 PPM chlorine, and the pool refilled and balanced.
- c) Backwash the filter.
- d) Reopen the pool.

Step 5. Recordkeeping

When incidents of contamination occur, document what you did to correct the situation. Maintain this record with your daily operating records. An "Incident Report" section is provided on the reverse of this guide.

B. Blood

If an incident occurs resulting in minor cuts and scrapes to a bather, verify that at the time of the incident the pool's disinfection levels meet the requirements outlined in the water recreation facility regulations.

If there is a serious injury resulting in significant blood loss in the pool, follow the procedures outlined in Steps 1, Step 3 d, e and g and Step 5.

Note: For incidents resulting in feces, vomitus, blood, or other bodily fluids on the pool deck or in the locker room, refer to Washington State Department of Labor and Industries for proper bloodborne precautions and procedures.

High Chlorine Dosage Work Sheet
Use only after contamination of pool by feces or vomitus
Complete the worksheet and keep it in your logbook under the incident date

CAUTION:

- You are using this worksheet because your pool has been contaminated by feces or vomitus **AND** the responsible person is ill or suspected to be ill, **OR** the stool or vomitus is loose or spread into a large area.
- Use this sheet only if the pool cannot be closed for 24 hours (see section 4b on the other side of this guide).
- Be aware that you will be trying to reach a high chlorine residual. After determining the needed chlorine level you should contact your pool equipment supplier to ensure this level will not have a harmful effect on the pool or equipment.
- Do not use this procedure unless you are familiar with calculating and reaching high chlorine residuals.
- Do not use this procedure unless you understand how to use your chlorine test kit to accurately read high chlorine residuals.
- Do not use this procedure unless you can quickly lower high free chlorine residuals to less than 10 PPM.

Time and Concentration Calculation:

Use this chart to determine the amount of time you wish to keep the pool closed and the minimum concentration of chlorine necessary for that time to ensure bacteria from the incident are killed. Times different from the chart can be calculated by using the formula: $7,200 \div \text{Time in minutes} = \text{Concentration of Chlorine in PPM}$.

Time	4 hours	6 hours	8 hours	10 hours	12 hours	14 hours	16 hours	18 hours	20 hours
Chlorine	30 PPM	20 PPM	15 PPM	12 PPM	10 PPM	9 PPM	8 PPM	7 PPM	6 PPM

Amount of Chlorine Needed:

The amount of chlorine needed to achieve the PPM you have determined will depend on: 1) the volume of water in your pool and, 2) the concentration you are using. Read the product information with the chlorine you are using or contact your pool equipment supplier. You might consider using chlorine made for shocking which will dissipate quickly. The pool cannot be opened until the free chlorine level is below 10 PPM.

Bromine pools: Use chlorine to obtain the high dosage.

Vacuum DE Filter Option

Facilities that take a significant time to backwash may choose this option in lieu of Steps 3 f and g, (not suitable for Step 4 conditions):

- Increase the free available chlorine (FAC) in your filter tank to 20 PPM.
- Reopen the pool.
- Backwash your filter at the end of the day.

Contamination Incident Report

Date of Occurrence: ____/____/____ Material in the pool was (check one) stool vomit. Material was intact spread into the pool. The person responsible was ill was not ill was not found. Free chlorine level at time of incident: ____PPM. The pool was not closed. The pool was closed for ____ hours and the free chlorine level was maintained at ____PPM. The amount of chlorine added: ____ (lbs, ounces, quarts) of _____. The pool was closed at ____ AM PM on ____/____/____. The pool was reopened at ____ AM PM on ____/____/____. The free chlorine level at the time of opening was ____ PPM (pools with a free chlorine level above 10 PPM cannot be reopened).

Signature of pool operator: _____