

SAFETY IN EXTREME HEAT

Reprinted from FEMA Fact Sheets

Doing too much on a hot day, spending too much time in the sun or staying too long in an overheated place can cause heat-related illnesses. Know the symptoms of heat disorders and overexposure to the sun, and be ready to give first aid treatment.

Before

- Contact the Ohio Department of Health, Local Health Department, Local Emergency Management Office or American Red Cross chapter for information on extreme heat.
- Install window air conditioners snugly.
- Close any floor heat registers nearby.
- Insulate spaces around air conditioners for a tighter fit.
- Use a circulating or box fan to spread the cool air.

Keep heat outside and cool air inside

- Install temporary reflectors, such as aluminum foil covered cardboard, to reflect any heat back outside. Keep the cool air inside by weather-stripping doors and window sills.
- Consider keeping storm windows up all year. Storm windows can keep the heat of a house in the summer the same way they keep the cold out in the winter.
- Check air-conditioning ducts for proper insulation.

During

- Protect windows. Hang shades, draperies, awnings, or louvers on windows that receive morning or afternoon sun. Outdoor awnings or louvers can reduce the heat entering the house by as much as 80 percent. Conserve electricity.
- During periods of extreme heat, people tend to use a lot more power for air conditioning which can lead to a power shortage or outage. Stay

indoors as much as possible. If air conditioning is not available, stay on the lowest floor out of the sunshine. Remember that electric fans do not cool, they just blow hot air around.

- Eat well-balanced, light meals.
- Drink plenty of water regularly. Persons who have epilepsy or heart, kidney, or liver disease; are on fluid-restrictive diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
- Limit intake of alcoholic beverages. Although beer and alcohol beverages appear to satisfy thirst, they actually cause further body dehydration.
- Dress in loose-fitting clothes that cover as much skin as possible. Lightweight, light-colored clothing reflects heat and sunlight and helps maintain normal body temperature.
- Protect face and head by wearing a wide-brimmed hat.
- Allow your body to get acclimated to hot temperatures for the first 2 or 3 days of a heat wave.
- Avoid too much sunshine. Sunburn slows the skin's ability to cool itself. Use a sunscreen lotion with a high SPF (sun protection factor) rating.
- Avoid extreme temperature changes. A cool shower immediately after coming in from hot temperatures can result in hypothermia, particularly for elderly and very young people.
- Slow down. Reduce, eliminate, or reschedule strenuous activities. High-risk individuals should stay in cool places. Get plenty of rest to allow your natural "cooling system" to work.
- Take salt tablets only if specified by your physician. Persons on salt-restrictive diets should check with a physician before increasing salt intake.
- Vacuum air conditioner filters weekly during periods of high use.
- Learn the symptoms of heat disorders and know how to give first aid.

During a Drought

- Lower water use. Watering the lawn and washing the car waste water. Whenever possible, re-use water.
- Place a brick or other large, solid object in the flush tank of the toilet to reduce the water used to flush.
- Farmers should contact the county Farm Service Agency for disaster assistance information.

Heat Disorders**Sunburn**

Symptoms: Skin redness and pain, possible swelling, blisters, fever, headaches.

First Aid: Take a shower, using soap, to remove oils that may block pores preventing the body from cooling naturally. If blisters occur, apply dry, sterile dressings and get medical attention.

Heat Cramps

Symptoms: Painful spasms usually in leg and abdominal muscles. Heavy sweating.

First Aid: Firm pressure on cramping muscles or gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue.

Heat Exhaustion

Symptoms: Heavy sweating, weakness, skin cold, pale and clammy. Weak pulse. Normal temperature possible. Fainting, vomiting.

First Aid: Get victim to lie down in a cool place. Loosen clothing. Apply cool, wet cloths. Fan or move victim to air-conditioned place. Give sips of water. If nausea occurs, discontinue. If vomiting occurs, seek immediate medical attention.

Heat Stroke (Sun Stroke)

Symptoms: High body temperature (106+). Hot, dry skin. Rapid, strong pulse. Possible unconsciousness. Victim will likely not sweat.

First Aid: Heat stroke is a severe medical emergency. Call 9-1-1 or emergency medical services or get the victim to a hospital immediately. Delay can be fatal. Move victim to a cooler environment. Try a cool bath or sponging to reduce body temperature. Use extreme caution. Remove clothing. Use fans and/or air conditioners. **DO NOT GIVE FLUIDS.** ■

**SPRING PRINCIPLES CLASS**

The Spring/Summer 2002 session of the Ohio Environmental Health Programs Course (Principles) had 16 sanitarians from 13 local health departments in attendance. Speakers provided information on all of the mandated environmental health programs, as well as other programs the sanitarian may come in contact with, such as resident/day camps, foodborne illness investigation, rabies control, plan review, disaster response, structure & design of local health departments, and the right of entry and investigative skills.

Those attending the three-week course and the departments they represent include: Jim Armstrong and Justin Bechtel from the Lake County Health Department, Matt Sromek and Robert Goard from the Lorain County Health Department, Nicole Kaiser from the Montgomery County Health Department, Robert Smith from the Cincinnati City Health Department, Vince Fasone from the Carroll County Health Department, Jacque Varty from the Wood County Health Department, Mike Kautz and Scott Wilson from the Butler County Health Department, Thomas Knode from the Franklin County Health Department, Olivia Murray from the Harrison County Health Department, Phillip Pugh from the Pickaway County Health Department, George Britton from the Mercer County Health Department, Rachel Rathburn from the Fairfield County Health Department and Joe Harrod from the Morrow County Health Department.

Congratulations for completion of this course and **GOOD LUCK** as you embark upon an exciting career!! ■



On Friday, June 14th, the Blue Frog and his creator, Jim Burkhart, hopped on to more relaxing ponds. After many years of public health service in Ohio, Jim has semi-retired to the sunny state of Florida. Most recently, Jim served as a Sanitarian Program Specialist in the Bureau of Environmental Health at the Ohio Department of Health, working with Public Swimming Pools, Spas, & Special Use Pools and the Marina Program. Will he be basking around a pool all day in the warm Florida sun?? No way! Jim plans to stay active in public health, as he has accepted a position as Director of Environmental Health at a county health department. We wish Jim happiness and the best of luck in his new endeavors. Thank you Jim, for your service to Public Health in Ohio!!

All Public Swimming Pool and Marina Program questions should be directed to Steve Binns, Program Administrator at 614-466-1390. ■



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 Bureau of Environmental Health
 246 N. High St., P.O. Box 118
 Columbus, Ohio 43216-0118
 614-466-1390

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PLEASE SHARE THIS NEWSLETTER WITH ALL HEALTH DEPARTMENT PERSONNEL.

Deadline dates for article submission are:

*August 30, 2002
 October 25, 2002
 December 27, 2002
 February 28, 2003*

OHIO DEPARTMENT OF HEALTH OFFERS TIPS FOR PROTECTION FROM E. COLI

The Ohio Department of Health (ODH), along with the Ohio Department of Agriculture (ODA), reminds all Ohioans to protect themselves from E. coli O157:H7, a potentially fatal bacterium often found in contaminated, undercooked beef.

"It is especially important to be vigilant about E. coli during the summer months," said ODH Director J. Nick Baird, M.D. "If you host or attend backyard barbecues, remember to eat only hamburgers that have been cooked thoroughly. Remember to wash all fruits and vegetables well. And always wash your hands thoroughly before eating or preparing food and after contact with animals."

E. coli O157 was first linked to illness during a 1982 outbreak of bloody diarrhea and was traced to contaminated hamburgers. The bacteria can also be spread in raw milk, in sewage-contaminated water and from one person to another.

The E. coli O157 bacterium is blamed for some 73,000 infections and 61 deaths in the United States each year, according to the CDC. Most illnesses are associated with eating undercooked, contaminated ground beef, so remember to cook hamburgers to an internal temperature of at least 160 degrees. Use a meat thermometer to be sure, as contaminated meat looks and smells normal and can turn brown before disease-causing bacteria are killed.

Most infected people suffer from diarrhea, which is sometimes bloody, and abdominal cramps; the illness generally clears up in five to 10 days. In children younger than 5 and the elderly, E. coli O157 can sometimes lead to kidney failure. This happens in about 2 percent to 7 percent of all infections.

Food is not the sole source of the bacterium, however, as outbreaks have occurred at animal exhibitions. ODH and ODA remind residents that when attending animal exhibitions, including fairs and petting zoos, to exercise proper handwashing techniques after

touching or petting animals and before eating and drinking.

The two agencies -- ODH and ODA -- work together with local health departments to monitor and help safeguard the state's food supply from contamination.

Tips to help prevent the spread of E. coli O157 include:

- Wash hands thoroughly* after touching animals.
- Wash hands thoroughly* before eating or preparing food, and after using the bathroom or changing diapers.
- Wash counters and utensils with hot, soapy water after coming in contact with raw meat.
- When cooking outdoors, use separate plates for raw meat and cooked meat.
- Cook all ground beef thoroughly, until juices run clear. Use a meat thermometer to ensure it is cooked to 160 degrees.
- Wash meat thermometers between tests.
- Keep raw meats and their juices away from other foods.
- Wash all fruits and vegetables well, especially those that will be served raw.
- Drink only pasteurized milk, juice or cider.
- Drink water only from regulated supplies.
- Keep hot foods hot and keep cold foods cold.
- When ordering hamburger at a restaurant, cut the patty at its thickest part to make certain the center is not still pink. If it is pink, send it back for further cooking and ask for a new bun and plate.
- People and children suffering from diarrhea should avoid swimming in public pools or lakes, sharing baths and preparing food.

* Thorough hand washing is defined as using warm water and washing with soap for at least 20 seconds. In public restrooms, use your arm or a paper towel to turn off the faucet and, if available, use the automatic door opener to exit the bathroom. ■

VOLUNTARY GUIDELINES FOR ANIMAL EXHIBITIONS IN OHIO

During the past two years several *E. coli* O157:H7 outbreaks have occurred throughout the nation that have been associated with agricultural fairs, petting zoos and animal exhibitions. In addition to concerns of exposure to *E. coli* O157:H7, other pathogens including, *Salmonella*, *Q fever*, *Cryptosporidium* and *Giardia*, also pose a contamination potential. As always, the risk of rabies from animal bites can become a real issue. The Ohio Department of Health and Ohio Department of Agriculture provide this voluntary guidance for reducing the risk of exposure for visitors at agricultural fairs and similar events throughout Ohio. By applying some planning and forethought in these areas, we all can help ensure an enjoyable and safe fair visit for all Ohioans. Three *E. coli* outbreaks occurred in Ohio associated with animal exhibitions: one in 2000 and two in 2001.

Water distribution systems:

Install back flow prevention devices between fountains or outlets in livestock areas and water lines supplying other uses on the grounds.

Evaluate the fairgrounds plumbing plan. Water supplies for food vendors should be separated from barn lines and sanitary facilities.

Pressure-test and inspect the fairgrounds potable water piping distribution system. Eliminate dead end lines.

Inspect and test the potable water supply for, at least, total coliforms, *E. coli* and nitrates before the event begins. Collect the samples from various outlets in the fairgrounds distribution system.

If the water distribution system uses in ground vaults, ensure the vaults are not flooded. Install sump pumps or drains to remove water from the vaults.

Discourage the use of hoses. Where used, install hose bibs, post signs that indicate the

hose must not be left lying on the ground. Ensure proper drainage around yard and barn hydrants to eliminate and prevent puddles or pooling water.

If the water supply is from a well(s), evaluate the well(s) for proper construction including the proper grouting of the annular space.

If the water supply is from a well(s), adequate distances must be maintained from possible sources of contamination such as manure storage areas, animal holding areas, etc. The well(s) must be protected from physical damage through the use of barriers.

Camper areas:

Ensure that waste dump stations are clearly marked and properly functioning.

Eliminate puddles or pooling of water around dump stations and potable water outlets.

Install back-flow prevention on hydrants and faucets in the camper area.

Animal exhibits (petting zoos/vendors):

Require that hand-wash stations be placed at the exits from petting zoo areas and post signs to encourage their immediate use. This is especially important with any vendor/exhibitor that has reptiles. Reptiles carry many strains of salmonella bacteria that can cause very serious illness in young children.

Keep animal areas, pens, partitions, etc. clean and free of manure residue. Promptly remove any animals being displayed that show evidence of illness especially diarrhea and fever.

Hand-mouth activities such as eating and drinking, smoking, and carrying toys and pacifiers should not be permitted in petting zoo interaction areas.

Wild animals that are known reservoirs for rabies (bats, skunks, raccoons and fox) should not have any direct contact with the public. Exhibits utilizing wild and exotic carnivores,

and primates should take steps to reduce the risk of these animals biting the public, as bites from these animals may also pose a rabies risk. Require petting zoos to have all eligible animals currently vaccinated against rabies. A veterinarian will be able to identify which animals can be vaccinated against rabies.

Discourage the use of young animals less than 60 days of age in exhibits where there is contact with the public. Young animals are more likely to be potential sources of diarrheal diseases that can be transmitted to children. It is preferable to use miniature or pygmy adult animals where animals are directly exposed to the public. If petting (direct contact) exposure is permitted, close supervision must be provided.

Do not permit vendors to sell or award, as prizes, reptiles, poultry or mammals. It is illegal, under Federal law to sell or give away turtles, with a shell length of less than four inches. A commercial propagators permit from the Ohio Department of Natural Resources does not exempt vendors from this federal restriction. Consult your local health department and county wildlife officer should you encounter questions or problems in this area.

Require that at least one adult to be in attendance at all times in an animal exhibit.

Have your fair veterinarian make routine inspections of animal exhibit areas (including high volume times on evenings and weekends) to assure that the above guidelines are being met.

General livestock:

Provide hand-wash stations at exits and other strategic places around livestock barns. Post signs to encourage their use.

Develop and implement the manure collection, handling and storage procedures. Determine where runoff from the manure storage area drains. Avoid runoff and pooling water.

Develop a written policy on how animal bites will be handled. Talk to your local health

department and share this policy with medical, veterinary and fair security authorities.

If you are considering an animal birthing display, keep visitors well back from the birthing area. Do not let visitors contact baby, including newborn, animals.

General food and hygiene practices:

Encourage the use of areas other than facilities that contain or have contained livestock for events involving only people.

Locate food and beverage service away from livestock areas whenever possible. Consider food and beverage courts.

Work with the local health department to insure all food/beverage vendors are licensed and inspected.

Provide adequate public hand-wash facilities near food/beverage vending areas. Post signs to encourage use.

Portable toilets should be equipped with hand-wash facilities. Signs to encourage attendees to wash hands before leaving animal/livestock areas and before eating should appear over/near hand wash facilities.

Post signs to encourage attendees to wash hands before leaving animal/livestock areas and post signs to encourage attendees to wash hands before eating.

Keep records, i.e., vendors, vendor locations, schedule of events, etc.

Resources:

- Local Health Departments
- Local water utility
- Local building-plumbing code enforcement unit
- Soil and Water Conservation District Office (locations on Ohio Department of Natural Resources website: <http://www.dnr.state.oh.us/odnr/soil+water/swcds.htm>)
- Ohio Department of Health website: <http://www.odh.state.oh.us>
- Ohio Department of Agriculture website: <http://www.state.oh.us/agr>

- Ohio Department of Commerce, Division of Industrial Compliance (State Plumbing Code) website:
<http://www.com.state.oh.us/ODOC/dic/dicplumbing.htm>
- Ohio Department of Natural Resources, Division of Soil and Water Conservation website:
<http://www.dnr.state.oh.us/odnr/soil+water>
- Ohio Department of Natural Resources, Division of Wildlife website:
<http://www.dnr.state.oh.us/wildlife/default.htm>
- Ohio Environmental Protection Agency (OEPA), Division of Drinking and Ground Water. You may contact the appropriate OEPA District Office as listed on the agency website:
<http://www.epa.state.oh.us/news/dist.html>
- Centers for Disease Control and Prevention website: <http://www.cdc.gov/>

These guidelines were developed by the Ohio Department of Agriculture in conjunction with the Ohio Department of Health. They were presented at the Ohio Fair Manager's Annual meeting on January 5, 2001 in order to provide a framework for addressing some of the potential human health risks associated with exhibition animals and the general public. This document is considered by both Agencies as "a work in progress" and subject to revision.

Last Revised June 7, 2002. ■

NEW ULTRAVIOLET LIGHT DISINFECTION UNIT ADDED TO NSF 55 CLASS "A" LISTING

Russell, Smith, RS

Private Water System Rule OAC 3701-28-09 currently provides for the use of UV as a primary means of disinfection for private water systems. Only UV systems that meet NSF Standard 55 "Class A" or the equivalent can be considered for approval as a means of primary disinfection of private water systems in Ohio. Any UV system that becomes listed on NSF Standard 55 Class "A" is acceptable for primary disinfection in Ohio without additional approval from the Ohio Department of Health. **There are currently three UV units listed as Class "A" systems on NSF Standard 55.** These are:

CFM Corporation

(905) 670-7777
475 Admiral Boulevard
Mississauga, Ontario L5T 2N1
Canada
Model: Vitapur LAMP001A 10

Trojan Technologies Inc.

(519) 457-3400
3020 Gore Road
London, Ontario N5V 4T7
Canada
Models: UVMax Pro 15 (17gpm)
UV Max Pro 7 (8.2 gpm)

UV Pure Technologies Inc.

(416) 208-9884
60 Venture Drive
Unit 19
Scarborough, Ontario M1B 3S4
Canada
Model: Hallet Water Unit 10 (10gpm) ■

HOUSEHOLD SEWAGE PRODUCT REVIEW

The BEH Residential Water & Sewage Program staff has recently reviewed a number of household sewage system products for use in Ohio. A summary of each product review and where more information can be found is provided here. Updated listings of septic tanks and aerobic treatment units is available on the ODH web site at <http://www.odh.state.oh.us/ODHPrograms/SEWAGE/sewserv.htm> or can be obtained in hard copy by calling BEH at 614-466-1390.

AEROBIC TREATMENT UNITS

Orenco Systems Inc. AdvanTex AX20N

The AdvanTex AX20N textile filter is listed by NSF International under ANSI/NSF Standard 40, rated at a capacity of 500 gallons per day, and includes a 1500 gallon two compartment watertight septic tank. The Orenco AdvanTex Treatment System incorporates a non-woven textile as the substrate for an attached growth fixed-film treatment process with recirculation of effluent through the second compartment of the septic tank. Use of this unit in any other configuration than that tested by NSF International requires review as an experimental component under OAC 3701-29-20(A) and (B). For more information, contact:

Orenco Systems Incorporated
814 Airway Avenue
Sutherlin, OR 97479
<http://www.orenco.com>
(800) 348-9843

Eljen Xpandable Chambers

The Expandable Chamber is a gravelless leaching device. It is shipped in a compressed bundle. When opened it is a series of cusped core plastic that resembles a number of short six-inch pipe on end. Each core is wrapped in a geo textile fabric. A four-inch pipe is laid on top and the entire system is covered in a geo-textile fabric prior to backfill. This may be installed at a one to one ratio to gravel leaching pipe systems in appropriate soils.

For more information, contact:
Eljen Corporation
125A McKee Street
East Hartford CT 06108
<http://www.Eljen.com>
800-610-0427

Hancor Narrow EnviroChamber

The Narrow EnviroChamber is a 15-inch wide and 11.5 inch tall chamber with louvered sidewalls. These may be used as gravelless leaching devices at a one to one ratio to a gravel leaching pipe system in appropriate soils. For more information, contact:

Hancor
401 Olive St.
Findlay, OH 45840
<http://www.hancor.com>
888-367-7473

SEPTIC TANK REVIEWS

The following septic tanks have been reviewed and found to be in compliance with OAC 3701-29 or have been approved as special devices under OAC 3701-29-20:

Click Burial Vault & Manufacturing Co.
705 Kadaerly Ave. N.W.
P.O. Box 761
New Philadelphia, OH 44663

1000 and 1500 gallon septic tank

Fry Septic Industries
7395 Ravenna Road
Painesville, OH 44077

1500-gallon tank and 2000 gallon two compartment tank

Holman Septic Tank Sales and Ready Mix Inc.
4896 South Michigan Road
Holton, IN 47023

1500 gallon tank in one or two compartment tank

Coate Concrete Products
P.O. box 159
West Milton, OH 45383

2300 gallon two compartment tank
Special Device

Arkansas Composites
1047 South County Line Road
Vilonia, AR, 72173

1000 and 1500 gallon tank

This is a fiberglass septic tank. It has a mid seam that must be sealed with a special methacrylate adhesive which is included. Orenco Systems Inc of Oregon developed the design for this tank. The manufacturing of the tanks is licensed to Arkansas Composites. ■

SEPTIC TANKS VS. SPECIAL DEVICES

The Ohio Department of Health reviews the designs of septic tanks upon the request of the manufacturer or local health departments. This review is to determine if the tanks comply with Ohio Administrative Rules (OAC) 3701-20 Household Sewage Disposal Rules. OAC 3701-29-07 sets minimum tank sizes, baffle requirements, liquid depth, and an air gap. These rules are very specific. OAC 3701-29-02 (A) attempts to provide some overall design guidance based on "general engineering practices".

However there are many tanks that may not comply with OAC 3701-29-07, for a number of different reasons. That may be due to special design needs such as shallow rock tanks or some plastic tank's special structural integrity.

OAC 3701-29-20 (C) allows the Director of Health to approve systems or components, which may differ from those set forth in the rules. Therefore many of the tanks listed on the ODH septic tank list are noted as a Special Device.

Most often these tanks do not meet the requirement of a 48-inch liquid depth and /or a 12-inch air gap. This is common with plastic tanks due to the ribbing on the tank, which

gives them additional structural strength.

It is important to remember that the primary function of a septic tank is to provide retention time to allow the sewage to separate and settle. This is a function of the length and width ratio in a rectangular tank and radius to depth ratio in cylindrical tanks.

The "Manual of Septic Tank Practices" first published in 1957 by the U.S. Department of Health Education and Welfare gives a good overview of the design of septic tanks. Parts of the OAC 3701-29 sewage rules of 1974 were based on this publication. Much of this information, rather than being definitive, is offered in ranges. For example, an air gap should account for 20% of the liquid depth. That would generally be 9 to 12 inches in average precast tanks. Liquid depth could range from 2 1/2 feet to 5 feet.

This is some of the information, which is considered when a manufacturer submits a request for a special device review. Therefore any special device which is listed on the septic tank list should perform the same as a septic tank that meets all of the requirements of OAC 3701-29.

Local health departments are encouraged to carefully inspect each tank and its installation. Staff should be familiar with the different tanks used in their jurisdiction. If possible the precast plants should be visited. Tanks may also have individual installation requirements concerning the method of backfilling or sealing of seams, inlets, and outlets. The buoyancy of tanks is also an issue in areas of seasonally high groundwater especially with non-concrete tanks. The information submitted to this office when tanks are reviewed is very narrow and specific. The ODH review does not insure that all tanks are manufactured according to the designs submitted. ■

SLUDGE/BIOSOLIDS

Tom Grigsby, RS

Sludge or biosolids are the material removed from various wastewater treatment operations, other than domestic septage. Biosolids may be land applied under certain conditions.

The Ohio EPA has the sole authority to regulate the land application of biosolids, (not septage), under Ohio Revised Code (ORC) Section 6111 and Ohio Administrative code (OAC) 3745. The Ohio EPA has been granted delegation from the US EPA to administer the land application of biosolids as per 40 CFR Part 503. In addition in the year 2000 House Bill 197, which amended ORC 6111, was passed and signed into law.

It is important for local Boards of Health to remember that they DO NOT have the authority to charge or collect any fees with regard to the land application of biosolids. That authority rests solely with the Ohio EPA. This authority was also affirmed by a court case in 1995, Burch Hydro Inc. vs. the Ashland County Board of Health. ■

STATEWIDE MOUND CONCURRENCE CLARIFICATION

Jean Caudill, RS

Statewide experimental concurrence has been granted by the Director of Health allowing local health departments to permit by variance the use of mound systems under the limitations and requirements specified in the written notification issued on October 27, 2000. This notification included the condition that such mounds must comply with siting, design, and construction specifications in one of the following sets of documents:

The Ohio State University (OSU) Extension Bulletins
813 Mound Systems for On-site Wastewater Treatment
829 Mound Systems: Pressure Distribution of Wastewater

Small Scale Waste Management Project (SSWMP) Publications
15.24 Wisconsin Mound Soil Absorption System: Siting, Design and Construction
9.14 Pressure Distribution Network Design

Both of these approved resources provide siting specifications and limitations. The OSU resource requires that there be at least two feet of suitable soil as vertical separation between the basal area of the mound and any limiting condition including a seasonal water table. The SSWMP resource requires at least 10 inches of vertical separation to seasonal saturation and additional separation distance guidance for variability in bedrock conditions.

The statewide mound concurrence may not be used to permit a mound system on a site with a more limiting vertical separation distance than those specified in these approved resources. In such cases where a Board of Health intends to grant variances for mounds on sites with more limiting conditions, experimental concurrence must be sought from the Director of Health under the standard process. Mound designs for sites with more limiting conditions must have timed dosing and an advanced distribution system that allows for small doses, as discussed in Converse (January, 2000) Pressure Distribution Designs based on Orifice Area.

In addition, the statewide concurrence does not apply to use of mounds preceded by pretreatment components. The approved resources cited above establish mound design criteria based on the use of septic tank effluent. If an experimental system design is proposed with a pretreatment component preceding a mound or modified mound, the standard process for obtaining Director of Health concurrence must be followed by the local health department and board of health.

Please Note: Information on the ODH experimental concurrence process is now available in a 9 page document entitled "**Experimental Concurrence Guidance**". Contact Jean Caudill at 614-644-7181 (jcaudill@gw.odh.state.oh.us) or Tom Grigsby at 614-644-8663 (tgrigsby@gw.odh.state.oh.us) to obtain an electronic, fax, or paper copy. ■

BASE SUPPORTS FOR MANUFACTURED HOMES, ABS FOUNDATION PADS

Barry Rice, RS



The Ohio Manufactured Homes Association (OMHA) recently conducted a feasibility study for the use of ABS plastic foundation pads for use as base supports for manufactured homes within manufactured home parks. ABS foundation base support pads offer SOME operators an economical alternative to the standard methods of base supports indicated in the rules and used by the industry. This method requires much less site preparation as is required with concrete and much less time to develop a site prior to bringing in a replacement home.

A number of test sites were established and the base supports were evaluated under the scrutiny of a professional engineer. The results were compiled and submitted to the Ohio Department of Health to evaluate. The Bureau of Environmental Health has made a determination that ABS base supports are acceptable for use, **BUT ONLY UNDER STRICT CONDITIONS**. ABS base supports ARE NOT for every home placement situation nor every manufactured home park. As many of you are aware, just as soil types are critical to the proper design of a household sewage disposal system, likewise the placement of ABS pads is critical and relies on an evaluation of the soil types as well as site preparation for proper drainage. As with ANY base support improvement, the Ohio Department of Health requires plan approval PRIOR to the placement of ABS base support systems and the placement of homes, (see OAC 3701-27-06(B)(13) and 3701-27-082(D)(4)). With this approval the agency will also conduct a construction verification inspection to assure that the ABS base support system is properly installed. Without this approval or inspection there is no assurance the home will be properly placed, thus, homes could sustain structural damage as a result of improper loading, frost heave, and settling. The Ohio Department of Health is aware that, now that the study is

complete and the ABS pads have been accepted, many operators will be planning to use them for home placements. In fact, there are already reports of these being placed with little or no regard for the requirements for plan approval or for the proper installation of the pads.

To help control and monitor the placement of ABS base supports and other methods, the Ohio Administrative Code (OAC) already requires a park operator to file a Manufactured Home Replacement Report (HEA 5232, 8/94) for every replacement home that comes into a park, (see OAC 3701-27-083). These forms help to remind operators of requirements within the rules. These also assist you, the licensor, with compliance in manufactured home parks to prevent the unauthorized placement of homes and to avoid the inconvenience to you, the operator, and the homeowner from having to seek approval AFTER a home is improperly placed. Therefore, if you are not receiving these forms regularly from your operators you are encouraged to remind them of this requirement and to provide them with the attached copy of the form so they can comply. As an additional reminder, OAC 3701-27-072(A) requires the park operator of a lot within a 100-year flood plain to procure a permit AS PERMISSION TO develop within a 100-year flood plain, even if they are replacing a home. Furthermore, OAC 3701-27-074(B) requires the park operator of a lot within a 100-year flood plain to elevate a REPLACEMENT home according to the requirements within that rule. Again, the Manufactured Home Replacement Report will help you to monitor this activity. So that you know, this rule does not require your agency to make an inspection for every report that is submitted to you, although that would be prudent and is the prerogative of your health district.

If you have any questions about the application of the rules cited here you can contact the Bureau of Environmental Health at 614-466-1390 and ask for me, or if you have design questions about base supports and plan review you can contact Diane Roller, Chief Engineer. ■



SWIMMING POOL AD HOC ADVISORY COMMITTEE MEETING MINUTES

Recreation Program

MARCH 29, 2002 MEETING

Unfinished Business

None

New Business

Mr. Burkhart informed the committee members that he received an e-mail from Chris Weaver (American Red Cross), stating that he could no longer serve on the Swimming Pool Ad-hoc Advisory Committee. He has accepted a position in the State of Florida. He stated that he would send a proxy to future meetings or will have a representative from the Red Cross be in contact.

Hearing no objections to the minutes of the last meeting (January 29, 2002), they were accepted as submitted.

Mr. Burkhart informed the committee that he has received a number of "Starting Platform (Blocks)/Diving Board Surveys" from local health departments and swimming pool owners/operators. They will be distributed to the appropriate sub-committees.

Due to the limited number of members present, the individual sub-committees did not meet and did not provide a report.

The following new proposals were reviewed and acted upon:

**TEMPLATE FOR PROPOSED RULE CHANGES
No. 37**

Submitted by: Chuck Kunsman
Date Submitted: 2/10/02

Representing: Public Swimming Pool Education and Certification

EXISTING RULE:

3701-31-05 (D) (2) Be certified validly and currently by one of the following entities as having completed the specified training successfully...(e)...(4)

**PROPOSED CHANGE TO EXISTING RULE:
(D)...**

(2) POSSESS CURRENT AND VALID CERTIFICATION IN A LIFEGUARD TRAINING PROGRAM THAT INCLUDES KNOWLEDGE AND SKILL TRAINING AND VERIFICATION APPROPRIATE FOR THE FACILITY IN AT LEAST THE FOLLOWING AREAS;

- (a) VICTIM RECOGNITION
- (b) SCANNING
- (c) WATER RESCUE SKILLS
- (d) SPINAL INJURY MANAGEMENT AND PREVENTION

THE DIRECTOR SHALL MAINTAIN A CURRENT LIST OF APPROVED PROGRAMS.

(3) POSSESS CURRENT AND VALID CERTIFICATION IN A CARDIOPULMONARY RESUSCITATION (CPR) PROGRAM THAT INCLUDES KNOWLEDGE AND SKILL TRAINING AND VERIFICATION FOR ADULTS, CHILDREN AND INFANTS IN AT LEAST THE FOLLOWING AREAS;

- (a) RESCUE BREATHING
- (b) CHOKING
- (c) CPR
- (d) BREATHING BARRIERS

THE DIRECTOR SHALL MAINTAIN A CURRENT LIST OF APPROVED PROGRAMS.

(4) POSSESS CURRENT AND VALID CERTIFICATION IN A FIRST AID PROGRAM THAT INCLUDES KNOWLEDGE AND SKILL TRAINING AND VERIFICATION IN AT LEAST THE FOLLOWING AREAS;

- (a) CARE AND PREVENTION OF MINOR INJURIES AND ILLNESS"

(b) CARE FOR BLEEDING INJURIES

THE DIRECTOR SHALL MAINTAIN A CURRENT LIST OF APPROVED PROGRAMS.

INTENT OF THIS CHANGE OR ADDITION:

To simplify and clarify the necessary training required to be a lifeguard. And to provide updated information to sanitarians and operators as to what programs currently meet these minimal standards. The Ad Hoc committee would provide the initial list of approved programs. The director would update this list and provide it to operators or health districts.

ESTIMATED COSTS

There is no cost with implementing this change.

CONSENSUS: Y ___ N ___
Date Considered: 3-29-2002
MAJORITY: Y ___ N ___
WITHDRAWN BY MR. KUNSMAN

TEMPLATE FOR PROPOSED RULE CHANGES
No. 38

Submitted by: Kris Bosworth
Date Submitted: 1/22/02
Representing: Local Health Department - Northern Ohio

EXISTING RULE:

OAC 3701-31-04(L)
For each public swimming pool or special use pool, the licensee shall provide a safety line with intermittent floats at water depths which exceed five feet, and at changes that increase pool bottom slope. The line shall be anchored to the interior wall of the pool. The safety line shall be located one foot toward the shallow portion from the change in slope. If the design of the pool prevents location of the safety line one foot toward the shallow portion, the line shall be located at the change

in slope. A safety line is not required if there is no break in slope between the shallow and deep portions of the pool and the maximum water depth is six feet or less.

PROPOSED CHANGE TO EXISTING RULE:

Add the following sentence: THE SAFETY LINE MAY BE TEMPORARILY REMOVED TO PREVENT INTERFERENCE WITH AQUATIC ACTIVITIES WHEN IT IS NOT NEEDED FOR NON-SWIMMERS.

INTENT OF THIS CHANGE OR ADDITION:

It is a common practice in smaller pools for the safety line to be temporarily removed to allow lap swimming. As the safety line rule currently stands, it is not legal to remove the line for lap swimming, water polo, or other aquatic games.

ESTIMATED COSTS

No costs.

CONSENSUS: Y ___, N ___
Date Considered: 3-29-2002
MAJORITY: Y ___, N ___
TABLED: Y x, N ___
MINORITY VIEWS: None

TEMPLATE FOR PROPOSED RULE CHANGES
No. 39

Submitted by: John Aseere
Date Submitted: 1/29/02
Representing: Public Swimming Pool Contractors

EXISTING RULE:

3701-31-041 (O) Pool Walls. The walls of public swimming pools and special use pools shall comply with the following requirements: (1) The side walls of the diving hopper of a pool with a diving board, other than a pool designed to competitive standards, shall not slope more than one horizontal to five vertical (eleven degrees from vertical). The other side walls of the pool shall meet the requirements of paragraph (O)(2) of this rule.

PROPOSED CHANGE TO EXISTING RULE:

3701-31-041 (O) Pool Walls AND FLOORS. The walls AND FLOORS of public swimming pools and special use pools shall comply with the following requirements:...

PROPOSED NEW RULE:

Add to 3701-31-041 (O): (4) THE FLOOR ON ALL POOLS AND SPECIAL USE POOLS SHALL NOT SLOPE MORE THAN TWELVE HORIZONTAL TO ONE VERTICAL.

INTENT OF THIS CHANGE OR ADDITION:

Clarification. Currently this is the existing enforced rule; however, it is not written in the code. Designers are designing pools that are difficult, it is not impossible to meet proper slopes.

ESTIMATED COSTS

This should cause no costs or hardships for anyone.

CONSENSUS: Y ____, N ____
Date Considered: 3-29-02
MAJORITY: Y ____, N ____
Tabled: Y x, N ____
MINORITY VIEWS: None

TEMPLATE FOR PROPOSED RULE CHANGES
No. 40

Submitted by: James L. Burkhart
Date Submitted: 3/22/02
Representing: Ohio Department of Health

EXISTING RULE:

3701-31-41 Design requirements applicable to all public swimming pools, public spas, and special use pools.

3701-31-041 Design requirements for construction, installation, renovation, or other substantial alteration of public swimming pool, public spas, and special use pools on or after January 1, 1999.

PROPOSED CHANGE TO EXISTING RULE:

Combination of Sections 3701-31-04 and 3701-31-041 of Ohio's Swimming Pool, Spa & Special Use Pool Rules (See Attached)

INTENT OF THIS CHANGE OR ADDITION:

To develop one set of rules applicable to all public swimming pools, public spas and special use pools.

ESTIMATED COSTS

Yet to be determined.

CONSENSUS: Y ____, N ____

Date Considered: 3-29-02

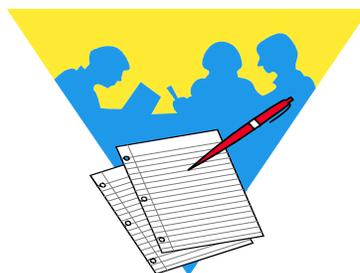
MAJORITY: Y ____, N ____

The committee began the review of Proposal #40.

MINORITY VIEWS: None

Having no further business to discuss, the meeting was adjourned at 2:30 P.M. ■

CALENDAR OF UPCOMING EVENTS



2002 - 2003

AUGUST 2002

15 **RS Exam** - Columbus - PES Examination 10:00 am. For more information contact the State Board of Sanitarian Registration at 614-466-1772.

SEPTEMBER 2002

25 - 26 **OEHA - Southeast District Fall Conference** - Shawnee State Park. For more information contact Mary Ann Webb, RS at 937-393-1941.

OCTOBER 2002

2 - 3 **OEHA - Southwest District Fall Conference** - Sinclair Center. For more information contact Ken Sharkey, RS at 513-564-1761.

9 - 10 **OEHA - Northeast District Fall Conference** - Atwood Lake Resort. For more information contact Harry Stark, RS at 216-443-7500.

16 - 17 **OEHA - Northwest District Fall Conference** - Great Bear Lodge. For more information contact Matt Work, RS at 440-967-7359.

DECEMBER 2002

12 **RS Exam** - Columbus - PES Examination 10:00 am. For more information contact the State Board of Sanitarian Registration at 614-466-1772.

JANUARY 2003

8 - 9 **Ohio Onsite Wastewater Association Annual Conference.** - University Plaza Hotel, Columbus, Ohio. For more information contact Tom Grigsby, RS at 614-644-8663. ■