

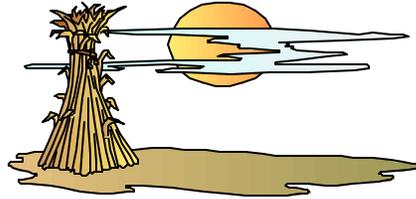


Division of Prevention  
Bureau of Environmental Health

# B · E · H · News

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## BUREAU BRIEFS

The Health Assessment Section staff participated in another public meeting held by the city of Urbana to discuss the contamination of the city's public water supply and adjacent private residential wells by low levels of chlorinated industrial solvents. Roughly 30 residents and governmental representatives attended this meeting. Representatives of the City of Urbana and their consultants, Ohio EPA staff, the county health commissioner, ODH and two of the companies whose facilities are sources of ground water contamination, fielded a number of questions from the residents. These included questions with regard to the city's proposal to develop a new well field; communications between the city, the agencies, and the residents with regard to the contamination problem; the possibility of the companies providing funding for the new well field and alternate water supplies for residents using private wells; and potential health threats posed by the contaminants in the drinking water. Additional health-related questions were concerned with the incidence of chronic, possibly environmental-related diseases in the Urbana area. It was pointed out that the bulk of the diseases are more likely the result of tobacco use, diet, and lifestyle rather than exposure to low levels of chemicals in the drinking water supply.

The Swimming Pool Rules Ad Hoc Advisory Committee and the Manufactured Home Parks Rule Revision Committee, both, have had recent meetings. These committees are composed of representatives from the various industries and interests affected by the Public Swimming Pool Rules and the Manufactured Home Park Rules as found in

the Ohio Administrative Code. The purpose of both committees is to review existing Administrative Code language and provide recommendations to the Director regarding any proposed changes, additions or deletions.

The Retail Food Safety Advisory Council recently met in Reynoldsburg. Topics discussed included recommendations for SB 136/HB 306, assessing number of sanitarians necessary for food safety programs at local health departments, bare hand contact procedures with ready-to-eat foods, and hair restraints.

The staff of the Household Sewage Program has been busy presenting information on the HSTS Rule revisions. Broader community interaction is beneficial to the draft HSTS rule development effort.

The Household Sewage Program staff has also been conducting records reviews in various counties. This data gathering is part of the process for the 319 grant study.

Plans are also underway for the Annual Midwest Workshop in Environmental Health. The Workshop will be held March 25-28, 2002 at the Holiday Inn-Worthington. Along with usual topics about Food Safety, Sewage Disposal, Recreation and Water, the Bureau will also conduct sessions on Incident Command, Indoor Air Quality, Customer Service, and other topics of interest to sanitarians and other local health department staff. Mark your calendars now!

**RECOGNITION OF ILLNESS ASSOCIATED WITH THE INTENTIONAL RELEASE OF A BIOLOGIC AGENT**

Taken from *MMWR Weekly*

October 19, 2001/ 50(41);893-7

On September 11, 2001, following the terrorist incidents in New York City and Washington, D.C., CDC recommended heightened surveillance for any unusual disease occurrence or increased numbers of illnesses that might be associated with the terrorist attacks. Subsequently, cases of anthrax in Florida and New York City have demonstrated the risks associated with intentional release of biologic agents (1). This report provides guidance for health-care providers and public health personnel about recognizing illnesses or patterns of illness that might be associated with intentional release of biologic agents.

**HEALTH-CARE PROVIDERS**

Health-care providers should be alert to illness patterns and diagnostic clues that might indicate an unusual infectious disease outbreak associated with intentional release of a biologic agent and should report any clusters or findings to their local or state health department. The covert release of a biologic agent may not have an immediate impact because of the delay between exposure and illness onset, and outbreaks associated with intentional releases might closely resemble naturally occurring outbreaks. Indications of intentional release of a biologic agent include 1) an unusual temporal or geographic clustering of illness (e.g., persons who attended the same public event or gathering) or patients presenting with clinical signs and symptoms that suggest an infectious disease outbreak (e.g.,  $\geq 2$  patients presenting with an unexplained febrile illness associated with sepsis, pneumonia, respiratory failure, or rash or a botulism-like syndrome with flaccid muscle paralysis, especially if occurring in otherwise healthy persons); 2) an unusual age distribution for common diseases (e.g., an increase in what appears to be a chickenpox-like illness among adult patients, but which might be smallpox); and 3) a large number of cases of acute flaccid paralysis with prominent bulbar palsies, suggestive of a release of *botulinum* toxin.

CDC defines three categories of biologic agents with potential to be used as weapons, based on ease of dissemination or transmission, potential for major public health impact (e.g., high mortality), potential for public panic and social disruption, and requirements for public health preparedness (2). Agents of highest concern are *Bacillus anthracis* (anthrax), *Yersinia pestis* (plague), variola major (smallpox), *Clostridium*

*botulinum* toxin (botulism), *Francisella tularensis* (tularemia), filoviruses (Ebola hemorrhagic fever,

Marburg hemorrhagic fever); and arenaviruses (Lassa [Lassa fever], Junin [Argentine hemorrhagic fever], and related viruses). The following summarizes the clinical features of these agents (3--6).

**Anthrax.** A nonspecific prodrome (i.e., fever, dyspnea, cough, and chest discomfort) follows inhalation of infectious spores. Approximately 2--4 days after initial symptoms, sometimes after a brief period of improvement, respiratory failure and hemodynamic collapse ensue. Inhalational anthrax also might include thoracic edema and a widened mediastinum on chest radiograph. Gram-positive bacilli can grow on blood culture, usually 2--3 days after onset of illness. Cutaneous anthrax follows deposition of the organism onto the skin, occurring particularly on exposed areas of the hands, arms, or face. An area of local edema becomes a pruritic macule or papule, which enlarges and ulcerates after 1--2 days. Small, 1--3 mm vesicles may surround the ulcer. A painless, depressed, black eschar usually with surrounding local edema subsequently develops. The syndrome also may include lymphangitis and painful lymphadenopathy.

**Plague.** Clinical features of pneumonic plague include fever, cough with muco-purulent sputum (gram-negative rods may be seen on gram stain), hemoptysis, and chest pain. A chest radiograph will show evidence of bronchopneumonia.

**Botulism.** Clinical features include symmetric cranial neuropathies (i.e., drooping eyelids, weakened jaw clench, and difficulty swallowing or speaking), blurred vision or diplopia, symmetric descending weakness in a proximal to distal pattern, and respiratory dysfunction from respiratory muscle paralysis or upper airway obstruction without sensory deficits. Inhalational botulism would have a similar clinical presentation as foodborne botulism; however, the gastrointestinal symptoms that accompany foodborne botulism may be absent.

**Smallpox (variola).** The acute clinical symptoms of smallpox resemble other acute viral illnesses, such as influenza, beginning with a 2--4 day nonspecific prodrome of fever and myalgias before rash onset. Several clinical features can help clinicians differentiate varicella (chickenpox) from smallpox. The rash of varicella is most prominent on the trunk and develops in successive groups of lesions over several days, resulting in lesions in various stages of development and resolution. In comparison, the vesicular/pustular rash of smallpox is typically most prominent on the face and extremities, and lesions develop at the same time.

**Inhalational tularemia.** Inhalation of *F. tularensis* causes an abrupt onset of an acute, nonspecific febrile illness beginning 3--5 days after exposure, with pleuropneumonitis developing in a substantial proportion of cases during subsequent days (7).

**Hemorrhagic fever** (such as would be caused by Ebola or Marburg viruses). After an incubation period of usually 5--10 days (range: 2--19 days), illness is characterized by abrupt onset of fever, myalgia, and headache. Other signs and symptoms include nausea and vomiting, abdominal pain, diarrhea, chest pain, cough, and pharyngitis. A maculopapular rash, prominent on the trunk, develops in most patients approximately 5 days after onset of illness. Bleeding manifestations, such as petechiae, ecchymoses, and hemorrhages, occur as the disease progresses (8).

#### CLINICAL LABORATORY PERSONNEL

Although unidentified gram-positive bacilli growing on agar may be considered as contaminants and discarded, CDC recommends that these bacilli be treated as a "finding" when they occur in a suspicious clinical setting (e.g., febrile illness in a previously healthy person). The laboratory should attempt to characterize the organism, such as motility testing, inhibition by penicillin, absence of hemolysis on sheep blood agar, and further biochemical testing or species determination. An unusually high number of samples, particularly from the same biologic medium (e.g., blood and stool cultures), may alert laboratory personnel to an outbreak. In addition, central laboratories that receive clinical specimens from several sources should be alert to increases in demand or unusual requests for culturing (e.g., uncommon biologic specimens such as cerebrospinal fluid or pulmonary aspirates).

When collecting or handling clinical specimens, laboratory personnel should 1) use Biological Safety Level II (BSL-2) or Level III (BSL-3) facilities and practices when working with clinical samples considered potentially infectious; 2) handle all specimens in a BSL-2 laminar flow hood with protective eyewear (e.g., safety glasses or eye shields), use closed-front laboratory coats with cuffed sleeves, and stretch the gloves over the cuffed sleeves; 3) avoid any activity that places persons at risk for infectious exposure, especially activities that might create aerosols or droplet dispersal; 4) decontaminate laboratory benches after each use and dispose of supplies and equipment in proper receptacles; 5) avoid touching mucosal surfaces with their hands (gloved or ungloved), and never eat or drink in the laboratory; and 6) remove and reverse their gloves before leaving the laboratory and dispose

of them in a biohazard container, and wash their hands and remove their laboratory coat.

When a laboratory is unable to identify an organism in a clinical specimen, it should be sent to a laboratory where the agent can be characterized, such as the state public health laboratory or, in some large metropolitan areas, the local health department laboratory. Any clinical specimens suspected to contain variola (smallpox) should be reported to local and state health authorities and then transported to CDC. All variola diagnostics should be conducted at CDC laboratories. Clinical laboratories should report any clusters or findings that could indicate intentional release of a biologic agent to their state and local health departments.

#### INFECTION-CONTROL PROFESSIONALS

Heightened awareness by infection-control professionals (ICPs) facilitates recognition of the release of a biologic agent. ICPs are involved with many aspects of hospital operations and several departments and with counterparts in other hospitals. As a result, ICPs may recognize changing patterns or clusters in a hospital or in a community that might otherwise go unrecognized. ICPs should ensure that hospitals have current telephone numbers for notification of both internal (ICPs, epidemiologists, infectious diseases specialists, administrators, and public affairs officials) and external (state and local health departments, Federal Bureau of Investigation field office, and CDC Emergency Response office) contacts and that they are distributed to the appropriate personnel (9). ICPs should work with clinical microbiology laboratories, on- or off-site, that receive specimens for testing from their facility to ensure that cultures from suspicious cases are evaluated appropriately.

#### STATE HEALTH DEPARTMENTS

State health departments should implement plans for educating and reminding health-care providers about how to recognize unusual illnesses that might indicate intentional release of a biologic agent. Strategies for responding to potential bioterrorism include 1) providing information or reminders to health-care providers and clinical laboratories about how to report events to the appropriate public health authorities; 2) implementing a 24-hour-a-day, 7-day-a-week capacity to receive and act on any positive report of events that suggest intentional release of a biologic agent; 3) investigating immediately any report of a cluster of illnesses or other event that suggests an intentional release of a biologic agent and requesting CDC's assistance when necessary; 4) implementing a plan, including accessing the Laboratory Response Network for Bioterrorism, to collect and transport specimens and to store them

appropriately before laboratory analysis; and 5) reporting immediately to CDC if the results of an investigation suggest release of a biologic agent.

*Reported by: National Center for Infectious Diseases; Epidemiology Program Office; Public Health Practice Program Office; Office of the Director, CDC.*

#### EDITORIAL NOTE:

Health-care providers, clinical laboratory personnel, infection control professionals, and health departments play critical and complementary roles in recognizing and responding to illnesses caused by intentional release of biologic agents. The syndrome descriptions, epidemiologic clues, and laboratory recommendations in this report provide basic guidance that can be implemented immediately to improve recognition of these events.

After the terrorist attacks of September 11, state and local health departments initiated various activities to improve surveillance and response, ranging from enhancing communications (between state and local health departments and between public health agencies and health-care providers) to conducting special surveillance projects. These special projects have included active surveillance for changes in the number of hospital admissions, emergency department visits, and occurrence of specific syndromes. Activities in bioterrorism preparedness and emerging infections over the past few years have better positioned public health agencies to detect and respond to the intentional release of a biologic agent. Immediate review of these activities to identify the most useful and practical approaches will help refine syndrome surveillance efforts in various clinical situations.

Information about clinical diagnosis and management can be found elsewhere (1--9). Additional information about responding to bioterrorism is available from CDC at <http://www.bt.cdc.gov>; the U.S. Army Medical.

Research Institute of Infectious Diseases at <http://www.usamriid.army.mil/education/bluebook.htm>; the Association for Infection Control Practitioners at <http://www.apic.org>; and the Johns Hopkins Center for Civilian Biodefense at <http://www.hopkins-biodefense.org>.

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**NEWS FROM THE USDA/FDA  
FOODBORNE ILLNESS EDUCATION  
INFORMATION CENTER**

Larry Holbert, RS

How do you say food safety in Chinese?

Check out the Web sites below for food safety teaching materials in languages other than English.

The site for U.S. federal, state, and local food safety materials has a foreign language section with documents in Chinese, French, German, Spanish, Russian, Portuguese, Japanese, and Korean. This includes education materials from the Partnership for Food Safety Education, the FDA Bad Bug Book, and more.

<http://www.foodsafety.gov/~fsg/fsglang.html>

The Integrated Food Safety Information Delivery System by the Iowa Dept. of Inspections and Appeals and IOWAccess provides fact sheets and signs for use in food establishments in French, Korean, Bosnian, Spanish, Italian, Japanese, German, Vietnamese, Laotian, Chinese, Greek, and Russian.

<http://www.profoodsafety.org>

The above Web sites and additional sites from other countries are available on the Foodborne Illness Education Information Centers's Food Safety Index at:

<http://www.nal.usda.gov/fnic/foodborne/fbindex/index.htm>

Visit the Foodborne Illness Education Information Center's Web site for more food safety information.

<http://www.nal.usda.gov/foodborne>



**NATIONAL FOOD SAFETY EDUCATION  
MONTH 2001**

Larry Holbert, RS

September was National Food Safety Education Month (NFSEM), an annual observance to focus attention on the importance of safe food handling and preparation in both home and commercial kitchens. Created by the food service industry in 1995, NFSEM is widely supported by federal, state, and local government agencies, the food industry, and consumer organizations. However, food safety education should be promoted **all year long**.

Be Cool. Chill Out - Refrigerate Promptly was this year's theme for NFSEM. Bacteria grow most rapidly in the Danger Zone - the unsafe temperatures between 40 (F and 140 (F - so it's important to keep foods out of this temperature range. In addition, cold temperatures keep most harmful bacteria from growing; therefore, refrigerating foods quickly is key!

The Food and Drug Administration (FDA) and the Food Safety and Inspection Service of the U.S. Department of Agriculture (USDA) have designed this year's NFSEM Consumer Education Planning Guide to help health educators promote food safety education all year long. The Planning Guide is a compendium of food safety education ideas, reproducible teaching materials, and resource information. Hard copies have been distributed widely to FDA field staff, USDA extension agents, state and local health agencies, school food supervisors and school nurses. All of the Planning Guide materials are available on the web at <http://www.foodsafety.gov/september.html> where a link is also available to the NFSEM Planning Guide for Retail Food Establishments of the National Restaurant Association Education Foundation's International Food Safety Council.

**USDA Meat and Poultry Hotline  
1-800-535-4555**

**FDA Food Information Line  
1-888-SAFEFOOD**

**NEW SEWAGE WEB PAGE**

John E. Smith, RS

**Check out the new Ohio Department of Health Web Pages!**

The Ohio Department of Health (ODH) is in the process of revising its web site. One of the latest revised sites is the sewage system program site. The new site has much to offer both to sanitarians as well as homeowners.

The general information page has a quick overview of the program and how to contact us by mail, voice, fax or e-mail. Click on the buttons to navigate to provided services, read both the current and draft rules, and read the latest ODH fact sheets.



This will take you to the many items that the sewage program does to provide you knowledge and understanding of the program and what we do to support local health departments and the general public, from technical assistance to training opportunities, to complaint resolution. Make sure to check out the "More Opportunities" page for training outside of ODH.



This page has information on how rules are developed and links to both the current rules and the draft rules.



This page says a great deal in a short time. It has several fact sheets that can be used by local health departments as handouts or the general public can be directed to the web site to download the fact sheets at home. This page also contains the draft site evaluation forms as proposed in the draft sewage rules.

Enjoy the new site, we hope this information can be used as a tool to help clarify and resolve siting design, installation and maintenance issues. Any comments regarding to site would be appreciated. E-mail comments to [jesmith@gw.odh.state.oh.us](mailto:jesmith@gw.odh.state.oh.us)

**UPDATE OOWA**

Tom Grigsby, RS

*Installer Certification*

The Ohio Onsite Wastewater Association (OOWA) is exploring the possibility of voluntary certification for septic system installers. OOWA would develop and administer this program. A number of installers have stated that this is something that would be beneficial to them. This is similar to an effort currently underway by the Ohio Water Well Association for their members.

In an attempt to determine if local health departments share any interest in a voluntary certification program, below is a very brief survey. This is only to gain some general feedback with regard to the concept of voluntary certification.

1. Do local health departments see a value to voluntary certification?
2. Would local health departments recognize voluntary certification? This could be as simple as placing an asterisk beside the name of the companies that complete this certification on your list of installers.
3. Would this be seen as a benefit when new installers are seeking first time registration within your jurisdiction?
4. If a certification program were put into place would a local health department consider accepting continuing education required by OOWA for this certification in lieu of any or all of a local department's annual continuing education requirement requirements?

Please send your response to the address below. If there are any questions or you would like more information please contact:

Tom Grigsby, R.S.  
614-644-8663  
e-mail: [tgrigsby@gw.odh.state.oh.us](mailto:tgrigsby@gw.odh.state.oh.us)

## **HOUSEHOLD SEWAGE PRODUCT REMINDERS**

Recently there have been a number of questions regarding the use of **replacement motors** in different aerobic treatment units (ATU).

Ohio Administrative Code 3701-29-08 (A) states:

"Aerobic type treatment systems shall comply with standard number forty as adopted by the National Sanitation Foundation board of trustees or standards accepted as equivalent by the Ohio department of health relating to materials, design, construction, performance, operation, maintenance, and safety of **the system in effect at the time of acceptance of a system** by the Ohio department of health, and the requirements of rules 3701-29-01 to 3701-29-21 of the Ohio Sanitary Code" (emphasis added).

This department has interpreted this rule to mean that if a unit has been approved with certain features it must be installed with those features. Any repair of the unit must also include those features. So if a unit is approved with an upflow filter it must be installed and maintained with an upflow filter and not replaced with another type of filter.

This also applies to motors for the ATUs. Unless the company has received approval from this department and authorization from the testing agency, NSF for example, then that is the motor that should be used when it is replaced. So a Multiflo motor can not replace a Jet or Oldham motor. The same applies to the various after market motors that are available from out of state.

The **NORWECO BK 2000** was approved by this department in May 1999.

The approval was to retrofit existing Norweco Singlair Models 401 and 820 treatment units. The BK 2000 may also be used on other treatment units **but only following the entire treatment train for which a unit was approved**. It is not intended to replace other types of filters or other treatment devices.

The BK 2000 is also approved as an effluent filter following a septic tank, and has additional features including flow equalization and the capacity for chlorine disinfection and dechlorination. The BK 2000 is not equivalent to an aerobic treatment unit or subsurface sand filter as described in OAC Chapter 3701-29, nor is there intended to be any approved reduction for any soil absorption component that would follow the BK 2000.

*If you have any questions regarding this Product Reminder, contact BEH Household Sewage Program staff at (614) 466-1390.*

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614-466-1390

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**Please share this newsletter with all health department personnel.**

Deadline dates for article submission are:

December 28, 2001  
February 22, 2002  
April 26, 2002  
June 28, 2002

**OVER 100 ATTEND PACKAGE SEWAGE TREATMENT PLANT WORKSHOP**

Kurt Erichsen, PE of TMACOG

Earlier this year, at Terra Community College, the Portage River Basin Council and TMACOG held a hands-on training session for operators of package sewage treatment plants. With a total of 109 registrants, the workshop attracted owners and employees of rural businesses that have package sewage treatment plants; licensed wastewater operators who operate package plants under contract, and the staff of regulator agencies (county health departments and Ohio EPA).

Package sewage treatment plants are often used where there is no public sewer. Properly used and maintained, the package plants are an effective means to handle waste; neglected, they can contaminate area streams and rivers.

The workshop explained the mechanical operation of package sewage plants and covered proper maintenance, including an inspection timetable that listed daily through yearly maintenance steps.

The workshop started with a classroom session that covered extended aeration processes: conversion of organics in sewage to activated sludge, and then separation of excess sludge from the waste stream to produce high quality effluent. How sludge settles is a key guide for effective operation, such as whether the plant is overloaded or underloaded, or whether excess sludge needs to be wasted.



The workshop used the following educational materials, all available on the web:

- ! Ohio EPA's Guide for Owners of Package Extended Aeration Sewage Treatment Plants, available at [http://www.epa.state.oh.us/dsw/document\\_index/docindx.html](http://www.epa.state.oh.us/dsw/document_index/docindx.html)
- ! Sludge Settling Characteristics, a guide with color photos on how to interpret the activated sludge settling "jar" test
- ! Process control diagrams for the conversion of organics to sludge; and separation of waste sludge from clear effluent. These diagrams were prepared by Ohio EPA and are available at <http://www.tmacog.org/ExtendedAerationWorkshop>



In the afternoon, the workshop included visits to three nearby package plants. All three are extended aeration plants with surface sand filters and tablet chlorinators. Because they serve facilities with different waste streams, each has its own operational challenges.

Sycamore Hills Golf Course — a 5,000 gpd plant serves a golf course and restaurant. The plant gets most of its flow during the golfing season, which varies with the weather and day of the week. Surge flows and variable loading rates can upset the extended aeration process, especially in a small plant.

Westwood Subdivision — a 20,000 gpd , operated by the Sandusky County Sanitary Engineering Department, serves a subdivision near Fremont. It has relatively constant flow, and is operated under an NPDES permit.

Misty Meadows Girl Scout Camp — a 6,300 gpd plant is underloaded most of the year, just serving office staff. It receives higher flows for special events and periods of use by campers.

Instructors at the workshop were Keith Kroeger and Jon Van Dommelen, Ohio EPA; Keith A. Radick, Floyd Browne Associates; Jeff Lamson, City of Fremont; Mike Ritter, City of Fostoria; Jon Drescher, City of Bowling Green; and Dan Wood, City of Sandusky.

The workshop was sponsored by Norwalk Concrete Industries, The Craun-Lieb Company, Gleason Construction, Norwest Consultants Inc., R.D. Zande and Associates, Floyd Browne Associates, Poggemeyer Design Group, Eastwood Environmental Inc., and the Ohio Environmental Education Fund.



**BOND CLAIM UPDATE**

John Wells, RS

Ohio Administrative Code Section (OAC) 3701-28-20 requires that all registered private water systems contractor maintain a \$10,000 surety bond for the benefit of any aggrieved party for damages incurred as a result of a violation of the private water systems rules. This section of the OAC also describes the process involved in a bond claim investigation. Whenever a local health district identifies a violation of the private water systems rules, they should work with the private water systems contractor and the system owner to get the violation corrected voluntarily. If the private water system contractor does not or cannot correct the violation, the system owner (aggrieved party) can initiate a bond claim with the assistance of the local health district. Once a bond claim is initiated, state program staff conduct an investigation in cooperation with the local health district. These investigations often include conducting on-site inspections, dye tests, and downhole camera surveys. The Director of Health will then issue a notice of violation to the private water systems contractor who is given an opportunity to correct the violations. If the contractor fails to correct the violations, the notice is sent to the contractor's bonding company for further resolution. Bonding companies may choose several options to fulfill their obligation under the surety bond including full payment compensation of system costs, or hiring a third party contractor to correct the violations.

The changes to the private water systems rules in 2000, coupled with the efforts of local health district staff in identifying and following up on violations, has resulted in a substantial increase in bond claim investigations in 2000 and 2001. We appreciate the efforts of the local health districts to make sure violations are corrected to ensure the safety of the drinking water for private water system owners in Ohio. The following is an update on the status of bond claims conducted to date and how they have been resolved. Kudos and thanks to local health district staff across the state who have assisted us with these investigations!!

These statistics are based on work done or completed on bond claims from January 1, 2001 through September 4, 2001. Some of the claims were initiated in 2000 but resolved or settled in 2001 and are therefore included in this "report".

Claims Initiated:	58
• Claims Valid	45
• Claims Not Valid	1
• Claims Inconclusive	8

Settlement: (based on available information at this time) 30 of 45 valid claims have been resolved.

- 13 Bond claims paid by Surety Company
- 9 Claims resolved by Private Water Systems Contractor (includes reconstruction of well, reimbursement, etc.)
- 3 Claims PWSC reimbursed homeowner costs (no reconstruction or other work attempted).
- 2 Claims – partial payment of claim made plus homeowner took PWSC to small claims court for additional undisclosed amount.
- 3 Claims dropped by homeowner
- 19 Claims are currently pending for a variety of reasons (new claims, awaiting information or responses from PWSC or others).

Questions regarding a bond claim or the process? Contact John Wells, Residential Water and Sewage Program at (614) 466-1390 for more details.

**PRIVATE WATER SYSTEMS CONTRACTOR  
REGISTRATION ACTIONS**

Rebecca Petty, RS

The Director of Health denied the 2001 private water systems contractor registration of Charles Barndt dba Clearwater of Ohio Well Drilling, Registration No. 02488 on August 3, 2001. The registration was denied based on failure to file well logs, inaccurate well logs and material misstatement of facts on 63 wells.

The Director of Health has proposed revocation of the private water systems contractor registration for Greg Helser dba Greg Helser and Sons Well Drilling, Registration No. 01679 for failure to maintain a surety bond.

The program is working on preparing Director's proposed notice of violations on several other private water systems contractors based on multiple violations of the Ohio Administrative Code 3701-28. These actions that are in progress and those finalized above can be credited to the hard work and assistance of several local health districts. These health districts identified the violations, conducted follow up inspections and correspondence and worked with state program staff to help make the enforcement process work. Thanks to the Wood, Sandusky, Ottawa, Lucas, Highland and Perry County Health Districts for their assistance in these final and on-going enforcement procedures.

Questions on private water systems contractor enforcement actions? Please contact Rebecca Petty or John Wells at (614) 466-1390.

**REMINDER! REMINDER! REMINDER!****PRIVATE WATER SYSTEMS CONTRACTOR  
INSPECTIONS FOR 2001**

Rebecca Petty, RS

Please remember to schedule and conduct your private water systems contractor inspections for 2001 prior to December 31, 2001. These inspections are required under Ohio Administrative Code Section 3701-28-04. Inspections should be conducted on private water systems contractors who have installed wells in your county over the past year. For those counties near the state border, this also includes out-of-state contractors who come into your county and construct wells. Please make every effort to conduct these inspections. **Private water systems contractors will be required to submit a copy of their inspection form with their 2002 private water systems contractor application.** Applications without inspection forms will be held until an inspection is completed. Private Water Systems Contractor Inspection Forms should be used for the inspection and can be obtained by contacting Desiree O'Brien with the Residential Water and Sewage Program at (614) 466-1390. Please remember to return the pink copy of the form to the Residential Water and Sewage Program. Please contact program staff with any questions regarding the inspection process.



**SWIMMING POOL AD HOC ADVISORY  
COMMITTEE MEETING MINUTES -  
JULY 31, 2001**

Location: MCL Cafeteria Westerville Rd.,  
Westerville, OH

**Old Business**

There were no objections to the minutes of the last meeting, 06/26/01.

**New Business**

The meeting began by returning to the reading and review of proposed rule changes tabulated by Jim Burkhart. This is a collection of comments from local health departments, designers, contractors, general public, etc. Discussion began with the following comments received from the Lake County General Health District:

**05 (A)** - "There should be specific rule language that addresses body fluid (vomit) and fecal contamination in the pool and appropriate remedial action." After a thorough discussion by the committee, it was agreed, that, it would be better to leave such language in the form of a policy, instead of a rule, which would make it easier to change, if required.

**06 (L)** - "If one cannot see the bottom of the pool, it should be required to be closed." After a thorough discussion by the committee, it was agreed that such a condition for pool closure should be part of the "Pool Closure Policy" as adopted by the local board of health.

**041 (Q)** - "The main drain cover should be a dark color. This would allow better viewing for pool clarity and for main drain cover security." After a thorough discussion by the committee, it was agreed not to add this proposed change to the rules. While most members did not want the drain cover to have a contrasting color, others thought it

would be a good idea to outline the drain cover with a contrasting color. Others felt that a painted cover would eventually fade or peel. Others felt that since all covers have holes that provide a dark background, no change was necessary.

**02 (A)** - "Wet decks and spray areas should be licensable. Language change stating something like; systems that recirculate, filter, and chlorinate water for recreational use are licensable." After thorough discussion by the committee, it was agreed that they have no jurisdiction regarding such facilities. However, they would consider developing proposed guidelines for the operations of such facilities.

**06 (A), 07 (A) (5)** - "If an automatic chemical controller is in use, manual pool chemistry readings need to take place more frequently than once every 12 hours. Multiple repeat problems with bad sensors, controllers out of calibration, controllers shutting the systems down, etc. have been found allowing systems to have inappropriate pool chemistry for up to 12 hours." Section 3701-31-06 (A) states in part... "For pools or spas utilizing automatic chemical controllers, disinfectant residual and pH data MAY be RECORDED once every twelve hours." Section 3701-31-07 (A) (4) states in part... "the licensee SHALL check the disinfectant level manually at least ONCE EVERY TWENTY-FOUR HOURS during the parts of the year that the pool or spa is in operation." A spirited debate developed. The committee was evenly split as to whether or not these rules should be changed. While some felt manual readings should be taken prior to the pool opening and every 6 hours thereafter, others felt it was not necessary because the automatic chemical controllers do an excellent job. Some committee members believed that two manual tests are automatically required based upon an interpretation of 06 (A). Others felt tests should be performed prior to opening and every 4 hours. Still others felt that these existing rules are minimum rules and that the local health department, if they wished, could require more frequent manual tests. Due to the various opinions offered, Mr. Burkhart requested that those in favor of changing the existing rules prepare proposed rule language to be presented to the full committee for a formal vote. Mr. Rice raised

a concern regarding the test kits that are being used to calibrate the automatic chemical controllers. Of particular concern was the freshness of the chemicals.

Discussion of the comments received from the Lake County General Health District was postponed at this point in order to allow the workgroups to meet.

### **Workgroups**

J. Burkhart requested that the workgroups provide a report, as follows:

#### *Diving Standards (Recreation) – John Aseere*

Mr. Aseere prepared a drawing, which was distributed to all committee members present, depicting the various Recreational Diving Area Design Features found in sections 3701-31-04 and 3701-31-041 as well as Great Lakes (GL) standards and ANSI standards for recreational diving boards measuring eight feet, ten feet and twelve feet in length. Mr. Aseere was attempting to develop one standard requirement for recreational diving boards. A suggestion was made by at least one committee member that the standards for recreational diving be eliminated. Any facility requesting permission to replace an existing diving board or to install a new diving board should follow the competitive diving standards currently addressed in the rules. After some discussion, the committee agreed to propose language that would eliminate the current recreational diving standards. It was unclear what effect such a rule change would have on any existing recreational diving boards. Two scenarios would be allowing existing recreational diving boards to remain until such time as the owner wishes to replace it or ordering all existing recreational diving boards to be upgraded or removed within a specified period of time, i.e., five years. A recommendation was made to determine how other States address this concern. A concern was raised regarding the replacement of an existing diving board as to whether or not the existing board was properly installed initially. In addition, one must be sure the board matches the appropriate diving stand.

#### *Diving Standards (Competitive) – Pat Lunsford*

Mr. Lunsford is trying to revise the existing rules pertaining to competitive diving. He is proposing any rules developed be tied into a particular governing body such as US Diving, US Swimming, NSPI, etc. The theory being that whenever the governing body changes its rules, Ohio's rules would automatically change. US Swimming may be recommending that all competitive racing events be held in at least 5 feet of water for both practicing and actual events. A "Starting Platform" survey is being developed that will be mailed to all local health departments with a request that they be forwarded to facilities that hold competitive events.

#### *Plan Review (Fees) – Barry Rice/Tim Patterson*

Subcommittee continued to discuss plan review issues (fees for plan review, equipment replacement, number of inspections, etc.) The committee took no action.

#### *Safety – Luci Sursi*

Subcommittee continues to review lifeguard requirements and certification. A question was asked of the subcommittee if they were considering adding an Automated External Defibrillator (AED) to the existing list of safety equipment required at each facility and the cost of the equipment. Yes, the committee is considering this addition with the costs estimated to be \$4,000. It was also stated that many lifeguards are currently being trained in the operation of AED's. The subcommittee is debating whether or not this additional safety equipment should be required and at which facilities. One scenario offered would be to require it only at those that are required to have lifeguards. A concern was raised over the availability of lifeguards, salaries being offered, and the levels of training currently available. Discussion followed regarding the training currently offered by Red Cross and YMCA. Discussed the possibility of requiring a lifeguard at every pool. Mrs. Sursi offered to bring in an AED at the next meeting to demonstrate how it functions. The committee took no action.

*Education – Kris Bosworth*

The education subcommittee is currently leaning away from the requirement of a certified training course such as Certified Pool Operators (CPO) or Aquatic Facility Operator (AFO) for pool operators. Instead, they are looking at modifying Sections 3701-31-06 (J), which states:

“The licensee . . . shall ensure that an authorized representative of the licensee who is familiar with the pool equipment is available whenever the pool is open for use to respond to requests for information or assistance by patrons of the pool or spa, the licensor, or the director.”

And Section 3701-31-06 (M), which states:

“The licensee shall ensure that operating personnel are trained in the operation of all equipment, procedures for handling, storing and using chemical compounds procedures for performing and interpreting the required onsite chemical tests and the appropriate emergency procedures.”

The Ohio Department of Agriculture addresses this concern under Section 901:9-1-14 (F) of the Ohio Administrative Code (OAC) which states:

“Management qualifications. All facilities containing aquatic devices with full body water contact shall have at least one employee properly trained in sanitation, safety, and proper maintenance of the aquatic device, and all physical and mechanical equipment and be trained in accordance with the standard of one of the following agencies:

- (a) National swimming pool foundation's certified pool/spa operator course (CPO);
- (b) National recreation and parks association aquatic facility operator course (AFO);
- (c) YMCA pool operator on location (POOL) certified operator.

Someone suggested the creation of a test for operators that could be administered by the local health departments. A comment was made that the State of Pennsylvania requires such a test. A comment was made that the goal should not be to mandate training but

knowledge. Others would like to see local control over the issue.

*Other Business*

The committee offered the guest representatives from the Cincinnati City Health Department the opportunity to comment on their concerns. Their concerns pertained primarily to interpreting Section 3701-31-07 (D), which discusses bacteriological testing of pool water. To the best of our knowledge, Cincinnati City Health Department is the only department routinely testing swimming pool for bacteria content. The committee commended Cincinnati City for the work they are doing regarding the collection of these samples and feel such information could be very valuable in the future. They suggested that, if Cincinnati City wishes to continue to collect samples, at least four samples be taken within a thirty-day period in order to follow the criteria stated in Section 07.

The committee continued with the comments received from the Lake County General Health District.

Number 7. “Play mats/energy absorbing cushions under playground-type equipment in pools should be light in color, not dark. These play mats/energy absorbing cushions become the bottom of the pool.” The committee agreed with this suggestion and will incorporate it into the revisions.

The committee turned their attention to comments received from the Medina County Combined General Health District, which suggested the addition into the rules language, which addresses the proper procedure to permanently abandon a public swimming pool. Of concern were those pools that are not properly abandoned. Thus causing a safety and/or nuisance conditions. The committee suggested such pools be addressed under the nuisance section of the law. It was the opinion of many committee members that, since such facilities do not hold a current license, the rules do not apply.

Lastly, the committee turned their attention to comments received from the Paulding County Health Department relating to two issues. First, whether or not any existing swimming pools with a single main drain on direct suction should be modified to

eliminate the potential for body entrapment and/or evisceration. Secondly, whether or not the rules should be changed to automatically require two main drains for all new construction. Currently Section 3710-31-041 (Q) states: "All public swimming pools, special use pools, and spas six feet or less in depth shall have at least two main drains on the recirculation system when the system is designed for direct suction." Paulding County would like to change the rule to read: "All public swimming pools, special use pools, and spas shall have at least two main drains on the recirculation system when the system is designed for direct suction." The committee debated the pros and cons of these suggestions with no formal action taken.

The meeting was adjourned just after 3:30 P.M.

***CERTIFIED POOL/SPA OPERATORS  
(CPO), AQUATIC FACILITY OPERATOR,  
COURSES***

James L. Burkhart, R.S.

It's never too late to consider signing up for a National Swimming Pool Foundation Certified Pool/Spa Operators (CPO) or Aquatic Facility Operators (AFO) course. Kurt Carmen, from the University of Toledo, teaches the CPO courses and Terry Smith teaches the AFO class. A few classes have been scheduled for the remainder of this year. Each student receives 16 hours of instruction by a Certified Instructor specifically trained to communicate the basic skills necessary to operate a pool or spa facility. The course is intensive and covers pool and spa chemistry, testing, treatment, filtration, maintenance, automatic feeding equipment, government requirements, etc. Each student must attend the 16 hours of instruction and then pass an (open book) examination to be certified. Upon successful completion of the course, a certificate suitable for framing is issued. The CPO certification is valid for five years and the AFO certification is valid for three years at which time a refresher course and/or an examination must be passed. I encourage you to contact your swimming pool/spa operators with this information and suggest that they take advantage of this opportunity. For 2001 over 7,000 swimming pool, spa and special use pool licenses will be issued in Ohio by approximately 141 local health departments. While the current rules do not mandate that each facility have a certified pool operator on staff. These are excellent courses and I strongly encourage you and the owner/operator of each facility to take advantage of this opportunity. Terry Smith has applied to the State Registration Board for approximately 15 clock hours of continuing education.

For those of you who have access to the INTERNET, additional information about the National Swimming Pool Foundation can be obtained through their web page at [www.nspf.com](http://www.nspf.com)



## ASK THE "BLUE FROG"

The "Blue Frog" will be a regular feature of this news letter. Any questions or comments you may have for the "Blue Frog" may be mailed to James L. Burkhart, Sanitarian Program Specialist, Ohio Department of Health, Bureau of Environmental Health, 246 N. High St., Columbus, Ohio, 43215, or e-mailed at: [jburkhar@gw.odh.state.oh.us](mailto:jburkhar@gw.odh.state.oh.us), or faxed at (614) 466-4556

Dear Blue Frog:

I recently assumed the position of manager of a motel that contains an indoor swimming pool and spa. At the conclusion of a recent inspection by the local sanitarian, I was advised that I had to remove the carpeting that was installed on the deck of the pool and spa last year by the previous manager. The swimming pool and spa were constructed in 1995. I contacted the previous manager who advised me that the contractor assured him that the material was easily cleanable, non-abrasive, slip-resistant, not subject to microbial growth or deterioration and does not present a hazard to public health or safety. Is the sanitarian correct? What are my options?

Sincerely,  
Douglas Martin

Dear Mr. Martin:

The sanitarian is correct. Section 3701-31-041 (F) (3) of the Ohio Administrative Code (OAC) clearly states that the "decks and other accessible areas shall not be constructed of wood and shall not be carpeted". For an indoor facility, the deck is considered to be the area within three feet of the water's edge. Even though the carpeting installed may, according to the installer, be easily cleanable, non-abrasive, slip-resistant, not subject to microbial growth or deterioration and does not present a hazard to public health or safety, the rules clearly prohibit its use. I suggest you work with the sanitarian on establishing a time limit where the carpeting will be removed.

Dear Blue Frog:

I currently operate a swimming pool measuring greater than 2,000 square feet and, of course, have lifeguards on duty when the pool is open for business. However, there are times when my pool is used only by a handful of people. Do I need to have my lifeguards on duty during those times when it is being used by so few bathers?

Sincerely,  
James Phillips

Dear Mr. Phillips:

Yes, you do. Rule 3701-31-05 (B) (1) of the OAC outlines when and how many lifeguards are required, which is based upon the surface area of your pool and the number of bathers. Since your facility is greater than 2,000 square feet, at least one lifeguard is required whenever your pool is open for business.

Dear Blue Frog:

I currently own a private indoor swimming pool. Since I am retired and love children, I offer swimming lessons to children ten years old and younger. I charge half the fees they charge at the local YMCA. Am I exempt from Ohio's swimming pool rules?

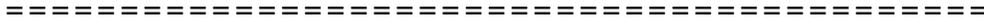
Sincerely,  
Aunt Granny

Dear Aunt Granny:

I think it is a wonderful of you to offer swimming lessons to children. Unfortunately, since you charge the children (parents) for the swimming lessons, you are no longer classified as a private swimming pool. According to Section 3749.01 of the Ohio Revised Code (ORC), a private swimming pool is defined as any indoor or outdoor structure, chamber, or tank containing a body of water for swimming, diving or bathing located at a dwelling housing no more than three families and used exclusively by the residents and their nonpaying guests. Since you charge your guests for the swimming lessons, you lose your exemption as a private swimming pool and must adhere to the requirements as a public swimming pool.

**PLEASE NOTE:** The answers in the feature are based upon the facts presented and are not legal advice and should not be substituted for consulting with your attorney. The opinions rendered do not commit ODH or any of its personnel to any regulatory position.

## CALENDAR OF UPCOMING EVENTS



## 2001 - 2002

### JANUARY 2002

- 7 - 11      **Environmental Health Programs Course (Principles) Fall Session Week 3.**  
*Contact LeeAnn Hoon at 614-466-1390 for more information.*
- 8 - 9      **Ohio Onsite Wastewater Association Annual Conference - Dayton Marriott,**  
*1414 Patterson Blvd. For reservations call 937-223-1000. For information  
regarding the conference contact Tom Grigsby at 614-466-1390.*

### FEBRUARY 2002

- 7 - 8      **Advances in Mound Systems for Onsite Wastewater Treatment,** *Holiday Inn  
on Lane Ave., Columbus Ohio. Registration inquiries 614-292-8571. Program  
content Dr. Karen Mancl 614-292-6007.*

### MARCH 2002

- 25 - 28      **Midwest Workshop - Holiday Inn Worthington, N. High St. Worthington, OH.**  
*Contact LeeAnn Hoon at 614-466-1390 for more information.*

**NEW SCHOOL INSPECTION FORM**

For a while now, you have probably been hearing that the Ohio Department of Health (ODH) is working on a new School Environmental Inspection Form and an accompanying guidance document. It's TRUE!! The inspection form and guidance document currently used by local health departments and schools is quite antiquated. Late last fall ODH formed a committee to accomplish the very task of revising these documents. The committee has been meeting monthly to discuss and work on a useful inspection form and guidance document. While the guidance document is still in its infancy, we would like to present a draft of the inspection report form for review.

The goal of the committee is to make the inspection form and guidance document useful to not only the local health department sanitarian conducting the inspection, but also the school officials involved with the environmental inspection. The inspection has already been sent to select school districts and local health departments. So far, comments have been very favorable, however minor adjustments have been made based on user suggestions.

The top of the form is self-explanatory, collecting basic information about the school being inspected. The middle portion categorizes the major areas that should be inspected (These areas will also serve as a chapter outline for the guidance document. Each chapter in the guidance document will go into depth about the particular section.). There is also a section provided for the inspecting sanitarian to write comments regarding the inspection. Finally, the front of the form provides a space for the sanitarian and the person receiving the form on-site to sign and date it. You will notice that the form also has information on the back. Each numbered category corresponds with the categories on the front, but provides a more detailed list under those categories. This is to prompt the inspecting sanitarian on items to be addressed under each category. Yes the back of the form is upside down - to provide ease of reading when attached to a clipboard. It is planned to have the form printed on NCR paper, so a copy can be left with the school at the time of the inspection.

Please take a few moments to look over this form and provide comments about its usefulness as an inspecting tool. We would appreciate any comments you might have regarding the form. We want to make it useful for the school as well as the health department sanitarian, *so please feel free to distribute it to the schools in your jurisdiction as well.* Please return all comments by Friday, December 14, 2001 to:

Ohio Department of Health  
Bureau of Environmental Health  
246 N. High St.  
Columbus, OH 43215  
ATTN: LeeAnn Hoon, RS  
Phone: 614-466-1390  
FAX: 614-466-4556  
E-mail: [ltodd@gw.odh.state.oh.us](mailto:ltodd@gw.odh.state.oh.us)

Please **DO NOT** use this form for official inspections yet - it is a **DRAFT** for comment purposes only. Thank you for your comments!!

**SCHOOL ENVIRONMENT INSPECTION REPORT**

**Health District**

School Name		School District		
Address		Telephone		
Principal/Administrator		Custodian		
Enrollment:		# of Classrooms:		
<b>School Type</b>	<b>Food Service</b>	<b>Pool</b>	<b>Water Supply</b>	<b>Sewage</b>
<input type="checkbox"/> Elementary <input type="checkbox"/> Middle <input type="checkbox"/> Junior High <input type="checkbox"/> Senior High <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Community <input type="checkbox"/> Non-Community	<input type="checkbox"/> Public <input type="checkbox"/> Non-Public

**DESCRIPTION**

*(See Comments for explanation of items marked X)*

- |                                |                         |
|--------------------------------|-------------------------|
| 1. EXTERIOR SURROUNDINGS       | 9. PLUMBING             |
| 2. BUILDINGS                   | 10. SEWAGE DISPOSAL     |
| 3. INDOOR AIR QUALITY & HVAC   | 11. LIGHTING            |
| 4. CLASSROOM SAFETY            | 12. MAINTENANCE         |
| 5. SCIENCE LABORATORIES        | 13. RECORD KEEPING      |
| 6. VOCATIONAL, INDUSTRIAL ARTS | 14. PEST MANAGEMENT     |
| 7. ART ROOMS                   | 15. PLAYGROUND SAFETY   |
| 8. CLINIC                      | 16. SAFETY & SANITATION |

Comments

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Sanitarian

Date

Received By

Date

## SUBCATEGORIES

### 1. EXTERIOR SURROUNDINGS

Location  
Grounds  
Traffic Safety  
Bus Parking/Driveway  
Outside Air Intakes  
Roof Exhaust and Condition  
Solid Waste Disposal  
Outdoor Athletic Facilities

### 2. BUILDINGS (INTERIORS)

Clean & Good Repair  
Clutter Minimized  
Floors  
Walls  
Ceilings  
Windows  
Stairways & Steps  
Chipped/Peeling Paint  
Exit Doors  
Solid Waste Disposal  
Fire Extinguishers properly  
located, charged & inspected  
Carpeting in Rooms - Condition

### 3. INDOOR AIR QUALITY & HVAC

Automatic Room Temperature  
Controls  
Inlets & Outlets Unobstructed  
System Maintained  
Free of Excessive Heat, Odor &  
Condensation  
Filtration

### 4. CLASSROOM SAFETY

Easy Ingress & Egress  
Emergency Exit Posted  
Cleaning & Sanitation  
Clutter Minimized  
Live Animals in Designated Areas  
Appropriate Care & Supervision of  
Live Animals  
See Buildings for additional items

### 5. SCIENCE LABORATORIES

Adult Supervision  
Personal Protective Equipment  
Fire Extinguisher Provided  
Eyewash & Safety Showers  
Available  
Fume Hoods Provided  
Chemical Storage  
Acids & Explosives in Appropriate  
Cabinets  
Chemical Spill Emergency Plan  
Maintenance of Chemical Drain  
Filters

### 6. VOCATIONAL, INDUSTRIAL ARTS

Adult Supervision  
Eye Wash & Safety Showers  
Available  
Appropriate Housekeeping  
Personal Protection Equipment  
Ventilation Systems  
Dust Collectors  
Equipment Safety Zone Observed  
Handwash Facilities  
Master Control/Shutoff  
Chemical Storage

### 7. ART ROOMS

Kiln Ventilation  
Safe Material Use  
Chemical Storage  
Photo Labs

### 8. CLINICS

Medication Storage  
First Aid Kit Available &  
Appropriately Stocked  
Sharps Management  
Handwash Facilities  
Toilet Available  
Easily Cleanable Cot  
Unusual Illness

### 9. PLUMBING

Approved Source  
Fixture Maintenance  
Drain Traps  
Back-flow Concerns  
Toilet Facilities  
Handwashing  
Showers  
Drinking Fountains

### 10. SEWAGE DISPOSAL

Approved System  
All Fixtures attached to system

### 11. LIGHTING

Adequate Levels  
Excessive Glare & Shadows  
Controlled

### 12. MAINTENANCE

Unauthorized Admittance to  
Equipment Areas  
Controlled  
Chemical Storage  
Boiler Certificate  
MSD Sheets Available  
Eyewash & Emergency Showers  
Available

### 13. RECORD KEEPING

Emergency Response Plan  
Asbestos Management Plan  
Fire Safety Plan  
Radon Tests Available  
MSD Sheets Available for All  
Chemicals Used Throughout  
Building  
Injury Reports  
Hazard Communication Training  
Plan  
Integrated Pest Management  
Logbook Available  
Additional Documentation

### 14. PEST MANAGEMENT

Integrated Pest Management  
No Evidence of Pests  
Proper Food Storage

### 15. PLAYGROUNDS

Equipment Design  
Accessibility  
Entrapment & Entanglement  
Hazards  
Guardrails/Barriers  
Condition of Hardware

### 16. SAFETY & SANITATION

Special Needs Area  
Building Security