U.S. Environmental Protection Agency

[District Address]

Assessment Guidebook Table Of Contents

Area/Topic *Subtopic*	Page No.
Central Office -- Chemical Management	
Chemical Purchasing	1
Inventory	2
Storage and Labeling	4
Clean-out	4
Training and Handling	6
Hazard Communication Plan	8
Central Office -- Energy	
Energy Star	10
Central Office -- Hazardous Materials	
Asbestos Management Plan	13
Asbestos Awareness Training	16
Initial Asbestos Inspections	17
Follow Up Asbestos Reinspections	18
Asbestos Records	19
Carbon Monoxide	19
Lead Paint	22
Lead in Drinking Water	24
Mercury Assessment and Removal	27
Mercury Spills	30
Mercury Recycling or Disposal	31
Polychlorinated Biphenyls (PCBs)	32
Radioactive Materials – Tritium Exit Signs (Devices)	33
Radon	37

Area/Topic *Subtopic*	Page No.
Storage Tanks -- Aboveground	38
Storage Tanks -- Underground	39
Tobacco Smoke	40
Central Office -- Hazardous Waste	
Generation	42
Generator Identification Number	42
Conditionally Exempt Small Quantity Generator (CESQG) Requirements	43
Small Quantity Generator (SQG)/ Large Quantity Generator (LQG) requirements	44
Central Office -- Indoor Air Quality	
IAQ Coordinator	46
Indoor Air Quality Profile	46
Ventilation System	47
Indoor Air Quality Management Plan	48
Central Office -- Mold/Moisture	
Mold Prevention	49
Mold Containment and Clean-up	51
Central Office -- Non-hazardous Waste	
Food Waste	54
Recycling	54
Waste Reduction	55
Central Office -- Outdoor Air Pollution	
Air Quality Index Advisories	57
School Bus Idling	57
Refrigeration and Air-Conditioning	59
Central Office -- Pest Control	
Integrated Pest Management Plan	62
Pesticide Use	62
Central Office -- Ultraviolet Radiation	
SunWise	66

Area/Topic *Subtopic*	Page No.
Central Office -- Water	
Drinking Water Quality	67
Water Efficiency	68
Waste Water	70
Central Office -- Safety and Health Policies	
Policies	72
Central Office -- Safety and Security	
Emergency Response and Crisis Management	73
Fire Prevention and Detection and Emergency Action Plans	73
Traffic and Pedestrian Safety	74
Central Office -- Injury and Illness Prevention	
Occupational Injury and Illness Reporting	76
Bloodborne Pathogens Exposure Control Plan	76
Classrooms	
General	78
Safety	82
Walls	83
Fire Safety	84
Floors -- General	85
Floors -- Carpet	86
Floors -- Resilient	89
Ceilings	90
Windows	92
Other Horizontal Surfaces	92
HVAC Systems -- General	93
HVAC System -- Air Supply and Return Diffusers	99
HVAC Systems -- Unit Ventilators	101
Indoor Air Quality	101
Animal Management	104
Art Supplies	105

Area/Topic *Subtopic*	Page No.
Sinks	106
Hallways and Stairwells	
General	109
Drinking Fountains	109
Floors -- Carpet	109
Restrooms	
General	111
Sinks	111
Toilets	113
Indoor Air Quality	115
Custodial Closets	
General	117
Hazard Communication	117
Science Rooms and Laboratories	
General	119
Chemical Hygiene Plan	121
Hazard Communication	122
Chemical Storage	123
Emergency Equipment -- Safety Showers	126
Emergency Equipment -- Eyewash Stations	127
Personal Protective Equipment	128
Ventilation	129
Visual Arts, Industrial Arts & Vocational Ed. Rooms	
General	131
Sinks	134
Chemical Hygiene Plan	136
Hazard Communication	137
Chemical Storage	138
Ventilation	140
Chemical Disposal Logs	142

Area/Topic *Subtopic*	Page No.
Art Supplies	143
Home Economic Rooms	
General	144
Cooking Area	145
Waste Management	147
Sinks	147
Combustion Appliances	149
Computer and CADD Labs	
Energy Star	151
Music Rooms	
General	152
Auditoriums	
General	153
Cafeterias and Student Dining Areas	
General	155
Cooking Area	156
Waste Management	158
Receiving	158
Library / Media Center	
General	161
Energy Star	162
Indoor Athletic Facilities	
Gymnasiums	163
Locker Rooms	164
Attics / Mezzanines	
General	167
Mechanical Rooms	
General	168

Area/Topic *Subtopic*	Page No.
Clinics / Health Officer / School Nurse	
Facilities	170
Sinks	171
Equipment and Durable Supplies	173
Ventilation	174
Administrative Areas	
Copy Rooms	176
Break Rooms	176
Outside Entrances and Exits	
Walk-off Mats	178
Floors -- Carpet	180
Building Exterior	
Adjacent Grounds	181
Adjacent Grounds -- No air contaminants within 25' of building envelope	184
Outside Air Intakes	185
Gutters, Downspouts, Scuppers and Storm Drains	187
Walls	189
Windows	193
Roof -- General	196
Roof -- Exhaust Stacks / Vents / Chimney Flues	197
Roof -- Roof Deck	198
Grounds	
General	201
Parking Areas and Driveways	202
Bus Loading and Unloading Areas	203
Sidewalks, Walkways and Stairs	204
Lawn Areas, Plant Beds and Athletic Fields	205
Solid Waste Disposal Areas	205

Area/Topic *Subtopic*	Page No.
Playgrounds	
General Safety	208
Playground Materials -- Chromated Copper Arsenate (CCA)	208
Playground Materials and Coatings	210
Protective Surfacing	211
Fall Zones	211
Swing Safety	212
Head Entrapment	213
Protrusion Hazards	213
Tripping Hazards	214
Sharp Points and Edges	214
Guardrails	214
Outdoor Athletic Facilities	
Stadiums, Bleachers and Grandstands	216
Relocatable/Portable Classrooms	
Specifications	218
Commissioning	219
Operations and Maintenance	220
Construction and Renovation	
Siting	223
Stormwater	224
Dredge and Fill/Wetlands	224
Hazardous Waste	225
Oil Spill Prevention	226
Hazardous Substances	227
Polychlorinated Biphenyls (PCBs)	228
Asbestos	229
Lead Paint	230
Indoor Air Quality	230
Radon -- Prevention	236

Area/Topic *Subtopic*	Page No.
Commissioning	236
Energy Management	237

U.S. Environmental Protection Agency

[District Address]

Assessment Guidebook

Area/Topic	**Central Office -- Chemical Management**
Subtopic	**Chemical Purchasing**
Assessment Standard	**School is purchasing chemicals in a manner that is consistent with the District's purchasing policy.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview school personnel responsible for purchasing chemicals.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Purchasing chemicals in a manner that is consistent with the District's purchasing policy will ensure that all chemicals have been screened for environmental, health and safety hazards prior to purchase, thus reducing and/or eliminating chemicals that are not appropriate for school environments.
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.
Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=361 Chemical Management Services#http://www.epa.gov/epaoswer/hazwaste/minimize/cms.htm# Colorado Chemical Management in Schools#http://www.cdphe.state.co.us/cp/Institutions/schools/ChemsInSchools/ChemMgmt.html
Assessment Standard	**All chemicals are purchased in quantities that will be used during the current school year.**
Type of Std.	EPA Recommendation **Priority:** 4

Guidance for Assessor	Interview school personnel responsible for purchasing chemicals.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Purchasing chemicals in a manner that is consistent with the District's purchasing policy will ensure that all chemicals have been screened for environmental, health and safety hazards prior to purchase, thus reducing and/or eliminating chemicals that are not appropriate for school environments.
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Subtopic **Inventory**

Assessment Standard	**School has conducted an inventory of all of the chemicals on-site, including school maintenance (cleaning, pesticides, repairs), science classrooms and labs, art classrooms, shop classrooms, etc.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review the chemical hygiene plan and written hazard communication plan for a chemical inventory. Ask to see inventories for other areas such as the art classrooms and shop classrooms.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. A chemical inventory serves as a reference for emergency personnel in the event of an emergency. The inventory is also a guide to the clean-out process because it identifies dates for which outdated chemicals should be disposed of. Be sure to check chemical lists included in pre-packaged science experiments or demonstration "kits".

Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.
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Assessment Standard	**All chemicals on the premises can be identified on the approved products list.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Compare the school's supply or inventory list of chemicals to the District's approved products list.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Purchasing chemicals in a manner that is consistent with the District's purchasing policy will ensure that all chemicals have been screened for environmental, health and safety hazards prior to purchase, thus reducing and/or eliminating chemicals that are not appropriate for school environments.
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.

Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=361 Maine Schools Mercury and Chemical Cleanout Project#http://www.state.me.us/dep/mercury/school.htm#

Subtopic **Storage and Labeling**

Assessment Standard	**All chemicals are stored properly.**		
Type of Std.	EPA Recommendation; OSHA Regulation (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect chemical storage areas. Properly stored chemicals are: clearly labeled; in their own original undamaged containers; in a designated storage room or individual cabinets equipped with operable locks and are outside of classrooms; according to chemically compatible families; flammable and corrosive materials stored in appropriate cabinets; on appropriate shelving units; and upright.		
Default Corr. Action			
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Properly storing and labeling chemicals makes them easily identifiable and reduces the risk of accidental use and/or chemical release.		
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release of 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.		
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Subtopic **Clean-out**

Assessment Standard	**School updates its chemical inventory list at least annually to reflect removal of chemicals from school.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review the chemical inventory list. Ensure all chemicals have anticipated removal dates. For chemicals past their anticipated removal dates, make sure there is a corresponding actual removal date.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Cleaning out chemicals on a periodic basis ensures that stockpiles of outdated chemicals do not accumulate, and eliminating chemical stockpiles reduces health and safety hazards.
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.
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Assessment Standard	**School has conducted a chemical clean-out, identifying and removing unnecessary hazardous materials through appropriate recycling and/or disposal methods.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview staff and review records. See hazardous waste.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Cleaning out chemicals on a periodic basis ensures that stockpiles of outdated chemicals do not accumulate, and eliminating chemical stockpiles reduces health and safety hazards.

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Subtopic **Training and Handling**

Assessment Standard	**School employees and students are properly trained to handle chemicals and lab equipment.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review the chemical hygiene plan and written hazard communication plan for training requirements. Interview school personnel, including personnel handling chemicals not covered under the chemical hygiene or hazard communication plans, to ensure training received.		
Default Corr. Action			
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Proper training and handling will help prevent accidents, thus reducing exposure to harmful chemicals.		
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Assessment Standard	**Only trained employees are permitted to transport chemicals within the building, and only after school hours or when students are within classrooms.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Interview school personnel responsible for transporting chemicals.
Default Corr. Action	
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Proper training and handling will help prevent accidents, thus reducing exposure to harmful chemicals.
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Assessment Standard	**Food and drink are prohibited in areas where chemicals are handled or stored.**

Type of Std.	EPA Recommendation; OSHA Regulation (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Look for signs prohibiting food and drink in areas where chemicals are handled or stored.		
Default Corr. Action			
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. Proper training and handling will help prevent accidents, thus reducing exposure to harmful chemicals.		
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.		
Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=361 OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram EPA Schools Chemical Cleanout and Prevention Campaign#http://www.epa.gov/epaoswer/osw/conserve/clusters/schools/index.htm		

Subtopic **Hazard Communication Plan**

Assessment Standard	**School has a written hazard communication plan.**		
Type of Std.	OSHA Regulation (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	NIOSH HazCom Helper Software -- OSHA Version. NIOSH's HazCom Helper provides those responsible for creating an OSHA HazCom written program with software to aid in writing their program and for identifying hazardous chemicals on site. OSHA's HazCom rule (29 CFR 1910.1200) requires regulated employers to determine which chemicals are hazardous, write a Hazard Communication Program, label all containers containing hazardous chemicals, keep MSDS's for all hazardous chemicals, provide HazCom training to employees, and to make the HazCom information available to employees.		
Default Corr. Action			

Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. A hazard communication plan is a critical element of chemical management; the plan ensures that chemicals are properly stored, handled, and disposed of.
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management creates a healthy atmosphere for school occupants and the surrounding environment. The purpose of the hazard communication plan is to comply with the OSHA Hazard Communication Standard, Title 29 Code of Federal Regulations 1910.1200 by compiling a hazardous chemicals list, by providing MSDS (Material Safety Data Sheets), by ensuring that containers are labeled, and by providing employees with training. In addition, the Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.
Links to Detailed Guidance	NIOSH HazCom Helper Software (OSHA Version)#http://www.cdc.gov/niosh/mining/products/product44.htm#..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc#_Hlk181004088 1,1316,1414,0,,NIOSH HazCom Helper Software (OS OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Chemical Emergency Preparedness and Management#http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/EPCRA.htm?OpenDocument# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram EPA Schools Chemical Cleanout and Prevention Campaign#http://www.epa.gov/epaoswer/osw/conserve/clusters/schools/index.htm

Area/Topic **Central Office -- Energy**

Subtopic **Energy Star**

Assessment Standard	**School is aware of the district's energy efficiency policy/program goals.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview the school personnel responsible for energy use. Check the partner list at www.energystar.gov/k-12 to determine if partner in ENERGY STAR program.
Default Corr. Action	
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality can be improved while improving the energy efficiency of a building.
Background	Electricity is generated from both renewable and nonrenewable energy sources. Energy efficiency/conservation is important because consumption of nonrenewable fossil fuels impacts the environment by polluting the water and air. Using fossil fuel energy more efficiently avoids emissions from power plants, can avoid the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.
Links to Detailed Guidance	ENERGY STAR K-12 School Districts#http://www.energystar.gov/K-12# Energy Star Portfolio Manager#http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager#
Assessment Standard	**School tracks whole building energy use, assesses energy performance using EPA's Energy Performance Rating System, sets whole building energy performance improvement target, and reassesses energy performance to measure improvement.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Use EPA's Energy Performance Rating System, found in Portfolio Manager, to determine where your building(s) stand in relation to others, obtain a baseline rating, and measure progress from year to year. Use the rating to help determine whether the building can save energy. Typically, lower ratings provide the greatest opportunity for energy savings. Review building upgrade/retrofit contracts for inclusion of the EPA rating as part of an energy audit/screening and again as part of measurement and verification activities.
Default Corr. Action	
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality

	can be improved while improving the energy efficiency of a building.
Background	Electricity is generated from both renewable and nonrenewable energy sources. Due to the limited amount of nonrenewable energy sources on earth, it is important to conserve our current supply or to use renewable sources so that our natural resources will be available for future generations. Energy conservation is also important because consumption of nonrenewable sources impacts the environment by polluting the water and air. Using energy more efficiently avoids emissions from power plants, avoids the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.
Links to Detailed Guidance	ENERGY STAR K-12 School Districts#http://www.energystar.gov/K-12# Energy Star Portfolio Manager#http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager#
Assessment Standard	**Procurement policy in place that favors the purchase of products carrying the ENERGY STAR, including Compact Fluorescent Lamps, kitchen equipment, office equipment, computers and others.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review procurement policy.
Default Corr. Action	
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality can be improved while improving the energy efficiency of a building.
Background	Electricity is generated from both renewable and nonrenewable energy sources. Energy efficiency/conservation is important because consumption of nonrenewable fossil fuels impacts the environment by polluting the water and air. Using fossil fuel energy more efficiently avoids emissions from power plants, can avoid the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.
Links to Detailed Guidance	ENERGY STAR Purchasing and Procurement#http://www.energystar.gov/purchasing#
Assessment Standard	**Monitor power management software on computer networks is installed.**
Type of Std.	EPA Recommendation **Priority:** 4

Guidance for Assessor	Interview information technology personnel.
Default Corr. Action	
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality can be improved while improving the energy efficiency of a building.
Background	Electricity is generated from both renewable and nonrenewable energy sources. Energy efficiency/conservation is important because consumption of nonrenewable fossil fuels impacts the environment by polluting the water and air. Using fossil fuel energy more efficiently avoids emissions from power plants, can avoid the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.
Links to Detailed Guidance	ENERGY STAR Monitor Power Management#http://www.energystar.gov/powermanagement#

Area/Topic	**Central Office -- Hazardous Materials**
Subtopic	**Asbestos Management Plan**
Assessment Standard	**School has an up-to- date asbestos management plan on file containing designation of a contact person who ensures that the responsibilities of the local education agency are properly implemented.**
Type of Std.	EPA Regulation -- 40 CFR 763, Subpart E **Priority:** 2
Guidance for Assessor	Review the asbestos management plan for the name, address, and telephone number of the designated person.
Default Corr. Action	
Importance	Asbestos products, with few exceptions, are not currently banned in the United States and are still "managed-in-place" in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.
Background	Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.
Links to Detailed Guidance	EPA's asbestos in schools homepage#http://www.epa.gov/opptintr/asbestos/pubs/asbestos_in_schools.html# Healthy School Environments Web Portal - Asbestos#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=42# Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf
Assessment Standard	**School has an up-to-date asbestos management plan on file that contains documentation of the steps to be taken by the Local Education Agency to provide written notification to parent, teacher, and employee organizations regarding the availability of the Asbestos Management Plan and any response actions taken or planned once annually.**

Type of Std.	EPA Regulation -- 40 CFR 763, Subpart E	**Priority:**	2
Guidance for Assessor	Review the asbestos management plan. A dated copy of each annual notification regarding the availability of the management plan should also be on file.		
Default Corr. Action			
Importance	Asbestos products, with few exceptions, are not currently banned in the United States and are still "managed-in-place" in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.		
Background	Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.		
Links to Detailed Guidance	EPA's asbestos in schools homepage#http://www.epa.gov/opptintr/asbestos/pubs/asbestos_in_schools.html# Healthy School Environments Web Portal - Asbestos#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=42# Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf		
Assessment Standard	**School has an up to date asbestos management plan on file containing records for periodic surveillance of known or suspected asbestos containing building material (ACBM).**		

Type of Std.	EPA Regulation -- 40 CFR 763, Subpart E	**Priority:**	2
Guidance for Assessor	Review the asbestos management plan.		
Default Corr. Action			
Importance	Asbestos products, with few exceptions, are not currently banned in the United States and are still "managed-in-place" in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing		

	materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.
Background	Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.
Links to Detailed Guidance	EPA's asbestos in schools homepage#http://www.epa.gov/opptintr/asbestos/pubs/asbestos_in_schools.html# Healthy School Environments Web Portal - Asbestos#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=42# Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf
Assessment Standard	**School has an up to date asbestos management plan on file containing a blueprint, diagram, or written description of each school building that identifies clearly each location where material was sampled for ACM, the exact location where each bulk sample was collected, date of collection, and where suspected ACBM is assumed to be ACM.**
Type of Std.	EPA Regulation -- 40 CFR 763, Subpart E **Priority:** 2
Guidance for Assessor	Review the asbestos management plan.
Default Corr. Action	
Importance	Asbestos products, with few exceptions, are not currently banned in the United States and are still “managed-in-place” in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.
Background	Asbestos-containing building materials include fireproofing material, insulation material, acoustical

or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.

Links to Detailed Guidance

EPA's asbestos in schools homepage#http://www.epa.gov/opptintr/asbestos/pubs/asbestos_in_schools.html#

Healthy School Environments Web Portal - Asbestos#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=42#

Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf

Subtopic **Asbestos Awareness Training**

Assessment Standard

Local education agency provides asbestos awareness training to all of its maintenance and custodial staff who work in buildings that contain asbestos.

Type of Std. EPA Regulation -- 40 CFR 763, Subpart E **Priority:** 2

Guidance for Assessor

Check for records of all persons required to be trained. Ensure employees receive adequate training on topics to be covered in both the two hour awareness training for all custodial and maintenance employees and the 14 hours of additional training for employees who disturb asbestos containing building materials as part of their work activities.

Default Corr. Action

Importance

Asbestos products, with few exceptions, are not currently banned in the United States and are still “managed-in-place” in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.

Background

Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have

an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.

Links to Detailed Guidance

The ABCs of Asbestos in Schools#http://www.epa.gov/asbestos/pubs/abcsfinal.pdf

EPA's asbestos in schools homepage#http://www.epa.gov/opptintr/asbestos/pubs/asbestos_in_schools.html#

Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf

Subtopic **Initial Asbestos Inspections**

Assessment Standard **An initial asbestos inspection has been conducted.**

Type of Std. EPA Regulation -- 40 CFR 763, Subpart E **Priority:** 2

Guidance for Assessor Review records for the initial inspection date and results.

Default Corr. Action

Importance Asbestos products, with few exceptions, are not currently banned in the United States and are still “managed-in-place” in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.

Background Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues

and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.

Links to Detailed Guidance

EPA's asbestos in schools homepage#http://www.epa.gov/opptintr/asbestos/pubs/asbestos_in_schools.html#

Healthy School Environments Web Portal - Asbestos#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=42#

Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf

Subtopic **Follow Up Asbestos Reinspections**

Assessment Standard

Follow-up re-inspections to the initial asbestos inspection have been performed every three years.

Type of Std. EPA Regulation -- 40 CFR 763, Subpart E **Priority:** 2

Guidance for Assessor

Review records for follow up inspection dates and results.

Default Corr. Action

Importance

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Background

Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.

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Subtopic **Asbestos Records**

Assessment Standard **School maintains records of each preventive measure and response action taken for friable and nonfriable asbestos-containing building material as well as records of the persons performing the actions.**

Type of Std. EPA Regulation -- 40 CFR 763, Subpart E **Priority:** 2

Guidance for Assessor Review the asbestos management plan.

Default Corr. Action

Importance Asbestos products, with few exceptions, are not currently banned in the United States and are still "managed-in-place" in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). Intact, undisturbed asbestos-containing materials (ACMs) generally do not pose a health risk. However, if ACMs are damaged, disturbed in some manner, or deteriorate over time, asbestos fibers can be released into the air. Health risks are greatly increased when occupants inhale these fibers, which can accumulate in the lungs over time. Continued exposure can cause serious lung complications including asbestosis, lung cancer, and mesothelioma. Implementation of an asbestos management plan ensures that asbestos containing materials are managed by trained personnel, reducing the risk of asbestos fiber releases.

Background Asbestos-containing building materials include fireproofing material, insulation material, acoustical or soundproofing material, and miscellaneous building materials such as ceiling tiles, flooring, and asbestos cement products. The presence of asbestos in high-activity public buildings such as schools presents the opportunity for inadvertent disturbance and potential for exposure. Exposure to asbestos fibers can cause serious lung diseases over time. The Asbestos Hazard Emergency Response Act (AHERA) was enacted in 1986 to create a framework for managing asbestos in schools. Pursuant to AHERA, EPA promulgated the Asbestos-Containing Materials in Schools Rule at 40 CFR 763, Subpart E in 1987. All schools covered under AHERA are required to have an initial inspection to determine the location and condition of asbestos containing building materials prior to occupancy. A management plan must then be developed by an accredited management planner from the information contained in the initial inspection. The management plan is a working document designed to be used to identify asbestos-containing materials in the building before renovations or maintenance activities are performed. Every three years following the initial inspection, the school must hire an accredited inspector to evaluate the condition of the asbestos materials identified in the initial inspection. For additional requirements under the Asbestos-Containing Materials in Schools Rule, please refer to the Code of Federal Regulations citation above, or the Federal Register (http://www.epa.gov/fedrgstr/EPA-TOX/pre1994/3269-8.pdf). EPA has established an asbestos-in-schools assistance program that provides direct technical assistance to help thousands of school officials and workers understand asbestos issues and meet the AHERA requirements. The program provides guidance to school districts, known as local education agencies, or LEAs, on how to develop an asbestos management plan, perform an initial inspection, and periodic re-inspections. Through the program, EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. Note: Additional requirements may apply.

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Federal Requirements for Asbestos Management in Schools#http://www.epa.gov/opptintr/asbestos/pubs/aherarequirements.pdf

Subtopic **Carbon Monoxide**

Assessment Standard **School has an inventory of all combustion appliances that are potential sources of carbon monoxide.**

Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review files for the inventory of combustion appliances.		
Default Corr. Action			
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.		
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.		
Links to Detailed Guidance	Preventing Carbon Monoxide Poisoning from Small Gasoline-powered Engines and Tools#http://www.cdc.gov/niosh/carbon2.html# Sources of indoor air pollution--carbon monoxide#http://www.epa.gov/iaq/co.html# Protect Your Family and Yourself from Carbon Monoxide Poisoning#http://www.epa.gov/iaq/pubs/coftsht.html# Consumer Product Safety Commission Questions and Answers on CO#http://www.cpsc.gov/cpscpub/pubs/466.html		
Assessment Standard	**School inspects all combustion appliances that are potential sources of carbon monoxide on an annual basis.**		

Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Review files for records of maintenance and inspection of combustion appliances that are potential sources of carbon monoxide.		
Default Corr. Action			
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.		
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Assessment Standard	**School places restrictions on the placement and use of gasoline powered engines or tools inside the building.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Interview maintenance personnel.
Default Corr. Action	
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.
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Assessment Standard	**Staff is trained to recognize the signs and symptoms of carbon monoxide exposure.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Interview staff.
Default Corr. Action	
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from

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Subtopic **Lead Paint**

Assessment Standard	**School maintains a file of lead paint inspection reports for all schools built prior to 1992.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review files for lead inspection reports.		
Default Corr. Action			
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.		
Background	In 1978, paint containing more than 0.06 percent lead was banned; however, old stocks of leaded paint were still used for more than a decade. As a general guideline, schools built prior to 1978 are likely to have lead-based paint on the premises. It is unlikely that schools built after 1992 have lead-based paint on the premises. Deteriorating lead-based paint releases lead dust and/or paint flakes that pose an immediate safety hazard for young children. Children exposed to lead may experience nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. As part of EPA's ongoing efforts to protect children from lead poisoning, the EPA introduced new standards under the Toxic Substances Control Act (TSCA) Section 403 (2001). The standards established in this rule apply to target housing (i.e., most pre-1978 housing) and child-occupied facilities (pre-1978 non-residential properties where children under the age of 6 spend a significant amount of time such as daycare centers and kindergartens). Under the new standards, lead is considered a hazard if there are greater than 40 micrograms of lead in dust per square foot on floors, 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard. Identifying lead hazards through these standards will allow inspectors and risk assessors to assist property owners in deciding how to address lead problems. The Indoor Air Quality Tools for Schools (IAQ TFS) Program helps schools prevent, identify, and resolve indoor air quality problems related to lead. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		

Links to Detailed Guidance	EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html# Federal Register 1.5.2001--Final Rule-Identification of Dangerous Levels of Lead#http://www.epa.gov/fedrgstr/EPA-TOX/2001/January/Day-05/t84.pdf# Healthy School Environments Web Portal--Lead#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=29#		
Assessment Standard	**School has a policy in place to manage any activity (e.g., renovation work) that may disturb areas containing lead paint hazards.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Review policy.		
Default Corr. Action			
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.		
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Assessment Standard	**All staff are trained to recognize and report potential lead paint hazards.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Interview staff.		
Default Corr. Action			
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells.		

	Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.
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Subtopic	**Lead in Drinking Water**		
Assessment Standard	**Plumbing survey has been conducted to locate areas of high risk for lead sources.**		
Type of Std.	Regulatory Requirement (Materials Evaluation: only for schools deemed Public Water System; e.g. schools drawing water from a well); EPA Recommendation to conduct a Plumbing Profile for schools whose water supply is provided by a municipal system.	**Priority:**	3
Guidance for Assessor	Review files for plumbing surveys. If plumbing survey records do not exist, or if significant plumbing modifications have been made since the last survey, conduct a plumbing survey as soon as possible to locate areas of high risk for lead sources.		
Default Corr. Action			
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Testing water in schools is important because children spend a significant portion of their days in these facilities, and likely consume water while on campus. The longer water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into water. As a result, facilities with on again/off again water use patterns, such as schools, may have elevated lead concentrations in the water.		
Background	Lead in drinking water can be a problem for both new and old school facilities. Older and poorly maintained schools may be more likely to have lead pipes, joints, and solder. However, new schools are also at risk: even legally “lead-free” pipes may contain up to 8 percent lead. These pipes can leave significant amounts of lead in the water for the first several months after		

	installation. When consumed, lead-contaminated drinking water is a serious health risk to children. As identified in the Lead and Copper Final Rule (58 FR 26479), EPA recommends that schools should take action when outlets indicate lead concentrations greater than 20 parts per billion (ppb). This is different from the 15 ppb action level required for public water systems under the Rule. As part of the Lead in Drinking Water in Schools and Daycares Program, EPA encourages schools to test their water for lead on a regular basis. The program provides comprehensive resources for schools, including information on the lead and copper rule, health effects of lead, and methods for testing the school's water supply. The guidance in the program will help schools maintain a safe drinking water supply.		
Links to Detailed Guidance	Drinking Water in Schools and Childcare Facilities#http://www.epa.gov/safewater/schools/index.html		
Assessment Standard	**Drinking fountains have been checked against EPA's list of known lead-containing models; listed fountains have been permanently taken out of service or removed.**		
Type of Std.	Required under Statute for all schools in the early 1990s. EPA Recommendation for all schools to re-check operational drinking fountains against EPA's list of known lead-containing models.	**Priority:**	2
Guidance for Assessor	Interview maintenance personnel and/or review maintenance files.		
Default Corr. Action			
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Testing water in schools is important because children spend a significant portion of their days in these facilities, and likely consume water while on campus. The longer water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into water. As a result, facilities with on again/off again water use patterns, such as schools, may have elevated lead concentrations in the water.		
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Links to Detailed Guidance	Drinking Water in Schools and Childcare Facilities#http://www.epa.gov/safewater/schools/index.html		
Assessment Standard	**School has a policy of flushing out at the start of each school day all drinking and cooking water outlets with high lead levels where other remediation actions have not been taken (replace outlet or disconnect outlet).**		
Type of Std.	EPA Recommendation	**Priority:**	3

Guidance for Assessor	Interview maintenance personnel.
Default Corr. Action	
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Testing water in schools is important because children spend a significant portion of their days in these facilities, and likely consume water while on campus. The longer water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into water. As a result, facilities with on again/off again water use patterns, such as schools, may have elevated lead concentrations in the water.
Background	Lead in drinking water can be a problem for both new and old school facilities. Older and poorly maintained schools may be more likely to have lead pipes, joints, and solder. However, new schools are also at risk: even legally “lead-free” pipes may contain up to 8 percent lead. These pipes can leave significant amounts of lead in the water for the first several months after installation. When consumed, lead-contaminated drinking water is a serious health risk to children. As identified in the Lead and Copper Final Rule (58 FR 26479), EPA recommends that schools should take action when outlets indicate lead concentrations greater than 20 parts per billion (ppb). This is different from the 15 ppb action level required for public water systems under the Rule. As part of the Lead in Drinking Water in Schools and Daycares Program, EPA encourages schools to test their water for lead on a regular basis. The program provides comprehensive resources for schools, including information on the lead and copper rule, health effects of lead, and methods for testing the school's water supply. The guidance in the program will help schools maintain a safe drinking water supply.
Links to Detailed Guidance	Drinking Water in Schools and Childcare Facilities#http://www.epa.gov/safewater/schools/index.html
Assessment Standard	**Drinking water taps have been tested for lead in the past year.**
Type of Std.	Regulatory Requirement (only for schools deemed Public Water System; e.g. schools drawing water from a well. Some schools may qualify for reduced monitoring); EPA Recommendation for schools whose water supply is provided by a municipal system. **Priority:** 3
Guidance for Assessor	Review files for date of testing and results of lead in drinking water. If testing records do not exist, or if testing has not been conducted within the past five years, collect and analyze samples from drinking water taps.
Default Corr. Action	
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Testing water in schools is important because children spend a significant portion of their days in these facilities, and likely consume water while on campus. The longer water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into water. As a result, facilities with on again/off again water use patterns, such as schools, may have elevated lead concentrations in the water.
Background	Lead in drinking water can be a problem for both new and old school facilities. Older and poorly maintained schools may be more likely to have lead pipes, joints, and solder. However, new schools are also at risk: even legally “lead-free” pipes may contain up to 8 percent lead. These pipes can leave significant amounts of lead in the water for the first several months after installation. When consumed, lead-contaminated drinking water is a serious health risk to children.

	As identified in the Lead and Copper Final Rule (58 FR 26479), EPA recommends that schools should take action when outlets indicate lead concentrations greater than 20 parts per billion (ppb). This is different from the 15 ppb action level required for public water systems under the Rule. As part of the Lead in Drinking Water in Schools and Daycares Program, EPA encourages schools to test their water for lead on a regular basis. The program provides comprehensive resources for schools, including information on the lead and copper rule, health effects of lead, and methods for testing the school's water supply. The guidance in the program will help schools maintain a safe drinking water supply.
Links to Detailed Guidance	Drinking Water in Schools and Childcare Facilities#http://www.epa.gov/safewater/schools/index.html
Assessment Standard	**Lead concentrations at all drinking water taps are below the EPA action level.**
Type of Std.	Regulatory Requirement (only for schools deemed Public Water System; e.g. schools drawing water from a well. Action level is 15 parts per billion for a 1000mL sample); EPA Recommendation for schools whose water supply is provided by a municipal system. **Priority:** 3
Guidance for Assessor	Review records of testing. The action level is 20 parts per billion for a 250mL sample for schools whose water supply is provided by a municipal system. Develop a plan to reduce lead levels at all taps which do not meet the 20 ppb standard. This may include instituting a flushing program, replacing pipes, solder and fixtures if they are known to be the source of lead, or disabling taps to prevent water from being consumed from this tap. Schools should consider providing bottled water in situations where plumbing, solder or fixtures known to be causing high lead levels cannot be replaced in a timely manner.
Default Corr. Action	
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Testing water in schools is important because children spend a significant portion of their days in these facilities, and likely consume water while on campus. The longer water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into water. As a result, facilities with on again/off again water use patterns, such as schools, may have elevated lead concentrations in the water.
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Links to Detailed Guidance	Drinking Water in Schools and Childcare Facilities#http://www.epa.gov/safewater/schools/index.html

Subtopic **Mercury Assessment and Removal**

Assessment Standard	**School prohibits the purchase of mercury products.**

Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review the school's chemical purchasing policy.		
Default Corr. Action			
Importance	In recent years, increasing numbers of metallic mercury spills and contamination incidents involving schoolchildren have been reported. This is primarily due to children's curiosity with mercury, specifically metallic mercury, because of its unique chemical properties. Mercury is a neurotoxin that can produce a wide range of health effects depending on the amount and timing of exposure. Most toxic effects relating to mercury exposure are from breathing contaminated air. At high doses, mercury exposure can cause tremors, inability to walk, convulsions, and even death. At more common levels seen in the United States, mercury exposure effects include subtle yet serious damage to the senses and brain. Repeated exposures to low levels of mercury vapor over long periods of time have been associated with irritability, impulsiveness, drowsiness, impaired memory, and sleep disturbances. These effects may occur at lower levels of exposure in children than adults. EPA recommends the removal of all mercury and mercury compounds from schools to eliminate the risk of spills and contamination.		
Background	Mercury is used in many items found in schools, such as thermometers, barometers, switches, thermostats, flowmeters, lamps, shoes, and laboratory reagents in the science department. Exposure to high levels of mercury has been linked to serious nervous system and developmental problems in humans, especially children. Many States have programs to facilitate removal and clean-up of mercury-containing material in schools. Most of the programs to remove mercury from schools have been enacted through legislation. In general, these school programs are aimed at increasing/promoting mercury recycling, improving mercury management in schools and educating teachers and students about mercury. A number of these programs focus on mercury removal from schools through laboratory clean outs and collection and replacement of mercury containing devices such as fever thermometers and thermostats. Also, some of these programs include outreach and education components such as workshops, Web sites, and on line training tools. Mercury-contaminated hazardous wastes can be specifically regulated under Resource Conservation and Recovery Act (RCRA) through a number of different regulations, including Hazardous Waste Identification Regulations (40 CFR Part 261), Universal Waste Regulations (40 CFR Part 273), and Land Disposal Restrictions (LDR) Regulations (40 CFR Part 268). States have also enacted legislation outlining rules, guidelines and standards for establishing concentration limits for mercury in products and applications. EPA's Office of Solid Waste (OSW) promotes the proper protective treatment, disposal, and long-term management of mercury and mercury wastes through the Safe Mercury Management Program. EPA also provides regulatory support, technical assistance and information transfer for mercury-related cleanups through the program. States also have programs to facilitate removal and clean-up of mercury-containing materials in schools.		
Links to Detailed Guidance	EPA Schools and Mercury#http://www.epa.gov/earlink1/mercury/schools.htm EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm NEWMOA Mercury in Schools and Communities#http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/schools/checklist.cfm# UW-Extension Mercury in Schools#http://www.mercuryinschools.uwex.edu/# EPA Healthy School Environments Web Portal--Mercury#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=30#		
Assessment Standard	**School has conducted and maintains an up-to-date inventory list of all devices containing elemental mercury, mercury compounds, and mercury solutions.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review the mercury inventory list		
Default Corr. Action			
Importance	In recent years, increasing numbers of metallic mercury spills and contamination incidents involving schoolchildren have been reported. This is primarily due to children's curiosity with		

mercury, specifically metallic mercury, because of its unique chemical properties. Mercury is a neurotoxin that can produce a wide range of health effects depending on the amount and timing of exposure. Most toxic effects relating to mercury exposure are from breathing contaminated air. At high doses, mercury exposure can cause tremors, inability to walk, convulsions, and even death. At more common levels seen in the United States, mercury exposure effects include subtle yet serious damage to the senses and brain. Repeated exposures to low levels of mercury vapor over long periods of time have been associated with irritability, impulsiveness, drowsiness, impaired memory, and sleep disturbances. These effects may occur at lower levels of exposure in children than adults. EPA recommends the removal of all mercury and mercury compounds from schools to eliminate the risk of spills and contamination.

Background

Mercury is used in many items found in schools, such as thermometers, barometers, switches, thermostats, flowmeters, lamps, shoes, and laboratory reagents in the science department. Exposure to high levels of mercury has been linked to serious nervous system and developmental problems in humans, especially children. Many States have programs to facilitate removal and clean-up of mercury-containing material in schools. Most of the programs to remove mercury from schools have been enacted through legislation. In general, these school programs are aimed at increasing/promoting mercury recycling, improving mercury management in schools and educating teachers and students about mercury. A number of these programs focus on mercury removal from schools through laboratory clean outs and collection and replacement of mercury containing devices such as fever thermometers and thermostats. Also, some of these programs include outreach and education components such as workshops, Web sites, and on line training tools. Mercury-contaminated hazardous wastes can be specifically regulated under Resource Conservation and Recovery Act (RCRA) through a number of different regulations, including Hazardous Waste Identification Regulations (40 CFR Part 261), Universal Waste Regulations (40 CFR Part 273), and Land Disposal Restrictions (LDR) Regulations (40 CFR Part 268). States have also enacted legislation outlining rules, guidelines and standards for establishing concentration limits for mercury in products and applications. EPA's Office of Solid Waste (OSW) promotes the proper protective treatment, disposal, and long-term management of mercury and mercury wastes through the Safe Mercury Management Program. EPA also provides regulatory support, technical assistance and information transfer for mercury-related cleanups through the program. States also have programs to facilitate removal and clean-up of mercury-containing materials in schools.

Links to Detailed Guidance

EPA Schools and Mercury#http://www.epa.gov/earlink1/mercury/schools.htm

EPA Mercury Web Site#http://www.epa.gov/mercury/#

EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm

NEWMOA Mercury in Schools and Communities#http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/schools/checklist.cfm#

EPA Healthy School Environments Web Portal--Mercury#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=30#

Assessment Standard

School has a policy to replace all unnecessary mercury containing devices with non-mercury devices.

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

Review the mercury replacement policy.

Default Corr. Action

Importance

In recent years, increasing numbers of metallic mercury spills and contamination incidents involving schoolchildren have been reported. This is primarily due to children's curiosity with mercury, specifically metallic mercury, because of its unique chemical properties. Mercury is a neurotoxin that can produce a wide range of health effects depending on the amount and timing of exposure. Most toxic effects relating to mercury exposure are from breathing contaminated air. At high doses, mercury exposure can cause tremors, inability to walk, convulsions, and even death. At more common levels seen in the United States, mercury exposure effects include subtle yet serious damage to the senses and brain. Repeated exposures to low levels of mercury vapor over long periods of time have been associated with irritability, impulsiveness, drowsiness, impaired memory, and sleep disturbances. These effects may occur at lower levels of exposure in children than adults. EPA recommends the removal of all mercury and mercury compounds from schools to eliminate the risk of spills and contamination.

Background	Mercury is used in many items found in schools, such as thermometers, barometers, switches, thermostats, flowmeters, lamps, shoes, and laboratory reagents in the science department. Exposure to high levels of mercury has been linked to serious nervous system and developmental problems in humans, especially children. Many States have programs to facilitate removal and clean-up of mercury-containing material in schools. Most of the programs to remove mercury from schools have been enacted through legislation. In general, these school programs are aimed at increasing/promoting mercury recycling, improving mercury management in schools and educating teachers and students about mercury. A number of these programs focus on mercury removal from schools through laboratory clean outs and collection and replacement of mercury containing devices such as fever thermometers and thermostats. Also, some of these programs include outreach and education components such as workshops, Web sites, and on line training tools. Mercury-contaminated hazardous wastes can be specifically regulated under Resource Conservation and Recovery Act (RCRA) through a number of different regulations, including Hazardous Waste Identification Regulations (40 CFR Part 261), Universal Waste Regulations (40 CFR Part 273), and Land Disposal Restrictions (LDR) Regulations (40 CFR Part 268). States have also enacted legislation outlining rules, guidelines and standards for establishing concentration limits for mercury in products and applications. EPA's Office of Solid Waste (OSW) promotes the proper protective treatment, disposal, and long-term management of mercury and mercury wastes through the Safe Mercury Management Program. EPA also provides regulatory support, technical assistance and information transfer for mercury-related cleanups through the program. States also have programs to facilitate removal and clean-up of mercury-containing materials in schools.
Links to Detailed Guidance	EPA Schools and Mercury#http://www.epa.gov/earlink1/mercury/schools.htm UW-Extension Mercury in Schools#http://www.mercuryinschools.uwex.edu/# EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm NEWMOA Mercury in Schools and Communities#http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/schools/checklist.cfm# EPA Healthy School Environments Web Portal--Mercury#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=30#

Subtopic	**Mercury Spills**		
Assessment Standard	**Ensure that the chemical hygiene plan has a spill control policy for mercury, that the staff is trained to clean up mercury spills, and has a mercury spill recovery kit.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review the chemical hygiene plan for: 1) the spill control policy; 2) staff training requirements, interview staff; and 3) Verify the location of the mercury spill kit.		
Default Corr. Action			
Importance	In recent years, increasing numbers of metallic mercury spills and contamination incidents involving schoolchildren have been reported. This is primarily due to children's curiosity with mercury, specifically metallic mercury, because of its unique chemical properties. Mercury is a neurotoxin that can produce a wide range of health effects depending on the amount and timing of exposure. Most toxic effects relating to mercury exposure are from breathing contaminated air. At high doses, mercury exposure can cause tremors, inability to walk, convulsions, and even death. At more common levels seen in the United States, mercury exposure effects include subtle yet serious damage to the senses and brain. Repeated exposures to low levels of mercury vapor over long periods of time have been associated with irritability, impulsiveness, drowsiness, impaired memory, and sleep disturbances. These effects may occur at lower levels of exposure in children than adults. EPA recommends the removal of all mercury and mercury compounds from schools to eliminate the risk of spills and contamination.		
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teachers and students about mercury. A number of these programs focus on mercury removal from schools through laboratory clean outs and collection and replacement of mercury containing devices such as fever thermometers and thermostats. Also, some of these programs include outreach and education components such as workshops, Web sites, and on line training tools. Mercury-contaminated hazardous wastes can be specifically regulated under Resource Conservation and Recovery Act (RCRA) through a number of different regulations, including Hazardous Waste Identification Regulations (40 CFR Part 261), Universal Waste Regulations (40 CFR Part 273), and Land Disposal Restrictions (LDR) Regulations (40 CFR Part 268). States have also enacted legislation outlining rules, guidelines and standards for establishing concentration limits for mercury in products and applications. EPA's Office of Solid Waste (OSW) promotes the proper protective treatment, disposal, and long-term management of mercury and mercury wastes through the Safe Mercury Management Program. EPA also provides regulatory support, technical assistance and information transfer for mercury-related cleanups through the program. States also have programs to facilitate removal and clean-up of mercury-containing materials in schools.

Links to Detailed Guidance

EPA Schools and Mercury#http://www.epa.gov/earlink1/mercury/schools.htm

EPA Healthy School Environments Web Portal--Mercury#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=30#

EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm

NEWMOA Mercury in Schools and Communities#http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/schools/checklist.cfm#

Subtopic **Mercury Recycling or Disposal**

Assessment Standard

Ensure the school recycles or disposes of unwanted mercury laboratory chemicals, mercury thermometers, gauges, and other devices in accordance with federal, state and local environmental regulations.

Type of Std. EPA Regulation **Priority:** 2

Guidance for Assessor

Interview the person responsible for disposing of hazardous waste. Ensure the school recycles fluorescent bulbs and mercury vapor lamps when possible.

Default Corr. Action

Importance

In recent years, increasing numbers of metallic mercury spills and contamination incidents involving schoolchildren have been reported. This is primarily due to children's curiosity with mercury, specifically metallic mercury, because of its unique chemical properties. Mercury is a neurotoxin that can produce a wide range of health effects depending on the amount and timing of exposure. Most toxic effects relating to mercury exposure are from breathing contaminated air. At high doses, mercury exposure can cause tremors, inability to walk, convulsions, and even death. At more common levels seen in the United States, mercury exposure effects include subtle yet serious damage to the senses and brain. Repeated exposures to low levels of mercury vapor over long periods of time have been associated with irritability, impulsiveness, drowsiness, impaired memory, and sleep disturbances. These effects may occur at lower levels of exposure in children than adults. EPA recommends the removal of all mercury and mercury compounds from schools to eliminate the risk of spills and contamination.

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also enacted legislation outlining rules, guidelines and standards for establishing concentration limits for mercury in products and applications. EPA's Office of Solid Waste (OSW) promotes the proper protective treatment, disposal, and long-term management of mercury and mercury wastes through the Safe Mercury Management Program. EPA also provides regulatory support, technical assistance and information transfer for mercury-related cleanups through the program. States also have programs to facilitate removal and clean-up of mercury-containing materials in schools.

Links to Detailed Guidance

EPA Schools and Mercury#http://www.epa.gov/earlink1/mercury/schools.htm

EPA Healthy School Environments Web Portal--Mercury#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=30#

EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm

NEWMOA Mercury in Schools and Communities#http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/schools/checklist.cfm#

Subtopic **Polychlorinated Biphenyls (PCBs)**

Assessment Standard **School has determined applicability and compliance with PCB regulations.**

Type of Std. EPA Regulation -- 40 CFR 761 **Priority:** 2

Guidance for Assessor If school was built prior to 1980, a complete PCB equipment/materials inventory should be conducted.

Default Corr. Action

Importance PCBs have been demonstrated to cause a variety of adverse health effects. PCBs have been shown to cause cancer in animals. PCBs have also been shown to cause a number of serious non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, endocrine system and other health effects. Studies in humans provide supportive evidence for potential carcinogenic and non-carcinogenic effects of PCBs. The different health effects of PCBs may be interrelated, as alterations in one system may have significant implications for the other systems of the body. The health effects of PCB exposure include severe skin rashes, thyroid gland disorders, headaches, nausea, vomiting, abdominal pains, liver damage and respiratory disorders. PCBs are very stable chemical compounds that do not readily break down. Because of this, they may remain in the body, causing long-lasting toxic effects over many years (see Health Effects of PCBs). For this reason, it is critical to minimize any potential exposure to them. The EPA banned the manufacture and import of PCBs to the U.S. in 1979 because of their toxic effects. They also banned the processing or use of PCBs, except in totally enclosed equipment. However, no state or federal regulations precluded the continued use of the older PCB fluorescent light ballasts. Therefore, a large number of PCB fluorescent light ballasts are still in use in U.S. schools. As long as the PCBs remain in the ballasts and potting material, they do not pose a health risk or environmental hazard. However, as they age, the ballasts degrade, increasing the risk of leaks or even fires, which would pose a health and environmental hazard. The hazard can be worsened by mishandling the incident.

Background Fluorescent light ballasts are the most common type of PCB product that may be present in schools built prior to 1980. Fluorescent light fixtures are used throughout elementary, middle and high schools and leaking fluorescent light ballasts represent the most likely source of PCB exposure to children and staff. However, just because a school was built before 1980, does not mean that fluorescent light ballasts pose a risk. Many older schools have undergone renovations and replacement of light fixtures is probably one of the more common projects in school renovation work. If all fluorescent light ballasts or all fixtures within a given school have been replaced after 1980, fluorescent light ballasts can be eliminated from the inventory of suspect PCB sources. Ballasts manufactured between July 1978 and July 1998 that do not contain PCBs were required by rule to be marked with the statement "No PCBs." EPA recommends, but does not require, removal of all pre-1979 fluorescent light ballasts in schools. There are several categories of equipment that may be used within schools, or that may be out of use but still in storage on school property, that may contain PCBs. 1) PCB and PCB contaminated transformers--pre-1979 transformers are assumed to be PCB, PCB-contaminated or non PCB based on their size and the type of dielectric fluid present. 2) PCB Capacitors--PCB regulations cover large and small capacitors but define a "small capacitor as one which contains less than 3 pounds of dielectric fluid. 3) Voltage Regulators.

Recently, several school districts have discovered that PCBs are present in building caulk installed on their facilities and sometimes in the soil near caulked structures. Typical locations include windows and expansion joints. PCBs are regulated by EPA, and caulk containing PCBs should be properly managed.

PCBs are currently prohibited from being used in caulk and other commodities (U.S. EPA, 40 CFR 761). However, prior to 1977, PCBs were present in some caulking materials used in the construction of schools and other buildings. Studies have shown that concentrations of PCB are typically 25-30% (250,000 to 300,000 ppm) by weight in some caulk materials. An investigation of 24 buildings in the Greater Boston Area revealed that one-third of the buildings tested (8 of 24) contained caulking materials with polychlorinated biphenyl (PCB) content exceeding 50 ppm by weight with an average concentration of 15,600 ppm or 1.5% (Herrick et al., 2004). These buildings included schools and other public buildings.

Links to Detailed Guidance

PCBs--A Guide for School Administrators#http://www.epa.gov/region09/toxic/pcb/pdfs/pcbadmin.pdf

PCBs--A Guide for School Maintenance Personnel#http://www.epa.gov/region09/cross_pr/p2/projects/pcbmain.pdf#

New York State Protocol for Addressing PCBs in Caulking Materials In Schools#http://www.emsc.nysed.gov/facplan/HealthSafety/PCBinCaulkProtocol-070615.html#..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc# 1,279,433,0,,New York State Protocol for Addr

Polychlorinated Biphenyl Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_pcb.pdf##..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc# 1,442,588,0,,Polychlorinated Biphenyl Self-Au

Polychlorinated Biphenyl (PCB) Waste Requirements List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_pcb.pdf##..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc#_Hlk181066825 1,597,793,0,,Polychlorinated Biphenyl (PCB) W

Subtopic **Radioactive Materials – Tritium Exit Signs (Devices)**

Assessment Standard

Responsible individual appointed to take actions to comply with appropriate Nuclear Regulatory Commission (NRC) regulations and requirements.

Type of Std. Nuclear Regulatory Commission (NRC) Regulation; 10 CFR Part 31.5 **Priority:** 2

Guidance for Assessor NRC Regulatory Issue Summary on Tritium EXIT Signs (See Links to Detailed Guidance)

Default Corr. Action

Importance

Broken or leaking tubes in tritium EXIT signs present a potential health risk if the tritium is taken inside the body. The tritium gas released to the moisture in the ambient air becomes tritiated water (HTO) that can be inhaled, ingested or absorbed by the skin into the body. Ventilation of the area and medical treatment such as diuresis to increase the elimination of tritiated water from the body can minimize the radiation exposure to internal organs, tissues and cells. As with all ionizing radiation, tritium exposure may increase the risk of cancer or birth defects. Children, women are sensitive populations for radiation exposure. Clean-up of contamination areas and medical treatment costs range from $60,000 to $200.000 per incident. A preventive approach, inventory controls and personnel prepared to respond quickly to a broken tritium sign can help reduce the potential health hazard and the NRC regulatory risk.

Tritium Exposure Incidents: Manufacturers' estimate that if all four tubes ruptured at one time in an exit sign, the tritium release could result in a dose from 30 mrem to 100 mrem. The NRC regulations address tritium exposure incidents. The NRC requires notification of any individual(s) exposed within a 24 hour period to a tritium release of 5 mrem or more.

Background

The U.S. National Fire Protection Association code requires that building egress be marked by emergency lighting that meets United Laboratories (UL) testing standards for luminosity. The UL 924 standard approves six types of EXIT sign technologies. Once a sign meets the UL standard, other performance attributes are important to consider including the sign's O&M demands, energy efficiency, hazards and disposal requirements. EXIT sign choices should be made based on the

sign's compatibility with your building design, integrated safety and security management systems and your organization's safety, health and environmental management programs.

Of the six Exit sign technologies approved by the UL only the self-luminous, tritium EXIT sign (Gaseous Tritium Light Source or GTLS) contains tritium, the radioactive form of hydrogen. Mixing tritium with a chemical that emits light in the presence of radiation, known as "phosphor in a glass tube" (a sealed source), creates a continuous, self-powered light source. This property of tritium is most useful for EXIT signs needed in areas where using batteries or electricity is not possible. Even though tritium is a hazardous material, it can be used safely as emergency lighting so long as it is shielded by the glass tubes within the sign which meet the NRC's requirements. If one or more of the four tubes in the exit signs are ruptured, the tritium, which exists in the tube as a high temperature gas, might escape into the local area. Broken or leaking tubes in a tritium EXIT sign are not considered safe and present a potential health risk if the tritium is taken inside the body. If tritium EXIT signs are installed in your building, NRC regulations apply and monetary penalties could be assessed for violations.

Outside a school building, incidents involving children and internal radiation exposure from broken tritium exit signs are often the result of a child or an adult taking a discarded, abandoned tritium EXIT sign home and breaking open the sign. To avoid the problems associated with improper management of the signs, the NRC regulates the tracking on sign inventories, establishes cradle to grave reporting and requires disposal with an NRC licensed facility.

Links to Detailed Guidance

NRC Regulatory Issue Summary on Tritium Exit Signs#http://nrc-stp.ornl.gov/asletters/other/sp06113.pdf

Responsible Management of Tritium Exit Signs Training#http://www.trainex.org

US Department of Health and Human Services, Radiation Event Medical Management (REMM), Incorporation of Radiation into Cells and Organs#http://remm.nlm.gov/contamimage_6.htm

Program-Specific Guidance About Licenses Authorizing Distribution to General Licensees - Final Report (NUREG-1556, Vol. 16) Appendix L: Guidance on Self-Luminous Exits (Q&As)#http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v16/sr1556v16.pdf

Assessment Standard

All tritium EXIT signs installed in the school(s) have been identified.

Type of Std.

Nuclear Regulatory Commission (NRC) Regulation; 10 CFR Part 31.5

Priority: 2

Guidance for Assessor

Default Corr. Action

Importance

Broken or leaking tubes in tritium EXIT signs present a potential health risk if the tritium is taken inside the body. The tritium gas released to the moisture in the ambient air becomes tritiated water (HTO) that can be inhaled, ingested or absorbed by the skin into the body. Ventilation of the area and medical treatment such as diuresis to increase the elimination of tritiated water from the body can minimize the radiation exposure to internal organs, tissues and cells. As with all ionizing radiation, tritium exposure may increase the risk of cancer or birth defects. Children, women are sensitive populations for radiation exposure. Clean-up of contamination areas and medical treatment costs range from $60,000 to $200.000 per incident. A preventive approach, inventory controls and personnel prepared to respond quickly to a broken tritium sign can help reduce the potential health hazard and the NRC regulatory risk.

Tritium Exposure Incidents: Manufacturers' estimate that if all four tubes ruptured at one time in an exit sign, the tritium release could result in a dose ranging from 30 mrem to 100 mrem. The NRC regulations address tritium exposure incidents. The NRC requires notification of any individual(s) exposed within a 24 hour period to a tritium release of 5 mrem or more.

Background

The U.S. National Fire Protection Association code requires that building egress be marked by emergency lighting that meets United Laboratories (UL) testing standards for luminosity. The UL 924 standard approves six types of EXIT sign technologies. Once a sign meets the UL standard, other performance attributes are important to consider including the sign's O&M demands, energy efficiency, hazards and disposal requirements. EXIT sign choices should be made based on the sign's compatibility with your building design, integrated safety and security management systems and your organization's safety, health and environmental management programs.

Of the six Exit sign technologies approved by the UL only the self-luminous, tritium EXIT sign (Gaseous Tritium Light Source or GTLS) contains tritium, the radioactive form of hydrogen. Mixing tritium with a chemical that emits light in the presence of radiation, known as "phosphor in a glass tube" (a sealed source), creates a continuous, self-powered light source. This property of tritium is most useful for EXIT signs needed in areas where using batteries or electricity is not possible. Even though tritium is a hazardous material, it can be used safely as emergency lighting so long as it is shielded by the glass tubes within the sign which meet the NRC's requirements. If one or more of the four tubes in the exit signs are ruptured, the tritium, which exists in the tube as a high temperature gas, might escape into the local area. Broken or leaking tubes in a tritium EXIT sign are not considered safe and present a potential health risk if the tritium is taken inside the body. If tritium EXIT signs are installed in your building, NRC regulations apply and monetary penalties could be assessed for violations.

Outside a school building, incidents involving children and internal radiation exposure from broken tritium exit signs are often the result of a child or an adult taking a discarded, abandoned tritium EXIT sign home and breaking open the sign. To avoid the problems associated with improper management of the signs, the NRC regulates the tracking on sign inventories, establishes cradle to grave reporting and requires disposal with an NRC licensed facility.

Links to Detailed Guidance

NRC Regulatory Issue Summary on Tritium Exit Signs#http://nrc-stp.ornl.gov/asletters/other/sp06113.pdf#

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Assessment Standard

School(s) have a record of all tritium EXIT sign purchases including the information provided by the manufacturer or distributor at the time of purchase.

Type of Std.

Nuclear Regulatory Commission (NRC) Regulation; 10 CFR Part 31.5

Priority: 2

Guidance for Assessor

The records should identify each sign by manufacture's name, model number and serial number, and the location of each sign.

Default Corr. Action

Importance

Broken or leaking tubes in tritium EXIT signs present a potential health risk if the tritium is taken inside the body. The tritium gas released to the moisture in the ambient air becomes tritiated water (HTO) that can be inhaled, ingested or absorbed by the skin into the body. Ventilation of the area and medical treatment such as diuresis to increase the elimination of tritiated water from the body can minimize the radiation exposure to internal organs, tissues and cells. As with all ionizing radiation, tritium exposure may increase the risk of cancer or birth defects. Children, women are sensitive populations for radiation exposure. Clean-up of contamination areas and medical treatment costs range from $60,000 to $200.000 per incident. A preventive approach, inventory controls and personnel prepared to respond quickly to a broken tritium sign can help reduce the potential health hazard and the NRC regulatory risk.

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Background

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Assessment Standard

All installed tritium EXIT signs display a label with words "Caution – Radioactive Material".

Type of Std.

Nuclear Regulatory Commission (NRC) Regulation; 10 CFR Part 31.5

Priority: 2

Guidance for Assessor

Default Corr. Action

Importance

Broken or leaking tubes in tritium EXIT signs present a potential health risk if the tritium is taken inside the body. The tritium gas released to the moisture in the ambient air becomes tritiated water (HTO) that can be inhaled, ingested or absorbed by the skin into the body. Ventilation of the area and medical treatment such as diuresis to increase the elimination of tritiated water from the body can minimize the radiation exposure to internal organs, tissues and cells. As with all ionizing radiation, tritium exposure may increase the risk of cancer or birth defects. Children, women are sensitive populations for radiation exposure. Clean-up of contamination areas and medical treatment costs range from $60,000 to $200.000 per incident. A preventive approach, inventory controls and personnel prepared to respond quickly to a broken tritium sign can help reduce the potential health hazard and the NRC regulatory risk.

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tritium with a chemical that emits light in the presence of radiation, known as "phosphor in a glass tube" (a sealed source), creates a continuous, self-powered light source. This property of tritium is most useful for EXIT signs needed in areas where using batteries or electricity is not possible. Even though tritium is a hazardous material, it can be used safely as emergency lighting so long as it is shielded by the glass tubes within the sign which meet the NRC's requirements. If one or more of the four tubes in the exit signs are ruptured, the tritium, which exists in the tube as a high temperature gas, might escape into the local area. Broken or leaking tubes in a tritium EXIT sign are not considered safe and present a potential health risk if the tritium is taken inside the body. If tritium EXIT signs are installed in your building, NRC regulations apply and monetary penalties could be assessed for violations.

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Subtopic **Radon**

Assessment Standard

All classrooms in contact with the ground have been tested for radon, if school located in Zone 1.

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

Review files for radon test results.

Default Corr. Action

Importance

The EPA ranks indoor radon among the most serious environmental health problems facing us today. Radon is generated in rock and soil, and it creeps up to the outside air. Although outdoor concentrations of radon are typically low, about 0.4 picocuries per liter (pCi/l) of air, it can seep into buildings through foundation cracks or openings and build up to much higher concentrations indoors. Radon is known to be a human lung carcinogen based on the wealth of biological and epidemiological evidence and data showing the connection between exposure to radon and lung cancer in humans. Evidence also suggests a synergistic effect between cigarette smoking and radon; the risks from exposure to both may exceed the risk from either acting alone. For these reasons, it is important for schools to test for radon on a regular basis to ensure that radon levels are 4 pCi/L or lower.

Background

Radon is a naturally occurring gas that seeps into buildings from the surrounding soil. In some cases, contaminated well water may be a source of radon. Radon gas decays into radioactive particles that can get trapped in the lungs when breathing, which can cause lung cancer. Each state implements its own regulations pertaining to radon. However, typically if radon levels exceed 4 pCi/L (picocurie per liter), EPA recommends that mitigation measures be taken to protect the health and safety of students and staff. To reduce the health risk associated with radon, EPA recommends that officials test every school for elevated radon levels. EPA's document, Radon Measurement in Schools - Revised Edition (EPA 402-R-92-014), provides guidance on planning, implementing, and evaluating a radon testing program for a school. Schools are encouraged to contact their respective State Radon Office for information on any state requirements concerning radon testing, or for a copy of the document. The U.S. Environmental Protection Agency (EPA) has also developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their IAQ problems, including those associated with radon. The Kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools

	in the Kit, school officials can educate staff, students, and parents about the importance of good IAQ and their roles in ensuring a healthy, comfortable learning environment.
Links to Detailed Guidance	Radon in Schools#http://www.epa.gov/radon/pubs/schoolrn.html# Radon Frequent Questions#http://www.epa.gov/radon/radonqa1.html#What%20are%20the%20Health%20Effects%20From%20Exposure%20to%20Radon EPA Map of Radon Zones#http://www.epa.gov/radon/zonemap.html
Assessment Standard	**If test results show radon levels of 4 pCi/L or greater, mitigation strategies have been implemented.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Review radon test results and review documentation of any mitigation actions.
Default Corr. Action	
Importance	The EPA ranks indoor radon among the most serious environmental health problems facing us today. Radon is generated in rock and soil, and it creeps up to the outside air. Although outdoor concentrations of radon are typically low, about 0.4 picocuries per liter (pCi/l) of air, it can seep into buildings through foundation cracks or openings and build up to much higher concentrations indoors. Radon is known to be a human lung carcinogen based on the wealth of biological and epidemiological evidence and data showing the connection between exposure to radon and lung cancer in humans. Evidence also suggests a synergistic effect between cigarette smoking and radon; the risks from exposure to both may exceed the risk from either acting alone. For these reasons, it is important for schools to test for radon on a regular basis to ensure that radon levels are 4 pCi/L or lower.
Background	Radon is a naturally occurring gas that seeps into buildings from the surrounding soil. In some cases, contaminated well water may be a source of radon. Radon gas decays into radioactive particles that can get trapped in the lungs when breathing, which can cause lung cancer. Each state implements its own regulations pertaining to radon. However, typically if radon levels exceed 4 pCi/L (picocurie per liter), EPA recommends that mitigation measures be taken to protect the health and safety of students and staff. To reduce the health risk associated with radon, EPA recommends that officials test every school for elevated radon levels. EPA's document, Radon Measurement in Schools - Revised Edition (EPA 402-R-92-014), provides guidance on planning, implementing, and evaluating a radon testing program for a school. Schools are encouraged to contact their respective State Radon Office for information on any state requirements concerning radon testing, or for a copy of the document. The U.S. Environmental Protection Agency (EPA) has also developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their IAQ problems, including those associated with radon. The Kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the Kit, school officials can educate staff, students, and parents about the importance of good IAQ and their roles in ensuring a healthy, comfortable learning environment.
Links to Detailed Guidance	Radon in Schools#http://www.epa.gov/radon/pubs/schoolrn.html# Radon Frequent Questions#http://www.epa.gov/radon/radonqa1.html#What%20are%20the%20Health%20Effects%20From%20Exposure%20to%20Radon EPA Map of Radon Zones#http://www.epa.gov/radon/zonemap.html

Subtopic **Storage Tanks -- Aboveground**

Assessment Standard	**If above-ground storage tanks are present, aggregate quantity of storage capacity is less than 1320 gallons, OR school has a Spill Prevention, Containment, and Countermeasure (SPCC) plan on file.**
Type of Std.	EPA Regulation -- 40 CFR, Part 112 **Priority:** 3

Guidance for Assessor	Determine the capacity of aboveground storage tanks. Review files for the SPCC plan.
Default Corr. Action	
Importance	If schools have aboveground storage tanks on-site, they are typically used to store petroleum for fueling purposes. Spills and leaks from aboveground storage tanks (ASTs) can jeopardize human health and safety. If damaged by vandals or vehicles, ASTs can also increase the risk of fire and other hazards. ASTs should be installed with adequate safeguards against fire, overfills, and damage to protect human health and the environment.
Background	Aboveground storage tanks commonly contain petroleum and other hazardous substances. Spills and leaks from aboveground storage tanks (ASTs) can jeopardize human health and safety. For these reasons, ASTs are subject to Federal and State regulations. Most ASTs need to meet U.S. EPA's Spill, Prevention, Control, and Countermeasure (SPCC) requirements (40 CFR, Part 112). SPCC applies to facilities with a single AST with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. SPCC requires procedural and contingency plans, as well as various technical requirements, such as corrosion protection. The Aboveground Storage Tank program coordinates and implements a wide range of activities to ensure that adequate and timely response measures are taken in communities affected by hazardous substances and oil releases where state and local first responder capabilities have been exceed or where additional support is needed. The Storage Tank Emission Reduction Partnership Program is intended to improve air quality by reducing smog-causing volatile organic compound (VOC) emissions from "slotted guide-poles" expeditiously and at little or no cost, as well as help owners of tanks meet their compliance obligations under the Clean Air Act. These programs assist schools in managing aboveground storage tanks on a regular basis and in the event of a hazardous substance release.
Links to Detailed Guidance	EPA Aboveground Storage Tank Program#http://www.epa.gov/OUST/cmplastc/asts.htm#

Subtopic **Storage Tanks -- Underground**

Assessment Standard	**If any school vehicles are fueled on school owned property, school is in compliance with Underground Storage Tank regulations.**		
Type of Std.	EPA Regulation -- 40 CFR, Part 280	**Priority:**	3
Guidance for Assessor	Visually inspect premises for fueling stations, interview school personnel.		
Default Corr. Action			
Importance	Petroleum and other hazardous substances are stored in approximately 705,000 underground storage tank systems (USTs) nationwide. If schools have USTs on-site, they are typically used to store petroleum for fueling purposes. Releases caused by leaks, spills, and overfills from UST systems can jeopardize human health and safety. Fumes and vapors can travel in plumes beneath the ground and collect in areas such as basements, utility vaults, and parking garages where they can pose a serious threat of explosion, fire, asphyxiation and other adverse health effects. In addition, UST releases can harm the environment by contaminating groundwater and soil. Therefore, it is important that USTs are properly installed, operated, and maintained.		
Background	An underground storage tank system (UST) is a tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground. The presence of underground storage tanks on school property is generally for refueling purposes. The greatest potential hazard from an UST is that petroleum products or other hazardous substance can leak and seep into the soil and contaminate groundwater, the source of drinking water for nearly half of all Americans. Subtitle I to the Resource Conservation and Recovery Act (RCRA) requires the EPA to develop and administer a comprehensive regulatory program for USTs storing petroleum or certain hazardous substances. As a result, EPA has developed technical regulations , financial responsibility regulations, and state program approval regulations for USTs (40 CFR 280). EPA's UST program is administered by the Office of Underground Storage Tanks (OUST). The program		

	is designed to protect human health and the environment from leaking underground storage tanks. Schools can maintain safe underground storage tanks by complying with the EPA's leak detection requirements as well as spill, overfill, and corrosion protection regulations.
Links to Detailed Guidance	EPA's underground storage tank program#http://www.epa.gov/swerust1/aboutust.htm# Detailed NIOSH Checklist#http://www.cdc.gov/niosh/docs/2004-101/chklists/n63ust~1.htm#
Assessment Standard	**If any school vehicles are fueled on school owned property, school maintains leak detection reports.**
Type of Std.	EPA Regulation -- 40 CFR, Part 280 **Priority:** 3
Guidance for Assessor	Review files for leak detection reports.
Default Corr. Action	
Importance	Petroleum and other hazardous substances are stored in approximately 705,000 underground storage tank systems (USTs) nationwide. If schools have USTs on-site, they are typically used to store petroleum for fueling purposes. Releases caused by leaks, spills, and overfills from UST systems can jeopardize human health and safety. Fumes and vapors can travel in plumes beneath the ground and collect in areas such as basements, utility vaults, and parking garages where they can pose a serious threat of explosion, fire, asphyxiation and other adverse health effects. In addition, UST releases can harm the environment by contaminating groundwater and soil. Therefore, it is important that USTs are properly installed, operated, and maintained.
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Links to Detailed Guidance	EPA's underground storage tank program#http://www.epa.gov/swerust1/aboutust.htm# NIOSH Safety Checklist Program for Schools--Underground Storage Tanks#http://www.cdc.gov/niosh/docs/2004-101/chklists/n63ust~1.htm#

Subtopic **Tobacco Smoke**

Assessment Standard	**School has a written non-smoking policy.**
Type of Std.	EPA & CDC Recommendations **Priority:** 2
Guidance for Assessor	Review the school's non-smoking policy. It should contain the following five elements: 1) a definition of what is considered "smoking"; 2) an explanation for why the school is implementing the policy; 3) prohibitions against tobacco use by students, all school staff, parents, and visitors on school property, in school vehicles, and at school-sponsored functions away from school property; 4) procedures for voicing concerns, resolving conflicts, and reporting violations; and 5) provisions for enforcement by school personnel.
Default Corr. Action	
Importance	The developing lungs of young children are severely affected by exposure to secondhand smoke

	for several reasons, including that children are still developing physically, have higher breathing rates than adults, and have little control over their indoor environments. EPA has classified secondhand smoke as a known cause of cancer in adults. (Group A carcinogen). In children, secondhand smoke is also associated with increased frequency and severity of asthma attacks, more frequent upper respiratory infections, persistent middle-ear effusion, repeating pneumonia, and bronchitis. A non-smoking policy protects children's' health by eliminating their exposure to secondhand smoke at school.
Background	Tobacco smoke is a serious health risk to children. Exposure to tobacco smoke can increase their risk of cancer and instigate or aggravate respiratory problems. The "Pro-Children Act of 1994" prohibits smoking in schools that receive federal funding from the Department of Education, the Department of Agriculture, or the Department of Health and Human Services (excluding Medicare or Medicaid). All other restrictions placed on smoking in public places are state and local regulations, which are typically addressed in clean indoor air laws enacted by states, counties and municipalities. EPA recommends that schools implement a non-smoking policy and incorporate a smoking education program into their curriculum. Schools should also use the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve indoor air quality problems related to tobacco smoke. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	CDC Guidelines for School Health Programs to Prevent Tobacco Use and Addiction#http://www.cdc.gov/mmwr/preview/mmwrhtml/00026213.htm EPA Tools for Schools Coordinator's Guide#http://www.epa.gov/iaq/schools/tfs/guidtoc.html CDC School Health Index#http://www.cdc.gov/HealthyYouth/SHI

Area/Topic **Central Office -- Hazardous Waste**

Subtopic **Generation**

Assessment Standard **School has determined its hazardous waste generation status.**

Type of Std. EPA Regulation -- 40 CFR, Part 262 **Priority:** 2

Guidance for Assessor

Interview school personnel and inspect all areas for hazardous waste. Hazardous wastes might be found in: science classrooms, art classrooms, laboratories, custodial and maintenance product use, print shop, auto shop, etc. Look for certain hazardous discarded products or materials that contain these products such as rags. Look for items that are a flammable, ignitable, solvent, a paint, dye, printing ink, pesticide, contains mercury, used oil, photo processing chemicals, reacts with water, capable of dissolving other materials, lab or science chemical. A school is considered: 1) a CESQG (conditionally exempt small quantity generator) if it generates no more than 220 lbs. of hazardous waste in a month; 2) a SQG (small quantity generator) if it generates between 220 and 2,200 lbs. of hazardous waste in a month; 3) a LQG (large quantity generator) if it generates more than 2,200 lbs. of hazardous waste in a month. Most schools are CESQGs most of the time (some exceptions apply - contact your State for assistance in determining your generator category). IMPORTANT NOTES: Schools may become SQGs or LQGs when they decide to clean out a laboratory; and these requirements reflect the federal hazardous waste program. States implement this program and have the authority to be more stringent, so it is imperative that you determine whether your state is implementing the federal program as is or has modified it.

Default Corr. Action

Importance

Hazardous wastes are sometimes disposed of improperly by individuals pouring wastes down the drain, on the ground, into storm sewers, or putting them with the trash. The dangers of such disposal methods may not be immediately obvious, but certain types of household hazardous waste have the potential to cause physical injury to sanitation workers; contaminate septic tanks or wastewater treatment systems if poured down drains or toilets; and present hazards to children if left unattended.

Background

Hazardous wastes are required to be handled properly from cradle (creation) to grave (disposal). Individual programs or activities conducted at school may generate quantities of hazardous wastes that when added together, the school may still fall into a category required to obtain a site-specific EPA identification number and to comply with applicable federal or state hazardous waste regulations. The Resource Conservation and Recovery Act regulates facilities that generate, transport, treat, store, or dispose of hazardous waste. The more hazardous waste a school generates, the more regulations the school is subject to. States may impose additional hazardous waste requirements. Other federal agencies may also regulate various aspects of chemical management, including transportation. EPA's National Waste Minimization Partnership Program focuses on reducing or eliminating the generation of hazardous waste containing any of 30 Waste Minimization Priority Chemicals. The EPA has also published RCRA guides including, “RCRA Orientation Manual,” “RCRA: Reducing Risk from Waste.” and "Managing Your Hazardous Waste: A Guide for Small Businesses." Reducing the generation of hazardous waste in schools decreases disposal costs, helps protect the environment, and reduces the risk of human exposure.

Links to Detailed Guidance

Managing Your Hazardous Waste: A Guide for Small Businesses#http://www.epa.gov/epaoswer/hazwaste/sqg/handbook/k01005.pdf#

NIOSH School Safety Checklist: Hazardous Waste#http://www.cdc.gov/niosh/docs/2004-101/chklists/n41was~1.htm#

Notification of Regulated Waste Activity (EPA Form 8700-12)#http://www.epa.gov/epaoswer/hazwaste/data/form8700/8700-12.pdf#

RCRA: Reducing Risk from Waste#http://www.epa.gov/epaoswer/general/risk/risk-1.pdf#

Subtopic **Generator Identification Number**

Assessment Standard **If the school generates regulated quantities of hazardous waste, the school has obtained a RCRA site-specific identification number.**

Type of Std. EPA Regulation -- 40 CFR, Part 262 **Priority:** 2

Guidance for Assessor	Review files. A school is required to notify the state environmental department to obtain a site-specific ID # (EPA form 8700-12) if it generates, stores, or offers for transport regulated quantities of hazardous wastes from the school. When you notify the state you will be assigned a permanent site-specific EPA identification number to use on all forms tracking the shipment of your wastes offsite. You may need more than one identification number if parts of the school generating hazardous waste are not on contiguous property - consult your state environmental agency.
Default Corr. Action	
Importance	Hazardous wastes are sometimes disposed of improperly by individuals pouring wastes down the drain, on the ground, into storm sewers, or putting them with the trash. The dangers of such disposal methods may not be immediately obvious, but hazardous waste have the potential to cause physical injury or illness to people who manage them; contaminate groundwater, the environment, septic tanks or wastewater treatment systems; and present hazards to children if left unattended.
Background	Hazardous wastes are required to be handled properly from cradle (creation) to grave (disposal). Individual programs or activities conducted at school may generate quantities of hazardous wastes that when added together, the school may still fall into a category required to obtain a site-specific EPA identification number and to comply with applicable federal or state hazardous waste regulations. The Resource Conservation and Recovery Act regulates facilities that generate, transport, treat, store, or dispose of hazardous waste. The more hazardous waste a school generates, the more regulations the school is subject to. States may impose additional hazardous waste requirements. Other federal agencies may also regulate various aspects of chemical management, including transportation. EPA's National Waste Minimization Partnership Program focuses on reducing or eliminating the generation of hazardous waste containing any of 30 Waste Minimization Priority Chemicals. The EPA has also published RCRA guides including, “RCRA Orientation Manual,” “RCRA: Reducing Risk from Waste.” and "Managing Your Hazardous Waste: A Guide for Small Businesses." Reducing the generation of hazardous waste in schools decreases disposal costs, helps protect the environment, and reduces the risk of human exposure.
Links to Detailed Guidance	Hazardous Waste and Your School#http://www.epa.gov/region1/assistance/schools/pdfs/mafact.pdf RCRA: Reducing Risk from Waste#http://www.epa.gov/epaoswer/general/risk/risk-1.pdf# Notification of Regulated Waste Activity (EPA Form 8700-12)#http://www.epa.gov/epaoswer/hazwaste/data/form8700/8700-12.pdf#

Subtopic	**Conditionally Exempt Small Quantity Generator (CESQG) Requirements**
Assessment Standard	**If the school is a CESQG, the school complies with the limited requirements applicable to a CESQG.**
Type of Std.	EPA Regulation -- 40 CFR, Part 262 **Priority:** 2
Guidance for Assessor	A school is considered a CESQG if it generate no more than 220 lbs. per month of hazardous waste from all sources. If CESQG, the generator is responsible for certain requirements: 1) Identify all hazardous waste; 2) Do not pour hazardous waste down the drain; 3) Comply with storage limits; and 4) Ensure proper treatment and disposal: (call the appropriate state agency to verify that the treatment, storage and disposal facility you have selected meets the requirements (permits, etc.).
Default Corr. Action	
Importance	Hazardous wastes are sometimes disposed of improperly by individuals pouring wastes down the drain, on the ground, into storm sewers, or putting them with the trash. The dangers of such disposal methods may not be immediately obvious, but hazardous waste have the potential to cause physical injury or illness to people who manage them; contaminate groundwater, the environment, septic tanks or wastewater treatment systems; and present hazards to children if left unattended. A waste is identified as hazardous if it exhibits any of the four hazardous waste characteristics (ignitability, corrosivity, reactivity, or toxicity). A waste is also identified as hazardous if it appears on any of the four lists of hazardous wastes developed by EPA. You may find that some mercury wastes are identified as hazardous by these regulations. If mercury levels in a waste exceed the Toxicity Characteristic Leach Test (TCLP) level of 0.2 mg/L for mercury, then the waste

is identified as a hazardous waste based on the toxicity characteristic. EPA assigns a separate unique mercury waste code based on the type of hazardous waste identified. A specific "D" waste code for a waste which exhibits the toxicity characteristic (TC) for mercury is D009. See 40 CFR 261.24.

Background

Hazardous wastes are required to be handled properly from cradle (creation) to grave (disposal). Individual programs or activities conducted at school may generate quantities of hazardous wastes that when added together, the school may still fall into a category required to obtain a site-specific EPA identification number and to comply with applicable federal or state hazardous waste regulations. The Resource Conservation and Recovery Act regulates facilities that generate, transport, treat, store, or dispose of hazardous waste. The more hazardous waste a school generates, the more regulations the school is subject to. States may impose additional hazardous waste requirements. Other federal agencies may also regulate various aspects of chemical management, including transportation. EPA's National Waste Minimization Partnership Program focuses on reducing or eliminating the generation of hazardous waste containing any of 30 Waste Minimization Priority Chemicals. The EPA has also published RCRA guides including, “RCRA Orientation Manual,” “RCRA: Reducing Risk from Waste.” and "Managing Your Hazardous Waste: A Guide for Small Businesses." Reducing the generation of hazardous waste in schools decreases disposal costs, helps protect the environment, and reduces the risk of human exposure.

Links to Detailed Guidance

Hazardous Waste and Your School#http://www.epa.gov/region1/assistance/schools/pdfs/mafact.pdf

RCRA: Reducing Risk from Waste#http://www.epa.gov/epaoswer/general/risk/risk-1.pdf#

Subtopic **Small Quantity Generator (SQG)/ Large Quantity Generator (LQG) requirements**

Assessment Standard

If the school is a Small- or Large Quantity Generator of hazardous waste, the school complies with more stringent requirements.

Type of Std. EPA Regulation -- 40 CFR, Part 262 **Priority:** 2

Guidance for Assessor

A school may become a small or large quantity generator of hazardous waste during a chemical cleanout. A school is considered an: 1) SQG if it generates between 220 and 2,200 lbs. of hazardous waste per month; or 2) LQG if it generates if it generates greater than 2,200 lbs of hazardous waste per month.

Default Corr. Action

Importance

Hazardous wastes are sometimes disposed of improperly by individuals pouring wastes down the drain, on the ground, into storm sewers, or putting them with the trash. The dangers of such disposal methods may not be immediately obvious, but certain types of household hazardous waste have the potential to cause physical injury to sanitation workers; contaminate septic tanks or wastewater treatment systems if poured down drains or toilets; and present hazards to children if left unattended. A waste is identified as hazardous if it exhibits any of the four hazardous waste characteristics (ignitability, corrosivity, reactivity, or toxicity). A waste is also identified as hazardous if it appears on any of the four lists of hazardous wastes developed by EPA. You may find that some mercury wastes are identified as hazardous by these regulations. If mercury levels in a waste exceed the Toxicity Characteristic Leach Test (TCLP) level of 0.2 mg/L for mercury, then the waste is identified as a hazardous waste based on the toxicity characteristic. EPA assigns a separate unique mercury waste code based on the type of hazardous waste identified. A specific "D" waste code for a waste which exhibits the toxicity characteristic (TC) for mercury is D009. See 40 CFR 261.24. If the school is a SQG or LQG, you are required to notify the state environmental department to obtain a site specific EPA ID # (EPA form 8700-12). When you notify the state you will be assigned a permanent site specific EPA identification number to use on all forms tracking the shipment of your wastes offsite. You may need more than one identification number if parts of the school generating hazardous waste are not on contiguous property – consult your state environmental agency. If your school is a LQG, you are required to submit a Biennial Report by March 1st of even numbered years covering generator activities for the previous year.

Background

Hazardous wastes are required to be handled properly from cradle (creation) to grave (disposal). Individual programs or activities conducted at school may generate quantities of hazardous wastes that when added together, the school may still fall into a category required to obtain a site-specific EPA identification number and to comply with applicable federal or state hazardous waste regulations. The Resource Conservation and Recovery Act regulates facilities that generate,

	transport, treat, store, or dispose of hazardous waste. The more hazardous waste a school generates, the more regulations the school is subject to. States may impose additional hazardous waste requirements. Other federal agencies may also regulate various aspects of chemical management, including transportation. EPA's National Waste Minimization Partnership Program focuses on reducing or eliminating the generation of hazardous waste containing any of 30 Waste Minimization Priority Chemicals. The EPA has also published RCRA guides including, “RCRA Orientation Manual,” “RCRA: Reducing Risk from Waste.” and "Managing Your Hazardous Waste: A Guide for Small Businesses." Reducing the generation of hazardous waste in schools decreases disposal costs, helps protect the environment, and reduces the risk of human exposure.
Links to Detailed Guidance	Hazardous Waste and Your School#http://www.epa.gov/region1/assistance/schools/pdfs/mafact.pdf RCRA: Reducing Risk from Waste#http://www.epa.gov/epaoswer/general/risk/risk-1.pdf#

Area/Topic **Central Office -- Indoor Air Quality**

Subtopic **IAQ Coordinator**

Assessment Standard	**School has an identified IAQ coordinator who maintains a file documenting IAQ activities.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review files for Indoor Air Quality records. Indoor air quality records may include: 1) the notification to all staff of the coordinator's responsibilities; 2) complaints and suggestions from staff, students, and parents; and 3) follow-up actions the coordinator has taken to resolve IAQ problems (e.g. requests for repairs, correspondence with administration, notification to parents).
Default Corr. Action	
Importance	Risk studies performed by EPA have consistently ranked indoor air pollution among the top five environmental risks to public health. Students are at greater risk because of the hours spent in school facilities and because children are especially susceptible to pollutants. Poor indoor air quality can increase long- and short-term health problems such as cough, eye irritation, headache, asthma episodes, and allergic reactions, and in rare cases, life threatening conditions such as severe asthma attacks, Legionnaire's disease or carbon monoxide poisoning can occur. Poor indoor air quality can also promote the spread of airborne infectious diseases such as tuberculosis, measles, staphylococcus infections, Legionella, and influenza. Maintaining good indoor air quality contributes to a favorable learning environment for students, performance of teachers and staff, and a sense of comfort, health, and well-being. These elements combine to assist a school in its core mission - educating children.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality. The first step in addressing indoor air quality issues is to identify a person (or persons) who will be responsible for addressing indoor air quality issues. The choice of an IAQ coordinator will depend on the organizational structure of your school system, and can be a person with other health and /or safety responsibilities. Responsibilities may be assigned as appropriate for the school, including, for example, delegating tasks to an existing health and safety committee.
Links to Detailed Guidance	EPA Tools for Schools Kit#http://www.epa.gov/iaq/schools/toolkit.html# EPA Tools for Schools Coordinator's Guide#http://www.epa.gov/iaq/schools/tfs/guidtoc.html Healthy School Environments Web Portal--IAQ#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=4#

Subtopic **Indoor Air Quality Profile**

Assessment Standard	**School has developed an indoor air quality profile based on a walkthrough assessment.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review files for IAQ building profile which should include information on the ventilation system (if school uses mechanical ventilation), pest control, moisture control, pollution control practices, and occupant-related activities.

Default Corr. Action	
Importance	Risk studies performed by EPA have consistently ranked indoor air pollution among the top five environmental risks to public health. Students are at greater risk because of the hours spent in school facilities and because children are especially susceptible to pollutants. Poor indoor air quality can increase long- and short-term health problems such as cough, eye irritation, headache, asthma episodes, and allergic reactions, and in rare cases, life threatening conditions such as severe asthma attacks, Legionnaire's disease or carbon monoxide poisoning can occur. Poor indoor air quality can also promote the spread of airborne infectious diseases such as tuberculosis, measles, staphylococcus infections, Legionella, and influenza. Maintaining good indoor air quality contributes to a favorable learning environment for students, performance of teachers and staff, and a sense of comfort, health, and well-being. These elements combine to assist a school in its core mission - educating children.
Background	The best way to develop an IAQ profile is to perform a walkthrough inspection of the school. This is not intended to be an intensive and detailed inspection, but rather a quick overview of the conditions that affect the quality of air within the school. It is helpful to have someone who is familiar with the operation of the building, such as a facility operator or custodian, conduct or assist in the inspection. During the walkthrough inspection, use the senses of sight, smell, feeling, and hearing to gain information on factors which affect indoor air quality. Observe the general level of cleanliness in classrooms and mechanical rooms. Look for pollutant sources such as mold, improperly stored chemicals, or excessively dirty air filters and ducts, and look for blocked airflows, such as those caused by books or papers on top of unit ventilators or plywood covering outdoor air intakes. Smell for unique or objectionable odors. Feel for uncomfortable air temperatures, drafts, and high or low humidity, and feel for air flowing into and out of grilles and air vents. Listen to the concerns of school occupants regarding IAQ. Do they provide clues to problems such as using their own pest spray to control pests, or turning off the unit ventilator because it is too noisy during class-time? Are there unusual equipment noises which may indicate potential problems? Also, perform a walkthrough inspection in all special-use areas, such as the cafeteria, art rooms, industrial arts areas, and science laboratories.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Kit#http://www.epa.gov/iaq/schools/toolkit.html# EPA Tools for Schools Coordinator's Guide#http://www.epa.gov/iaq/schools/tfs/guidtoc.html Healthy School Environments Web Portal--IAQ#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=4# IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf

Subtopic **Ventilation System**

Assessment Standard	**School has records of ventilation system inspections on file (if mechanical ventilation system present).**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review files for records of annual ventilation system inspections.		
Default Corr. Action			
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered		

	adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
Background	The main purposes of a Heating, Ventilation, and Air-Conditioning (HVAC) system are to help maintain good indoor air quality through adequate ventilation with filtration and provide thermal comfort. HVAC systems are among the largest energy consumers in schools. The choice and design of the HVAC system can also affect many other high performance goals, including water consumption (water cooled air conditioning equipment) and acoustics.
Links to Detailed Guidance	IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf IAQ Tools for Schools Ventilation Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklstbkgd.pdf IAQ Tools for Schools Kit#http://www.epa.gov/iaq/schools/toolkit.html# Healthy School Environments Web Portal--IAQ#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=4#

Subtopic	**Indoor Air Quality Management Plan**		
Assessment Standard	**School has an IAQ management plan.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review the Indoor Air Quality Management Plan to ensure it contains: 1) a statement of importance from the administration; 2) identification of an IAQ coordinator and delegation of the coordinator's responsibilities; 3) guidance on appropriate actions for correcting IAQ problems; 4) emergency response procedures for IAQ incidents; and 5) requirements for walkthrough inspections.		
Default Corr. Action			
Importance	Risk studies performed by EPA have consistently ranked indoor air pollution among the top five environmental risks to public health. Students are at greater risk because of the hours spent in school facilities and because children are especially susceptible to pollutants. Poor indoor air quality can increase long- and short-term health problems such as cough, eye irritation, headache, asthma episodes, and allergic reactions, and in rare cases, life threatening conditions such as severe asthma attacks, Legionnaire's disease or carbon monoxide poisoning can occur. Poor indoor air quality can also promote the spread of airborne infectious diseases such as tuberculosis, measles, staphylococcus infections, Legionella, and influenza. Maintaining good indoor air quality contributes to a favorable learning environment for students, performance of teachers and staff, and a sense of comfort, health, and well-being. These elements combine to assist a school in its core mission - educating children.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	EPA Tools for Schools Coordinator's Guide#http://www.epa.gov/iaq/schools/tfs/guidtoc.html EPA Tools for Schools Kit#http://www.epa.gov/iaq/schools/toolkit.html# Healthy School Environments Web Portal--IAQ#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=4#		

Area/Topic	**Central Office -- Mold/Moisture**
Subtopic	**Mold Prevention**
Assessment Standard	**No wet or damp areas.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect all areas for water stains, dampness or condensation, and wet spots. Dry them quickly (24-48 hours) to prevent mold growth.
Default Corr. Action	
Importance	Mold spores waft through the indoor and outdoor air continually and thrive in areas with excessive moisture or water accumulation. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Delayed maintenance or insufficient maintenance can exacerbate moisture problems. Molds produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Federal Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance for mold clean up and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.
Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html# EPA Mold Resources Page#http://www.epa.gov/iaq/molds/moldresources.html Minnesota Schools--Investigating and Remediating Mold#http://www.health.state.mn.us/divs/eh/indoorair/schools/mold.html# Healthy School Environments Web Portal - Mold and Moisture#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=31
Assessment Standard	**Indoor relative humidity is maintained below 60% (ideally between 30% and 50%, except in cold climates during freezing temperatures, when relative humidity levels between 20-30% are normal).**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Check the relative humidity.
Default Corr. Action	
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated

	with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.
Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html# Healthy School Environments Web Portal - Mold and Moisture#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=31 Minnesota Schools--Investigating and Remediating Mold#http://www.health.state.mn.us/divs/eh/indoorair/schools/mold.html#
Assessment Standard	**All school structures (including portable structures) are inspected for visible mold, moldy odors, moisture, stains or discoloration, and water leakage on a regular basis.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Review files for inspection reports and results.
Default Corr. Action	
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, toxins, and/or irritants that have the potential to cause health problems such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.

Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html# Healthy School Environments Web Portal - Mold and Moisture#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=31 Minnesota Schools--Investigating and Remediating Mold#http://www.health.state.mn.us/divs/eh/indoorair/schools/mold.html#

Subtopic	**Mold Containment and Clean-up**

Assessment Standard	**All moisture and mold problems have been investigated and evaluated.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Review files for mold investigation results and remediation plans.		
Default Corr. Action			
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.		
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.		
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Assessment Standard	**Communication with all building occupants occurs at each stage of the mold remediation process, as appropriate.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Review files for mold investigation results and remediation plans.		
Default Corr. Action			

Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, toxins, and/or irritants that have the potential to cause health problems such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.
Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html# Healthy School Environments Web Portal - Mold and Moisture#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=31 Minnesota Schools--Investigating and Remediating Mold#http://www.health.state.mn.us/divs/eh/indoorair/schools/mold.html# What Are Antimicrobial Pesticides?#http://www.epa.gov/oppad001/ad_info.htm
Assessment Standard	**If visible mold is present, a remediation plan has been developed.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Review files for mold investigation results and remediation plans.
Default Corr. Action	
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality.Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in

managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, “Managing Asthma in the School Environment,” also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, “Mold Remediation in Schools and Commercial Buildings.” The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.

Links to Detailed Guidance

Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#

Healthy School Environments Web Portal - Mold and Moisture#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=31

Minnesota Schools--Investigating and Remediating Mold#http://www.health.state.mn.us/divs/eh/indoorair/schools/mold.html#

What Are Antimicrobial Pesticides?#http://www.epa.gov/oppad001/ad_info.htm

Assessment Standard

If visible mold is present, a remediation plan has been implemented.

Type of Std. EPA Recommendation **Priority:** 2

Guidance for Assessor

Review files for mold investigation results and remediation plans.

Default Corr. Action

Importance

Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.

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Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#

Healthy School Environments Web Portal - Mold and Moisture#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=31

Minnesota Schools--Investigating and Remediating Mold#http://www.health.state.mn.us/divs/eh/indoorair/schools/mold.html#

What Are Antimicrobial Pesticides?#http://www.epa.gov/oppad001/ad_info.htm

Area/Topic **Central Office -- Non-hazardous Waste**

Subtopic **Food Waste**

Assessment Standard	**School has a program in place to minimize food waste from cafeteria food production.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview cafeteria personnel.
Default Corr. Action	
Importance	Food discards make up approximately 10 percent, by weight, of the total municipal waste stream. In 1997, of the 21.9 million tons of food waste generated in the United States, only 2.6 percent was recovered. Food waste generators such as schools may economically benefit from diverting their unwanted food to beneficial uses. More specifically, schools can potentially reduce purchase costs through waste prevention strategies, cut service costs by using fewer or smaller trash bins, reduce garbage bills by less frequent trash collection and receive discounts from the waste hauler for separate collections of organic material.
Background	More than one quarter of America's food, or about 96 billion pounds of food per year, is waste. A food waste reduction hierarchy - feeding people first, animals second, recycling third, and composting last - serves to show how productive use can be made of much of the excess food that is currently contributing to leachate and methane formation in landfills. The U.S. Environmental Protection Agency's Office of Solid Waste (OSW) regulates all solid waste, including food waste, under the Resource Conservation and Recovery Act (RCRA). Individual states adopt the federal standards and operate their own waste management programs. WasteWise is a free, voluntary, EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes. The program is flexible and allows participants to design waste reduction programs that are tailored to their specific needs. Using the WasteWise program, schools should be able to significantly reduce food waste.
Links to Detailed Guidance	California Integrated Waste Management Board#http://www.ciwmb.ca.gov/FoodWaste/# CA Integrated Waste Management Board--Waste Recovery#http://www.ciwmb.ca.gov/LGLibrary/Innovations/FoodWaste/# EPA WasteWise Program#http://www.epa.gov/wastewise/#

Subtopic **Recycling**

Assessment Standard	**School has recycling bins for: 1) plastic; 2) office paper/newspaper/cardboard; 3) aluminum/tin; and 4) glass.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Inspect the premises for recycling containers.
Default Corr. Action	
Importance	Recycling turns materials that would otherwise become waste into valuable resources and generates a host of environmental, financial, and social benefits. Recycling, including composting, diverted 68 million tons of material away from landfills and incinerators in 2001. Curbside recycling programs, along with drop-off and buy-back centers, resulted in a diversion of about 30 percent of the nation's solid waste in 2001. Teaching children to recycle will ultimately help conserve resources for their future.
Background	Recycling involves collecting recyclable materials that would otherwise be considered waste, sorting and processing recyclables into raw materials such as fibers, and manufacturing raw materials into new products. WasteWise is a free, voluntary, EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes. The program is flexible and allows participants to design waste reduction programs that are tailored to their specific

needs. Using the WasteWise program, schools should be able to significantly reduce non-hazardous waste.

Links to Detailed Guidance

Municipal solid waste - recycling#http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm#

EPA's WasteWise Program#http://www.epa.gov/wastewise/wrr/recycle.htm#

Reuse + Recycling = Waste Reduction: A Guide for Schools and Groups#http://www.epa.gov/osw/students/school.pdf#

Assessment Standard

School purchases supplies and equipment made with recycled content materials (e.g. paper products, engine oil, paints).

Type of Std. EPA Recommendation **Priority:** 4

Guidance for Assessor

Interview school personnel.

Default Corr. Action

Importance

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Links to Detailed Guidance

Municipal solid waste - recycling#http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm#

EPA's WasteWise Program#http://www.epa.gov/wastewise/wrr/recycle.htm#

Healthy School Environments Web Portal--Recycling#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=43&s_id=46

Reuse + Recycling = Waste Reduction: A Guide for Schools and Groups#http://www.epa.gov/osw/students/school.pdf#

Subtopic **Waste Reduction**

Assessment Standard

School has implemented a waste education program, such as EPA's Waste Wise Program.

Type of Std. EPA Recommendation **Priority:** 4

Guidance for Assessor

Interview school personnel responsible for waste management.

Default Corr. Action

Importance

Improper storage and disposal of non-hazardous waste, referred to as municipal solid waste, can cause unsanitary conditions and increase pest populations feeding on the waste. By providing adequate disposal containers and encouraging staff and students to dispose waste properly, a healthy school environment can be maintained. Schools should also use municipal solid waste management practices such as source reduction, recycling, and composting to prevent or divert materials from the waste stream.

Background

Nearly everything we do leaves behind some kind of waste. Schools generate ordinary garbage, also known as non-hazardous or municipal solid waste (MSW). Several MSW management

	practices, such as source reduction, recycling, and composting, prevent or divert materials from the wastestream. The U.S. Environmental Protection Agency's Office of Solid Waste (OSW) regulates all solid waste under the Resource Conservation and Recovery Act (RCRA). The objectives of RCRA are to protect the public from the hazards of waste disposal, conserve energy and natural resources by recycling and recovery, reduce or eliminate waste, and clean up waste which may have been improperly disposed of. Individual states adopt the federal standards and operate their own waste management programs. WasteWise is a free, voluntary, EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes. The program is flexible and allows participants to design waste reduction programs that are tailored to their specific needs. Using the WasteWise program, schools should be able to significantly reduce non-hazardous waste.
Links to Detailed Guidance	Municipal solid waste - recycling#http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm# EPA's WasteWise Program#http://www.epa.gov/wastewise/wrr/recycle.htm# Reuse + Recycling = Waste Reduction: A Guide for Schools and Groups#http://www.epa.gov/osw/students/school.pdf# Healthy School Environments Web Portal--Recycling#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=43&s_id=46

Area/Topic **Central Office -- Outdoor Air Pollution**

Subtopic **Air Quality Index Advisories**

Assessment Standard	**School has procedures in place for responding to Air Quality Index advisories.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review files for Air Quality Index advisory procedures.		
Default Corr. Action			
Importance	Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country. Ozone, also known as smog, can irritate the respiratory system, causing coughing, irritation in your throat or a burning sensation in the airways. It can reduce lung function, causing feelings of chest tightness, wheezing, or shortness of breath. Ozone can aggravate asthma and trigger asthma attacks. Children, who are more likely to be active outdoors, and people with asthma are the groups at greatest risk from ground-level ozone. Particle pollution, also known as particulate matter, is composed of microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. When exposed to these small particles, children with lung diseases, such as asthma, are more at risk of hospital and emergency room visits. Even healthy children may experience temporary symptoms from exposure to elevated levels of particles. Symptoms may include: irritation of the eyes, nose and throat; coughing; phlegm; chest tightness; and shortness of breath. Children may be exposed to very high levels of particle pollution during wildfire/smoke events.		
Background	The Air Quality Index, or AQI, is a nationally uniform index for reporting and forecasting daily air quality. It is used to report the five most common ambient air pollutants that are regulated under the Clean Air Act: ground-level ozone, particle pollution, carbon monoxide, sulfur dioxide, and nitrogen dioxide, although the two pollutants most frequently reported are ozone and particle pollution. The AQI tells the public how clean or polluted the air is and how to avoid potential associated health effects. AQI is forecasted and reported by State and local air agencies. These are the agencies that will communicate air quality advisories to the school district. However, both forecasts and real-time AQI reports can be found on the AIRNow Website (http://www.airnow.gov).		
Links to Detailed Guidance	EPA AIRNow Program#http://www.airnow.gov/#		

Subtopic **School Bus Idling**

Assessment Standard	**School has an anti-idling policy on file.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review files.		
Default Corr. Action			
Importance	Buses idling at schools can produce concentrated diesel exhaust emissions both outside and inside school buses and school buildings. Diesel exhaust contains significant levels of small particles, known as fine particulate matter. Fine particles in the air pose a significant health risk because they can cause lung damage, premature death, and aggravation of respiratory conditions such as asthma. Diesel particulate matter has also been identified as a likely cause of cancer. The soot and gases emitted by diesel buses are associated with acute eye, throat, and bronchial irritation; exacerbation of asthma and allergenic responses; and potential interference with proper lung growth and development in children. In addition to impacting human health, diesel exhaust also harms the environment by contributing to ozone formation (smog) and acid rain. An anti-idling policy can protect the health of staff and students by reducing the levels of fine particulate matter in and around school buildings.		

Background	School buses are the safest way for children to get to school. However, pollution from diesel vehicles has health implications for everyone, especially children. Efforts should be taken to reduce pollution from public school buses to ensure that buses are a healthy way for children to get to school. EPA is working aggressively to reduce pollution from new heavy-duty diesel trucks and buses by requiring them to meet more stringent emission standards in the future. The most recent set of standards took effect in 2004. A set of even more stringent standards will take effect in 2007. At that time, new heavy-duty vehicles will be up to 95 percent cleaner than today's vehicles. Clean School Bus USA is a public-private environmental partnership that seeks to reduce children's exposure to air pollution from diesel school buses. The program emphasizes three ways to reduce public school bus emissions through anti-idling strategies, engine retrofit and clean fuels as well as bus replacement. The goal of Clean School Bus USA is to reduce both children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses, thus providing health benefits to children and improving air quality and the environment.		
Links to Detailed Guidance	EPA Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample		
Assessment Standard	**Signs are posted stating that all vehicles are prohibited from idling on school premises.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect premises for posted signs that prohibit idling.		
Default Corr. Action			
Importance	Buses idling at schools can produce concentrated diesel exhaust emissions both outside and inside school buses and school buildings. Diesel exhaust contains significant levels of small particles, known as fine particulate matter. Fine particles in the air pose a significant health risk because they can cause lung damage, premature death, and aggravation of respiratory conditions such as asthma. Diesel particulate matter has also been identified as a likely cause of cancer. The soot and gases emitted by diesel buses are associated with acute eye, throat, and bronchial irritation; exacerbation of asthma and allergenic responses; and potential interference with proper lung growth and development in children. In addition to impacting human health, diesel exhaust also harms the environment by contributing to ozone formation (smog) and acid rain. An anti-idling policy can protect the health of staff and students by reducing the levels of fine particulate matter in and around school buildings.		
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Links to Detailed Guidance	EPA Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample		
Assessment Standard	**School bus schedules are designed to minimize school bus caravanning.**		
Type of Std.	EPA Recommendation	**Priority:**	4

Guidance for Assessor	Review school bus schedules and interview the principal.
Default Corr. Action	
Importance	Buses idling at schools can produce concentrated diesel exhaust emissions both outside and inside school buses and school buildings. Diesel exhaust contains significant levels of small particles, known as fine particulate matter. Fine particles in the air pose a significant health risk because they can cause lung damage, premature death, and aggravation of respiratory conditions such as asthma. Diesel particulate matter has also been identified as a likely cause of cancer. The soot and gases emitted by diesel buses are associated with acute eye, throat, and bronchial irritation; exacerbation of asthma and allergenic responses; and potential interference with proper lung growth and development in children. In addition to impacting human health, diesel exhaust also harms the environment by contributing to ozone formation (smog) and acid rain. An anti-idling policy can protect the health of staff and students by reducing the levels of fine particulate matter in and around school buildings.
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Links to Detailed Guidance	EPA Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample

Subtopic **Refrigeration and Air-Conditioning**

Assessment Standard	**Refrigerant Inventory conducted to determine if the school's refrigeration equipment uses regulated ozone-depleting refrigerant.**
Type of Std.	EPA Regulation -- 40 CFR, Part 82 **Priority:** 4
Guidance for Assessor	Interview the school HVAC or maintenance personnel. Review service records of outside service technicians or contractors. Review refrigerant purchase records. HVAC equipment may use HCFC refrigerant (commonly referred to as R-22 or by the tradename FREON-22). Other refrigeration related products owned or operated by the school (for example, cafeteria refrigerators or freezers, water coolers, drinking fountains, and laboratory equipment) may rely on ozone-depleting HCFC or CFC refrigerant (commonly referred to as R-12 or by the tradename FREON-12).
Default Corr. Action	
Importance	Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are nontoxic, nonflammable chemicals that were, and in some cases continue to be, used in the manufacture of aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. However, upon discovery that these substances deplete the ozone layer, the manufacture of these ozone-depleting substances (ODSs) has been scheduled for phaseout. The phase out on the manufacture of these ODSs is expected to have direct health benefits over the next century, including reduced incidence of skin cancer and cataracts, decreased risks to human immune systems, and increased protection of plant and animal life from excessive UV exposure. Proper maintenance of equipment containing CFC and HCFC refrigerants is important to reduce emissions and subsequent depletion of the ozone layer. A reduction in emissions will reduce potential health effects to humans.

Background	EPA regulations issued under the Clean Air Act are aimed at reducing use and emissions of ODSs. Schools can do their part by creating an inventory of their equipment that uses ozone-depleting refrigerants. This effort will assist the school in tracking their refrigerant usage and assist them in maintaining their air-conditioning and refrigeration equipment. Schools can also make certain that any procurement of new equipment is limited to those that use EPA-approved refrigerant substitutes. In doing so, students and staff reduce health risks, help protect the ozone layer, stimulate new technology, save energy, and prevent pollution.
Links to Detailed Guidance	Summary of EPA Refrigerant Regulations#http://epa.gov/ozone/title6/608/608fact.html# CFCs and the Process of Ozone Depletion#http://www.epa.gov/ozone/science/process.html# Summary of EPA-Approved Substitute Refrigerants#http://www.epa.gov/ozone/snap/refrigerants/lists/index.html#
Assessment Standard	**School's air-conditioning or refrigeration systems contain LESS THAN a fifty-pound charge of CFC or HCFC refrigerant.**
Type of Std.	EPA Regulation -- 40 CFR, Part 82 **Priority:** 3
Guidance for Assessor	Develop an inventory of equipment that lists the type of refrigerant and weight of the refrigerant charge as specified by the equipment manufacturer.
Default Corr. Action	
Importance	Chlorofluorocarbons (CFCs) and hydrofluorocarbons (HCFCs) are nontoxic, nonflammable chemicals that were, and in some cases continue to be, used in the manufacture of aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. However, upon discovery that these substances deplete the ozone layer, the manufacture of these ozone-depleting substances (ODSs) has been scheduled for phaseout. The phase out on the manufacture of these ODSs is expected to have direct health benefits over the next century, including reduced incidence of skin cancer and cataracts, decreased risks to human immune systems, and increased protection of plant and animal life from excessive UV exposure. Proper maintenance of equipment containing CFC and HCFC refrigerants is important to reduce emissions and subsequent depletion of the ozone layer. A reduction in emissions will reduce potential health effects to humans.
Background	EPA regulations issued under the Clean Air Act are aimed at reducing use and emissions of ODS. EPA regulations mandate the repair or replacement of air-conditioning equipment (with an ODS refrigerant charge greater than 50 pounds) that leaks more than 15% or its refrigerant charge during a consecutive 12-month period. EPA regulations also mandate the repair or replacement of refrigeration equipment (with an ODS refrigerant charge greater than 50 pounds) that leaks more than 35% or its refrigerant charge during a consecutive 12-month period. Replacement of existing equipment is limited to equipment that uses an EPA-approved refrigerant substitute that is less damaging to the ozone layer.
Links to Detailed Guidance	Summary of EPA Refrigerant Regulations#http://epa.gov/ozone/title6/608/608fact.html# Summary of EPA Leak Repair Requirements for Comfort Cooling Chillers#http://epa.gov/ozone/title6/608/leak.html# Things to Consider When Purchasing New Air-conditioning Equipment#http://epa.gov/ozone/title6/phaseout/22phaseout.html#
Assessment Standard	**If school personnel perform any type of repair, service, or maintenance on any air conditioning or refrigeration equipment, personnel are properly certified as a section 608 EPA-approved technician.**
Type of Std.	EPA Regulation -- 40 CFR, Part 82 **Priority:** 3
Guidance for Assessor	Interview all service personnel to make certain that they are properly certified as an EPA Section 608 technician. Copies of all certifications must be filed and readily available. Make certain that service personnel have access to and properly use EPA-approved refrigerant recovery equipment. If school personnel perform maintenance, service, or repair make certain that the school certifies with their EPA regional office that they have access to and will properly use EPA-approved

	refrigerant recovery equipment.
Default Corr. Action	
Importance	Chlorofluorocarbons (CFCs) and hydrofluorocarbons (HCFCs) are nontoxic, nonflammable chemicals that were, and in some cases continue to be, used in the manufacture of aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. However, upon discovery that these substances deplete the ozone layer, the manufacture of these ozone-depleting substances (ODSs) has been scheduled for phaseout. The phase out on the manufacture of these ODSs is expected to have direct health benefits over the next century, including reduced incidence of skin cancer and cataracts, decreased risks to human immune systems, and increased protection of plant and animal life from excessive UV exposure. Proper maintenance of equipment containing CFC and HCFC refrigerants is important to reduce emissions and subsequent depletion of the ozone layer. A reduction in emissions will reduce potential health effects to humans.
Background	EPA regulations issued under the Clean Air Act are aimed at reducing use and emissions of ODS. Schools can do their part by making certain that their service personnel are EPA-certified to maintain, service, or repair refrigeration and air-conditioning equipment. Technician certification ensures that service personnel are aware of the environmental and health consequences of improper refrigerant handling. Schools using in-house employees to service equipment must also make certain that their employees obtain and properly use EPA-certified refrigerant recovery equipment. EPA requires that schools performing service with their own employees certify with their EPA regional office that they have obtained and are properly using certified refrigerant recovery equipment. The proper use of such equipment will make certain that refrigerant releases are minimized during maintenance, service, and repair.
Links to Detailed Guidance	Summary of EPA Refrigerant Regulations#http://epa.gov/ozone/title6/608/608fact.html# Electronic Copy of Certification Form for Owners of Refrigerant Recovery Equipment#http://www.epa.gov/ozone/title6/608/recoveryform.pdf# Listing of EPA-Approved Technician Certification Training Programs#http://www.epa.gov/ozone/title6/608/technicians/608certs.html#

Area/Topic **Central Office -- Pest Control**

Subtopic **Integrated Pest Management Plan**

Assessment Standard	**School is implementing an integrated pest management plan.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Review the integrated pest management plan to ensure it contains: 1) structural and operational actions to inhibit pests; 2) the contractor's means for monitoring pest populations in and around the building; 3) the names of proposed primary pesticides (accepted common name and generic name) and alternatives approved by EPA; 4) the method of proposed pesticide application, storage and disposal; 5) the rationale for each type of use; and 6) the proposed trapping devices for rodents, if any.
Default Corr. Action	
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.
Background	Pesticides are powerful tools for controlling pests. However, pesticides need to be used carefully and judiciously, especially when used in sensitive areas where children are present. Children are more sensitive than adults to pesticides. Young children can have greater exposure to pesticides from crawling, exploring, or other hand-to-mouth activities. Put simply, integrated pest management (IPM) is a safer, and usually less costly option for effective pest management in a school community. A school IPM program uses common sense strategies to reduce sources of food, water and shelter for pests in your school buildings and grounds. An IPM program takes advantage of all pest management strategies, including the judicious and careful use of pesticides when necessary. Since children spend so much of their day at school, integrated pest management provides an opportunity to create a safer learning environment - - to reduce children's exposure to pesticides as well as eliminate pests. EPA is encouraging school officials to adopt IPM practices to reduce children's exposure to pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use of pesticides. The Integrated Pest Management (IPM) approach is a safer and usually less costly option for effective pest management in the school community.
Links to Detailed Guidance	EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# School IPM#http://schoolipm.ifas.ufl.edu/# IPM Institute of North America#http://www.ipminstitute.org/school.htm#

Subtopic **Pesticide Use**

Assessment Standard	**School provides notification of their pest control policies, methods of application, and requirements for posting and pre-notification to parents and school employees.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review files for copies of pesticide notification.

Default Corr. Action	
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Pesticides may be in use in many areas of the school, including classrooms, cafeterias and food preparation areas, and on school grounds. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.
Background	The term pesticide refers not only to insecticides, but also to herbicides, fungicides, and various other substances used to control pests. Pesticides are used both indoors and outdoors and are generally recognized by their advertised brand names. Examples include disinfectants and sanitizers, fungicides, fumigants, herbicides, insecticides, microbials, repellents, and rodenticides. Pesticides pose risks to human health and the environment when people do not follow directions on product labels or if they use products irresponsibly. For example, people might use pesticides when they are not really needed, apply too much, or apply or dispose of them in a manner that could contaminate water or harm wildlife. Even alternative or organic pesticides can have these unintended consequences if not used correctly. EPA regulates the use of pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the basis for regulation, sale, distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides.
Links to Detailed Guidance	Pesticides: Controlling Pests#http://www.epa.gov/pesticides/controlling/index.htm# EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# School IPM#http://schoolipm.ifas.ufl.edu/# IPM Institute of North America#http://www.ipminstitute.org/school.htm# What Are Antimicrobial Pesticides?#http://www.epa.gov/oppad001/ad_info.htm
Assessment Standard	**School maintains annual summaries of pesticide applications, copies of pesticide labels, copies of notices, and MSDSs in an accessible location.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review files for information pertaining to pesticides.
Default Corr. Action	
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Pesticides may be in use in many areas of the school, including classrooms, cafeterias and food preparation areas, and on school grounds. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.
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	distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use of pesticides. The Integrated Pest Management (IPM) is a safer and usually less costly option for effective pest management in the school community.
Links to Detailed Guidance	Pesticides: Controlling Pests#http://www.epa.gov/pesticides/controlling/index.htm# EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# School IPM#http://schoolipm.ifas.ufl.edu/# IPM Institute of North America#http://www.ipminstitute.org/school.htm# What Are Antimicrobial Pesticides?#http://www.epa.gov/oppad001/ad_info.htm
Assessment Standard	**Children are prohibited from entering the pesticide area for at least 8 hours following the application or longer, if feasible, or if required by the pesticide label.**
Type of Std.	EPA Recommendation--See pesticide label for specific requirements. **Priority:** 2
Guidance for Assessor	Review the school's policy/procedures for pesticide application.
Default Corr. Action	
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Pesticides may be in use in many areas of the school, including classrooms, cafeterias and food preparation areas, and on school grounds. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.
Background	The term pesticide refers not only to insecticides, but also to herbicides, fungicides, and various other substances used to control pests. Pesticides are used both indoors and outdoors and are generally recognized by their advertised brand names. Examples include disinfectants and sanitizers, fungicides, fumigants, herbicides, insecticides, microbials, repellents, and rodenticides. Children may be especially sensitive to health risks posed by pesticides. EPA regulates the use of pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the basis for regulation, sale, distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use of pesticides. The Integrated Pest Management (IPM) is a safer and usually less costly option for effective pest management in the school community.

Links to Detailed Guidance	Pesticides: Controlling Pests#http://www.epa.gov/pesticides/controlling/index.htm# EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# School IPM#http://schoolipm.ifas.ufl.edu/# IPM Institute of North America#http://www.ipminstitute.org/school.htm# What Are Antimicrobial Pesticides?#http://www.epa.gov/oppad001/ad_info.htm

Area/Topic **Central Office -- Ultraviolet Radiation**

Subtopic **SunWise**

Assessment Standard	**School uses the SunWise program or otherwise follows CDC's Guidelines for School Programs to Prevent Skin Cancer.**		
Type of Std.	EPA Recommendation; CDC Recommendation	**Priority:**	4
Guidance for Assessor	Interview school administrators.		
Default Corr. Action			
Importance	Overexposure to the sun's ultraviolet (UV) radiation can cause immediate and long term adverse health effects such as sunburn, skin cancer, eye damage and cataracts, and immune system suppression. UV radiation is classified as a human carcinogen. Skin cancer is the most common type of cancer in the United States. One American dies every hour from skin cancer. Teaching students about ozone depletion, UV radiation, and sun protection methods through the SunWise program will help them establish safe sun exposure practices. SunWise also provides schools with suggestions for infrastructure enhancements (e.g., sun-safe policies and shade structures.)		
Background	To help educators raise sun safety awareness, the U.S. Environmental Protection Agency (EPA) has developed the SunWise School Program for grades K-8. SunWise Partner Schools receive a free tool kit with standards-based, cross-curricular classroom activities that raise children's awareness of stratospheric ozone depletion, UV radiation, and simple sun safety practices; a UV-sensitive frisbee for hands-on experiments; policy guidance for sun-safe school policies and shade structures; story and activity books, posters, and more. Through this program, children will learn the dangers of overexposure to ultraviolet radiation and how to protect themselves from it.		
Links to Detailed Guidance	SunWise School Program#http://www.epa.gov/sunwise/# SunWise Action Steps#http://www.epa.gov/sunwise/actionsteps.html# School Health Guidelines-Skin Cancer#http://www.cdc.gov/healthyyouth/skincancer/index.htm		

Area/Topic **Central Office -- Water**

Subtopic **Drinking Water Quality**

Assessment Standard	**Drinking water source is protected if school acquires drinking water from its own well.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Conduct routine Source Water Assessments, inspect area around the facility and identify any surrounding activities that might have an adverse effect on the quality of the water.		
Default Corr. Action			
Importance	A source water assessment is a study and report, unique to each water system, that provides basic information about the water used to provide drinking water. Assessments identify the major potential sources of contamination to drinking water supplies. This information is used to determine how susceptible the water system is to contamination. Potential contamination may results in contaminants that may cause both acute and chronic health threats.		
Background	Your state may have already conducted an assessment for you and can provide the information collected to you for review. If an assessment has not been conducted, ask your state for assistance. A source water assessment includes: delineating (or mapping) the source water assessment area, conducting an inventory of potential sources of contamination in the delineated area, and determining the susceptibility of the water supply to those contamination sources.		
Links to Detailed Guidance	Source Water Protection#http://cfpub.epa.gov/safewater/sourcewater/#..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc#_Hlk181004281 1,1520,1587,0,,Source Water Protection#http://c		

Assessment Standard	**No pathways exist for drinking water contamination or unintentional water loss.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Routinely inspect water pipes to ensure adequate maintenance, leaking pipes can provide an entry way for water contaminants. In addition, leaking pipes can contribute significantly to needless water loss and expense as well as to mold problems.		
Default Corr. Action			
Importance	Leaks in plumbing may constitute a public health risk. These pathways provide an opportunity for contamination of drinking water which may result in the spread of disease. The problem is a dynamic one, because piping systems are continually being installed, altered, or extended. In addition, fixing leaking pipes will reduce the amount of water loss and promote water conservation. Water conservation is an integral part of watershed protection, particularly in arid and drought-stricken areas.		
Background	Leaks in plumbing provide an opportunity for pathogens to enter your water supply. Pathogens are usually associated with gastrointestinal illness and, in extreme cases, death. Pathogens include: viruses, bacteria, parasites, protozoa and cysts. Efficient water use helps to reduce the need for costly water supply and wastewater treatment facilities, helps maintain stream flows and healthy aquatic habitats, and reduces the energy used to pump, heat and treat water.		
Links to Detailed Guidance	Ground Water and Drinking Water--Cross-Connection Control Manual#http://www.epa.gov/safewater/crossconnection.html# EPA Water Use Efficiency Program#http://www.epa.gov/owm/water-efficiency/index.htm#		
Assessment Standard	**On-site drinking water storage is protected from contamination.**		

Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Conduct routine physical inspections of the storage tank to ensure good maintenance and avoid water contaminants. Conduct routine inspections of the water stored to ensure it has not been contaminated while being stored in the tank.		
Default Corr. Action			
Importance	Water can become re-contaminated by pathogens in poorly maintained storage tanks. Pathogens are usually associated with gastrointestinal illness and, in extreme cases, death. Pathogens include: viruses, bacteria, parasites, protozoa and cysts.		
Background			
Links to Detailed Guidance	List of Drinking Water Contaminants and MCLs#http://www.epa.gov/safewater/mcl.html#micro Microbials and Disinfection By-Products#http://www.epa.gov/safewater/mdbp.html#		

Subtopic **Water Efficiency**

Assessment Standard	**School has conducted a water audit to determine its water usage.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review files for results of water audits.		
Default Corr. Action			
Importance	Efficient water use can have major environmental, public health and economic benefits by helping to improve water quality, maintain aquatic ecosystems and protect drinking water sources. Schools in the United States annually use from 1-3 million gallons of water each. By implementing modest efficiency schools can save between 25-75 % of their water use. Efficient use of water, through behavioral, operational or equipment changes can help conserve water supplies and reduce pollution of our fresh water sources.		
Background	Water is essential for life and plays a vital role in the proper functioning of the Earth's ecosystems. More than 97 percent of the Earth's water is the saltwater in oceans and salt lakes; another 2.0 percent is in icecaps/glaciers. Fresh water in lakes, streams and rivers is very limited and makes up less than 0.01 percent of the Earth's water, ground water makes up another 0.6 percent. In the United States over 250 million people depend on this freshwater. Pollution of water has a serious impact on all living creatures, and can negatively affect the use of water for drinking, recreation, transportation and commerce. EPA enforces federal clean water and safe drinking water laws, provides support for municipal water and wastewater treatment plants, encourages water efficiency and takes part in pollution prevention efforts aimed at protecting watersheds and sources of drinking water.		
Links to Detailed Guidance	EPA Water Use Efficiency Program#http://www.epa.gov/owm/water-efficiency/index.htm#		
Assessment Standard	**All building systems (e.g. chillers, Cooling towers, boilers, plumbing fixtures, cafeteria equipment) are operating efficiently (based on the results from the water audit).**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Interview maintenance personnel.		
Default Corr. Action			

Importance	Efficient water use can have major environmental, public health and economic benefits by helping to improve water quality, maintain aquatic ecosystems and protect drinking water sources. Schools in the United States annually use from 1-3 million gallons of water each. By implementing modest efficiency schools can save between 25-75 % of their water use. Efficient use of water, through behavioral, operational or equipment changes can help conserve water supplies and reduce pollution of our fresh water sources.
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Links to Detailed Guidance	EPA Water Use Efficiency Program#http://www.epa.gov/owm/water-efficiency/index.htm#
Assessment Standard	**All water-using equipment is checked regularly for leaks to prevent damage to building structure and mold formation.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview maintenance personnel.
Default Corr. Action	
Importance	Efficient water use can have major environmental, public health and economic benefits by helping to improve water quality, maintain aquatic ecosystems and protect drinking water sources. Schools in the United States annually use from 1-3 million gallon of water each. By implementing modest efficiency schools can save between 25-75 % of their water use. Efficient use of water, through behavioral, operational or equipment changes can help conserve water supplies and reduce pollution of our fresh water sources.
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Links to Detailed Guidance	EPA Water Use Efficiency Program#http://www.epa.gov/owm/water-efficiency/index.htm#
Assessment Standard	**Water-using equipment that is purchased is in the top 25% of efficiency.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview school personnel responsible for water use or purchasing equipment use.

Default Corr. Action	
Importance	Efficient water use can have major environmental, public health and economic benefits by helping to improve water quality, maintain aquatic ecosystems and protect drinking water sources. Schools in the United States annually use from 1-3 million gallon of water each. By implementing modest efficiency schools can save between 25-75 % of their water use. Efficient use of water, through behavioral, operational or equipment changes can help conserve water supplies and reduce pollution of our fresh water sources.
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Links to Detailed Guidance	EPA Water Use Efficiency Program#http://www.epa.gov/owm/water-efficiency/index.htm#

Subtopic **Waste Water**

Assessment Standard	**School prohibits the dumping of gasoline, oil, chemicals, and lawn and garden pesticides down the drain, into surface water, onto the ground, or in the trash.**		
Type of Std.	EPA Regulatory requirements may apply.	**Priority:**	2
Guidance for Assessor	Review the school’s hazardous waste disposal guidelines.		
Default Corr. Action			
Importance	Municipal wastewater consists primarily of domestic and industrial wastewater from manufacturing and commercial activities. Both types of wastewater are collected in sanitary sewers, and are usually treated at a municipal wastewater treatment plant. After treatment, the wastewater is discharged to its receiving water (e.g., a river, an estuary, or an ocean). Wastewater entering a treatment plant may contain organic pollutants (including raw sewage), metals, nutrients, sediment, bacteria, and viruses. Toxic substances such as motor oil, paint, cleaners, and pesticides also make their way into sanitary sewers. The Clean Water Act requires that all point source wastewater dischargers obtain and comply with an NPDES permit. Schools typically have sinks and drains that are connected to a publicly owned treatment works (POTW). Discharges to a POTW are regulated under the CWA. Schools must determine if the POTW allows drain disposal of paints, inks, or other chemicals. If the school discharges to a septic tank system, no chemicals should be disposed down the drain. Management and disposal of spent solvents and other waste materials may be regulated under RCRA hazardous waste regulations. It is the school's responsibility to make this determination. Schools must ensure that RCRA hazardous waste is safely accumulated and transported off-site for proper disposal. Depending on the quantity of waste generated by a school, additional requirements for storage, handling and emergency response may apply. Schools should consult the MSDSs for these materials and should consider replacing those that are regulated under RCRA with less hazardous or toxic substitutes if possible.		
Background	Metals, organic pollutants, sediment, bacteria and viruses may all be found in wastewater. As a result, untreated wastewater can cause serious harm to the environment and threaten human life. EPA regulates the discharge and treatment of wastewater under the Clean Water Act. The National Pollutant Discharge Elimination System (NPDES) issues permits to all wastewater dischargers and treatment facilities. These permits establish specific discharge limits, monitoring and reporting requirements and may also require these facilities to undertake special measures to protect the environment from harmful pollutants. The United States Environmental Protection Agency’s Office of Wastewater Management (OWM) oversees a range of programs contributing to the well-being of		

	the nation's waters and watersheds. OWM programs include the direction of the NPDES Permit Program, oversight of the National Pretreatment Program, and enhancement of the Agency's biosolids (sewage sludge) management program. By obtaining an NPDES permit, schools ensure that discharges to receiving waters are not harmful to human health and the environment.
Links to Detailed Guidance	National Pollutant Discharge Elimination System (NPDES)#http://cfpub.epa.gov/npdes/index.cfm# EPA Topics: Wastewater#http://www.epa.gov/ebtpages/watewastewater.html# Wastewater Primer#http://www.epa.gov/owm/primer.pdf#

Area/Topic	**Central Office -- Safety and Health Policies**
Subtopic	**Policies**
Assessment Standard	**School has written policies that address the eight components of the Coordinated School Health Program.**
Type of Std.	CDC Recommendations **Priority:** 3
Guidance for Assessor	Review files for policies. Policies should include: 1) School Health and Safety Policies and Environment; 2) Health Education; 3) Physical Education and Other Physical Activity Programs; 4) Nutrition Services; 5) School Health Services; 6) School Counseling, Psychological, and Social Services; 7) Health Promotion for Staff; and 8) Family and Community Involvement.
Default Corr. Action	
Importance	Promoting healthy and safe behaviors among students is an important part of the fundamental mission of schools, which is to provide young people with the knowledge and skills they need to become healthy and productive adults. Improving student health and safety can increase students' capacity to learn, reduce absenteeism, and improve physical fitness and mental alertness. The School Health Index (SHI) Self-Assessment & Planning Guide was developed by CDC in partnership with school administrators and staff, school health experts, parents, and national nongovernmental health and education agencies for the purpose of: 1) Enabling schools to identify strengths and weaknesses of health and safety policies and programs, 2) Enabling schools to develop an action plan for improving student health, which can be incorporated into the School Improvement Plan, and 3) Engaging teachers, parents, students, and the community in promoting health-enhancing behaviors and better health. There is growing recognition of the relationship between health and academic performance, and your school's results from using the SHI can help you include health promotion activities in your overall School Improvement Plan.
Background	In order to help develop written school health and safety policies addressing the eight components of a coordinated school health program, schools can use CDC's School Health Index: A Self-Assessment and Planning Guide (SHI). A team made up of representatives from different groups within the school—parents, teachers, students, administrators, other staff members, and concerned community members—completes eight self-assessment modules. Responses to the items are scored to help identify the school's strengths and weaknesses. The School Health Index includes a Planning for Improvement section to help schools develop and action plan for improving student health. With the growing recognition of the relationship between health and academic performance, completing the School Health Index can become one of your school's important Leave No Child Behind educational reform activities. In order to establish an overall policy framework for school health programs, schools can also use Fit, Healthy, and Ready to Learn: A School Health Policy Guide produced by the National Association of State Boards of Education (NASBE). The document is organized around sample policies that reflect best practice, which can be adapted to fit local circumstances.
Links to Detailed Guidance	CDC School Health Index#http://www.cdc.gov/HealthyYouth/SHI Fit, Healthy, and Ready to Learn: A School Health Policy Guide#http://www.nasbe.org/HealthySchools/fithealthy.html

Area/Topic **Central Office -- Safety and Security**

Subtopic **Emergency Response and Crisis Management**

Assessment Standard **School has crisis management plans in place addressing: 1) preparedness, 2) prevention and mitigation, 3) response, and 4) recovery.**

Type of Std. Department of Education Recommendations **Priority:** 3

Guidance for Assessor Review files for plans.

Default Corr. Action

Importance Natural disasters such as floods, earthquakes, fires, and tornadoes can strike a community with little or no warning. School shootings, threatened or actual, are extremely rare but are horrific and chilling when they occur. The harrowing events of September 11 and subsequent anthrax scares have ushered in a new age of terrorism. Communities across the country are struggling to understand and avert acts of terror. Children and youth rely on and find great comfort in the adults who protect them. Teachers and staff must know how to help their students through a crisis and return them home safely. Knowing what to do when faced with a crisis can be the difference between calm and chaos, between courage and fear, between life and death. There are thousands of fires in schools every year, yet there is minimal damage to life and property because staff and students are prepared. This preparedness needs to be extended to all risks schools face. Schools and districts need to be ready to handle crises, large and small, to keep our children and staff out of harm's way and ready to learn and teach. The time to plan is now. If you do not have a crisis plan in place, develop one. If you have one, review it, update and practice your plan.

Background

Links to Detailed Guidance U.S. Department of Education-- Practical Information on Crisis Planning#http://www.ed.gov/admins/lead/safety/crisisplanning.html#

U.S. Department of Education--Emergency Planning#http://www.ed.gov/admins/lead/safety/emergencyplan/index.html#

Subtopic **Fire Prevention and Detection and Emergency Action Plans**

Assessment Standard **School has emergency action and fire detection and prevention plans.**

Type of Std. OSHA Regulation - 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 3

Guidance for Assessor Review files for plans.

Default Corr. Action

Importance NIOSH has developed a checklist covering regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.164, 1910.165 and 1910.38. It applies to fire detection and alarm systems and to fire and emergency action plans. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. The OSHA code for emergency action and fire prevention plans under 1910.38 is comprehensive and covers emergencies other than fires. The ideal fire and emergency action plan, however, should include all the requirements. Fire alarm and detection systems installed in full compliance with existing building codes may not have to be upgraded to meet existing code regulations. Detailed annual testing requirements of automatic and manual fire alarm systems and fire detection systems have not be included in this checklist. Please consult 29 CFR 1910.164, 1910.165 and 5:18-3.4(c)6 and (c)8 for additional details.

Background

Links to Detailed Guidance	Detailed NIOSH Checklist: Alarm Systems and Evacuation Plans #http://www.cdc.gov/niosh/docs/2004-101/chklists/n15fir~1.htm# OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Traffic and Pedestrian Safety**

Assessment Standard	**"Safe Pedestrian Routes" to school have been designated, distributed to parents and posted in the main office.**		
Type of Std.	Department of Transportation Recommendation	**Priority:**	3
Guidance for Assessor	Interview staff.		
Default Corr. Action			
Importance	Students are at much greater risk traveling to and from school than at any other time in their school day. During the 1998-1999 school year, more than 800 children between the ages of 5 through 18 were killed during normal school transportation hours while traveling by passenger car, foot, bicycle, public transportation and school bus. Many more were injured or suffered close calls. These injuries and deaths affect everyone in the community.		
Background	Through education, enforcement, and outreach, NHTSA's pedestrian safety programs are directed toward reducing pedestrian injuries and fatalities. Walking is encouraged as an alternate mode of transportation to motor vehicle travel. Additional goals include: reducing the number of impaired pedestrian injuries and fatalities, improving the safety of elderly pedestrians and reaching diverse communities. Given the success of community-based initiatives to improve other aspects of transportation safety, the National Highway Traffic Safety Administration (NHTSA) launched its Getting to School Safely program in 2000 to address the full range of school transportation safety issues. Through the Getting to School Safely Community Action Kit, NHTSA is providing communities across the United States with resources to help them conduct programs aimed at improving the safety of students traveling to and from school. This second edition includes updated statistics and additional resources. School transportation safety programs are as diverse as the ways students get to school and the types of safety problems they encounter. They can range from a one-time event, such as a bike rally or participation in National Walk to School Day, to a longer-term initiative that addresses various aspects of transportation safety throughout the school year.		
Links to Detailed Guidance	U.S. Department of Transportation--Pedestrian Safety#http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.5928da45f99592381601031046108a0c/ Safe Routes to School#http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004/index.html NHTSA -- Traffic Safety#http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.e712547f8daccabbbf30811060008a0c/		
Assessment Standard	**Student drop-off and pick-up points are designated and supervised.**		
Type of Std.	Department of Transportation Recommendation	**Priority:**	3
Guidance for Assessor	Interview staff.		
Default Corr. Action			
Importance	Students are at much greater risk traveling to and from school than at any other time in their school day. During the 1998-1999 school year, more than 800 children between the ages of 5 through 18 were killed during normal school transportation hours while traveling by passenger car, foot, bicycle, public transportation and school bus. Many more were injured or suffered close calls. These injuries and deaths affect everyone in the community.		

Background	Through education, enforcement, and outreach, NHTSA's pedestrian safety programs are directed toward reducing pedestrian injuries and fatalities. Walking is encouraged as an alternate mode of transportation to motor vehicle travel. Additional goals include: reducing the number of impaired pedestrian injuries and fatalities, improving the safety of elderly pedestrians and reaching diverse communities. Given the success of community-based initiatives to improve other aspects of transportation safety, the National Highway Traffic Safety Administration (NHTSA) launched its Getting to School Safely program in 2000 to address the full range of school transportation safety issues. Through the Getting to School Safely Community Action Kit, NHTSA is providing communities across the United States with resources to help them conduct programs aimed at improving the safety of students traveling to and from school. This second edition includes updated statistics and additional resources. School transportation safety programs are as diverse as the ways students get to school and the types of safety problems they encounter. They can range from a one-time event, such as a bike rally or participation in National Walk to School Day, to a longer-term initiative that addresses various aspects of transportation safety throughout the school year.
Links to Detailed Guidance	U.S. Department of Transportation--Pedestrian Safety#http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.5928da45f99592381601031046108a0c/ Safe Routes to School#http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004/index.html NHTSA -- Traffic Safety#http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.e712547f8daccabbbf30811060008a0c/
Assessment Standard	**Students, parents and employees provided with: traffic safety and pedestrian brochures; bicycle and bus safety rules; information on pedestrian routes to and from school; student drop-off/pickup procedures; and seat belt/car safety information.**
Type of Std.	Department of Transportation Recommendation **Priority:** 3
Guidance for Assessor	Interview staff.
Default Corr. Action	
Importance	Students are at much greater risk traveling to and from school than at any other time in their school day. During the 1998-1999 school year, more than 800 children between the ages of 5 through 18 were killed during normal school transportation hours while traveling by passenger car, foot, bicycle, public transportation and school bus. Many more were injured or suffered close calls. These injuries and deaths affect everyone in the community.
Background	Through education, enforcement, and outreach, NHTSA's pedestrian safety programs are directed toward reducing pedestrian injuries and fatalities. Walking is encouraged as an alternate mode of transportation to motor vehicle travel. Additional goals include: reducing the number of impaired pedestrian injuries and fatalities, improving the safety of elderly pedestrians and reaching diverse communities. Given the success of community-based initiatives to improve other aspects of transportation safety, the National Highway Traffic Safety Administration (NHTSA) launched its Getting to School Safely program in 2000 to address the full range of school transportation safety issues. Through the Getting to School Safely Community Action Kit, NHTSA is providing communities across the United States with resources to help them conduct programs aimed at improving the safety of students traveling to and from school. This second edition includes updated statistics and additional resources. School transportation safety programs are as diverse as the ways students get to school and the types of safety problems they encounter. They can range from a one-time event, such as a bike rally or participation in National Walk to School Day, to a longer-term initiative that addresses various aspects of transportation safety throughout the school year.
Links to Detailed Guidance	U.S. Department of Transportation--Pedestrian Safety#http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.5928da45f99592381601031046108a0c/ Safe Routes to School#http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004/index.html NHTSA -- Traffic Safety#http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.e712547f8daccabbbf30811060008a0c/

Area/Topic **Central Office -- Injury and Illness Prevention**

Subtopic **Occupational Injury and Illness Reporting**

Assessment Standard	**School (employer) maintains a log and summary of recordable occupational injuries and illnesses (OSHA Form No. 300 or equivalent) that reflects separately the illness and injury experience of each establishment (i.e., school).**		
Type of Std.	OSHA Regulation -- 29 CFR 1904 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Review files.		
Default Corr. Action			
Importance	This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1904. These regulations apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees. The OSHA No. 300 is a log and summary form available from OSHA for recording occupational injuries and illnesses. OSHA accepts equivalent forms as long as the forms include all the required information and are readable and comprehensible. Note: Additional requirements may apply. See 29 CFR 1904		
Background			
Links to Detailed Guidance	NIOSH Checklist on Occupational Illness and Injury Reporting#http://www.cdc.gov/niosh/docs/2004-101/chklists/r1n02r~1.htm# NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		

Subtopic **Bloodborne Pathogens Exposure Control Plan**

Assessment Standard	**School has a bloodborne pathogens exposure control plan.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Review files for plan.		
Default Corr. Action			
Importance	NIOSH School Safety Checklist for Bloodborne Pathogens covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.1030. It applies to work activities that may result in exposure to blood or other potentially infectious materials. Such activities might include students learning how to take blood tests or teachers who are trained in first aid and are required to render first aid in case of emergency. This checklist does not cover acts that result in exposure to blood or other potentially infectious materials when someone voluntarily helps others in an emergency. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a non-regulatory recommendation. Definitions of underlined terms are provided at the end of the checklist to help you understand some of the questions. Note: Additional requirements may apply. See 29 CFR 1910.		
Background			

Links to Detailed Guidance	NIOSH Checklist for Bloodborne Pathogens#http://www.cdc.gov/niosh/docs/2004-101/chklists/n77blo~1.htm# OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Area/Topic **Classrooms**

Subtopic **General**

Assessment Standard	**Overall clean and sanitary conditions.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Regular and thorough classroom cleaning is important to ensure good indoor air quality. The presence of dirt, moisture, and warmth also stimulates the growth of molds and other biological contaminants. Unsanitary conditions attract insects and vermin, leading to possible indoor air quality (IAQ) problems from animal or insect allergens. The overuse or improper use of pesticides for secondary control of insects, vermin, and head lice can cause IAQ problems.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf		
Assessment Standard	**Free of visible mold on any interior surface.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.		
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has		

	published supplementary literature on the subject including, “Mold Remediation in Schools and Commercial Buildings.” The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.
Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#
Assessment Standard	**Free of signs of moisture problems or water damage on any interior surface.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA’s Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, “Managing Asthma in the School Environment,” also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, “Mold Remediation in Schools and Commercial Buildings.” The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.
Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#
Assessment Standard	**Stored items do not inhibit or restrict routine maintenance or cleaning.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Regular and thorough classroom cleaning helps to ensure good indoor air quality (IAQ). While custodians typically clean the classroom, teachers also play an important role in promoting and maintaining classroom cleanliness. The presence of dirt, moisture, and warmth stimulates the growth of molds and other biological contaminants. Unsanitary conditions attract insects and

vermin, leading to possible IAQ problems from animal or insect allergens. Excessive or improper use of pesticides for secondary control of insects, vermin, and head lice can also cause IAQ problems.

Background

Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance

IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf

IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf

IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf

IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf

Assessment Standard

Free of evidence of pests or obvious food sources.

Type of Std. EPA Recommendation **Priority:** 2

Guidance for Assessor

Visually inspect

Default Corr. Action

Importance

Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.

Background

The term pesticide refers not only to insecticides, but also to herbicides, fungicides, and various other substances used to control pests. Pesticides are used both indoors and outdoors and are generally recognized by their advertised brand names. Examples include disinfectants and sanitizers, fungicides, fumigants, herbicides, insecticides, microbials, repellents, and rodenticides. Children may be especially sensitive to health risks posed by pesticides. EPA regulates the use of pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the basis for regulation, sale, distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use

	of pesticides. The Integrated Pest Management (IPM) is a safer and usually less costly option for effective pest management in the school community.
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf IAQ Tools for Schools IPM Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklst.pdf IAQ Tools for Schools IPM Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklstbkgd.pdf EPA IPM in Schools#http://www.epa.gov/pesticides/ipm#
Assessment Standard	**Food stored in sealed, vermin-proof containers.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.
Background	The term pesticide refers not only to insecticides, but also to herbicides, fungicides, and various other substances used to control pests. Pesticides are used both indoors and outdoors and are generally recognized by their advertised brand names. Examples include disinfectants and sanitizers, fungicides, fumigants, herbicides, insecticides, microbials, repellents, and rodenticides. Children may be especially sensitive to health risks posed by pesticides. EPA regulates the use of pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the basis for regulation, sale, distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use of pesticides. The Integrated Pest Management (IPM) is a safer and usually less costly option for effective pest management in the school community.
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf IAQ Tools for Schools IPM Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklst.pdf IAQ Tools for Schools IPM Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklstbkgd.pdf EPA IPM in Schools#http://www.epa.gov/pesticides/ipm#
Assessment Standard	**Drapes and curtains clean with no noticeable dust accumulation.**
Type of Std.	EPA Recommendation **Priority:** 3

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Maintain a cleaner school with reduced effort by using two simple techniques: 1) Reduce the amount of dust and dirt that enters the school through walk-off mats (see Outside Entrances and Exits); and 2) Reduce the amount of dust released from vacuum bags and dust cloths. Cleaner schools positively affect students and staff both physically and psychologically. Buildings with high dust levels have been associated with increased complaints, illnesses, and discomfort. Specifically, dust mites have been found to trigger asthma attacks. In addition to dust, these techniques reduce other particles (such as pollens), that are known to cause allergic reactions. Use high-efficiency vacuum bags. Standard paper or cloth bags allow dust to pass completely through the vacuum and back into the air and onto surfaces. When possible, use micro-filtration bags that retain dust and particles in the 3 micron size range or even smaller. Although these bags cost more initially, using them can reduce labor costs. When dusting, ensure dust is collected and not released back into the air. Use wet cloths to collect dust, and dust in a circular motion rather than a flicking motion.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf

Subtopic **Safety**

Assessment Standard	**Chemicals & cleaning products inaccessible to children.**		
Type of Std.	EPA & CDC Recommendation	**Priority:**	1
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Many chemicals and chemicals in products are toxic to humans, animals, and/or the environment. Over 85,000 synthetic chemicals are in commercial use today. Toxic chemicals cause a variety of serious effects such as cancer, brain and nervous system disorders, reproductive disorders, and liver, kidney, lung and other organ damage. Chemicals also can irritate the skin, eyes, nose and throat. A chemical inventory serves as a reference for emergency personnel in the event of an emergency. The inventory is also a guide to the clean-out process because it identifies dates for which outdated chemicals should be disposed of. Be sure to check chemical lists included in pre-packaged science experiments or demonstration "kits".		
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in		

classrooms, science laboratories and vocational shops as well as in facility maintenance. Proper chemical use and management is critical in maintaining a healthy atmosphere for school occupants and the surrounding environment. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Partnership for Environmental Priorities Program seeks to reduce the use or release 31 Priority Chemicals whether they are used in products and processes or found in water, air, or waste emissions. Incorporating these programs into chemical management encourages students and staff to reduce the amount of toxic chemicals used.

Links to Detailed Guidance

Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#

Subtopic **Walls**

Assessment Standard

Chipped or peeling paint or plaster not present.

Type of Std. EPA Recommendation **Priority:** 2

Guidance for Assessor

Visually inspect

Default Corr. Action

Importance

Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.

Background

In 1978, paint containing more than 0.06 percent lead was banned; however, old stocks of leaded paint were still used for more than a decade. As a general guideline, schools built prior to 1978 are likely to have lead-based paint on the premises. It is unlikely that schools built after 1992 have lead-based paint on the premises. Deteriorating lead-based paint releases lead dust and/or paint flakes that pose an immediate safety hazard for young children. Children exposed to lead may experience nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. As part of EPA's ongoing efforts to protect children from lead poisoning, the EPA introduced new standards in the Toxic Substances Control Act (TSCA) Section 403 (2001). Under the new standards, lead is considered a hazard if there are greater than 40 micrograms of lead in dust per square foot on floors, 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard. Identifying lead hazards through these standards will allow inspectors and risk assessors to assist property owners in deciding how to address lead problems. The Indoor Air Quality Tools for Schools (IAQ TFS) Program helps schools prevent, identify, and resolve indoor air quality problems related to lead. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality. The EPA offers additional resources pertaining to lead and the evaluation of lead-based paint on the following website: http://www.epa.gov/opptintr/lead/leadpbed.htm

Links to Detailed Guidance	EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html# Federal Register 1.5.2001--Final Rule-Identification of Dangerous Levels of Lead#http://www.epa.gov/fedrgstr/EPA-TOX/2001/January/Day-05/t84.pdf# Healthy School Environments Web Portal--Lead#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=29#

Subtopic	**Fire Safety**		
Assessment Standard	**Fire extinguishers checked monthly and serviced annually, clearly marked, and easily accessible.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	1
Guidance for Assessor	Review inspection logs indicating dates of inspections and service		
Default Corr. Action			
Importance	Life safety.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 and refer to local building codes.		
Links to Detailed Guidance	NIOSH Checklist--General Fire Requirements#http://www.cdc.gov/niosh/docs/2004-101/chklists/r1n07g~1.htm# OSHA Emergency Standards#http://www.osha.gov/SLTC/etools/evacuation/evaluate.html OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		
Assessment Standard	**All exits and exit corridors free of obstructions that would restrict or prevent emergency egress from the building.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	1
Guidance for Assessor	Ensure that all exit doors are inspected for proper operation and closure		
Default Corr. Action			
Importance	Life safety.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 and refer to local building codes.		
Links to Detailed Guidance	NIOSH Checklist--General Fire Requirements#http://www.cdc.gov/niosh/docs/2004-101/chklists/r1n07g~1.htm# OSHA Emergency Standards#http://www.osha.gov/SLTC/etools/evacuation/evaluate.html OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		
Assessment Standard	**All exits properly marked.**		
Type of Std.	OSHA Regulation--29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	1
Guidance for Assessor	Ensure that exit signs are clearly visible and properly illuminated		
Default Corr. Action			

Importance	Life safety.
Background	Note: Additional requirements may apply. See 29 CFR 1910 and refer to local building codes.
Links to Detailed Guidance	NIOSH Checklist--General Fire Requirements#http://www.cdc.gov/niosh/docs/2004-101/chklists/r1n07g~1.htm# OSHA Emergency Standards#http://www.osha.gov/SLTC/etools/evacuation/evaluate.html OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

Subtopic **Floors -- General**

Assessment Standard	**Smooth, wear resistant, and easily cleanable.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Free of obstructions to cleaning and maintenance**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		

Default Corr. Action	
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf

Subtopic **Floors -- Carpet**

Assessment Standard	**Clean and dry with no noticeable odors.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other		

volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance

IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf

IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf

IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html#Carpet

Carpet and Rug Institute#http://www.carpet-rug.com/

Reslient Floor Covering Institute#http://rfci.com/

Assessment Standard

Free of evidence of staining.

Type of Std. EPA Recommendation **Priority:** 4

Guidance for Assessor

Visually inspect

Default Corr. Action

Importance

All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.

Background

Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance

IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf

IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf

IAQ Design Tools for Schools--Controlling Pollutants and

	Sources#http://www.epa.gov/iaq/schooldesign/controlling.html#Carpet Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/
Assessment Standard	**Secure to floor with no loose edges, tears, holes or other tripping hazards.**
Type of Std.	Good practice **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html#Carpet Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/
Assessment Standard	**Not installed in areas with plumbing.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains

	immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html#Carpet Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/

Subtopic	**Floors -- Resilient**		
Assessment Standard	**Clean and dry.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		

Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html##Resilient%20Flooring IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/
Assessment Standard	**Smooth, intact and secure.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html##Resilient%20Flooring Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/

Subtopic **Ceilings**

Assessment Standard	**Clean with no water stains, rust stains, water damage or visible mold.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	

Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance to clean up mold and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#
Assessment Standard	**Free of chipping/peeling paint or loose, cracked, or falling ceiling materials.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.
Background	In 1978, paint containing more than 0.06 percent lead was banned; however, old stocks of leaded paint were still used for more than a decade. As a general guideline, schools built prior to 1978 are likely to have lead-based paint on the premises. It is unlikely that schools built after 1992 have lead-based paint on the premises. Deteriorating lead-based paint releases lead dust and/or paint flakes that pose an immediate safety hazard for young children. Children exposed to lead may experience nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. As part of EPA's ongoing efforts to protect children from lead poisoning, the EPA introduced new standards in the Toxic Substances Control Act (TSCA) Section 403 (2001). Under the new standards, lead is considered a hazard if there are greater than 40 micrograms of lead in dust per square foot on floors, 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard. Identifying lead hazards through these standards will allow inspectors and risk assessors to assist property owners in deciding how to address lead problems. The Indoor Air Quality Tools for Schools (IAQ TFS) Program helps schools prevent,

identify, and resolve indoor air quality problems related to lead. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality. The EPA offers additional resources pertaining to lead and the evaluation of lead-based paint on the following website: http://www.epa.gov/opptintr/lead/leadpbed.htm

Links to Detailed Guidance

EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html#

Federal Register 1.5.2001--Final Rule-Identification of Dangerous Levels of Lead#http://www.epa.gov/fedrgstr/EPA-TOX/2001/January/Day-05/t84.pdf#

Healthy School Environments Web Portal--Lead#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=29#

Subtopic **Windows**

Assessment Standard **Free of chipped or peeling paint or plaster.**

Type of Std. EPA Recommendation **Priority:** 2

Guidance for Assessor Visually inspect

Default Corr. Action

Importance Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. At low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.

Background In 1978, paint containing more than 0.06 percent lead was banned; however, old stocks of leaded paint were still used for more than a decade. As a general guideline, schools built prior to 1978 are likely to have lead-based paint on the premises. It is unlikely that schools built after 1992 have lead-based paint on the premises. Deteriorating lead-based paint releases lead dust and/or paint flakes that pose an immediate safety hazard for young children. Children exposed to lead may experience nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. As part of EPA's ongoing efforts to protect children from lead poisoning, the EPA introduced new standards in the Toxic Substances Control Act (TSCA) Section 403 (2001). Under the new standards, lead is considered a hazard if there are greater than 40 micrograms of lead in dust per square foot on floors, 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard. Identifying lead hazards through these standards will allow inspectors and risk assessors to assist property owners in deciding how to address lead problems. The Indoor Air Quality Tools for Schools (IAQ TFS) Program helps schools prevent, identify, and resolve indoor air quality problems related to lead. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality. The EPA offers additional resources pertaining to lead and the evaluation of lead-based paint on the following website: http://www.epa.gov/opptintr/lead/leadpbed.htm

Links to Detailed Guidance

EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html#

Federal Register 1.5.2001--Final Rule-Identification of Dangerous Levels of Lead#http://www.epa.gov/fedrgstr/EPA-TOX/2001/January/Day-05/t84.pdf#

Healthy School Environments Web Portal--Lead#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=29#

Subtopic **Other Horizontal Surfaces**

Assessment Standard **Free of visible accumulation of dust/debris on high or low surfaces.**

Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Maintain a cleaner school with reduced effort by using two simple techniques: 1) Reduce the amount of dust and dirt that enters the school through walk-off mats (see Outside Entrances and Exits); and 2) Reduce the amount of dust released from vacuum bags and dust cloths. Cleaner schools positively affect students and staff both physically and psychologically. Buildings with high dust levels have been associated with increased complaints, illnesses, and discomfort. Specifically, dust mites have been found to trigger asthma attacks. In addition to dust, these techniques reduce other particles (such as pollens), that are known to cause allergic reactions. Use high-efficiency vacuum bags. Standard paper or cloth bags allow dust to pass completely through the vacuum and back into the air and onto surfaces. When possible, use micro-filtration bags that retain dust and particles in the 3 micron size range or even smaller. Although these bags cost more initially, using them can reduce labor costs. When dusting, ensure dust is collected and not released back into the air. Use wet cloths to collect dust, and dust in a circular motion rather than a flicking motion.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		

Subtopic **HVAC Systems -- General**

Assessment Standard	**Fans operating continuously during all occupied periods.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor		

	temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
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Assessment Standard	**Thermostatic controls set to operate fan continuously during occupied periods.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	In rooms with controls present, ensure that fan set to run continuously vs. cycling on and off during occupied periods
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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	Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
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Assessment Standard	**Free of excessive noise or vibration from any system component.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Assessment Standard	**Free of visible mold or other debris on any system component.**
Type of Std.	EPA Recommendation; NIOSH Recommendation **Priority:** 2

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Assessment Standard	**Free of offensive odors from any system component.**
Type of Std.	EPA Recommendation; NIOSH Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered

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Assessment Standard	**Pleated paper air filtration media in use.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Assessment Standard	**Air filters properly sized and installed.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Inspect filter bank to ensure that filters fit tightly against one another and filter brackets to prevent air by-pass around filtration media
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Assessment Standard	**Air filters not excessively loaded with particulate debris.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Ensure that air filters are structurally intact with no bowing or collapse indicating overloading

Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Subtopic	**HVAC System -- Air Supply and Return Diffusers**
Assessment Standard	**Air supply diffusers and return grilles unobstructed.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building

	codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Assessment Standard	**Free of rigged baffles, deflectors or barriers affixed to existing diffusers.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
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Subtopic **HVAC Systems -- Unit Ventilators**

Assessment Standard	**Air outlets & inlets unobstructed by books, boxes, or other items.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Tools for Schools Ventilation Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklstbkgd.pdf IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/hvac.html		

Subtopic **Indoor Air Quality**

Assessment Standard	**Free of objectionable/unusual odors (mold, mildew, VOCs, sewer gas, ETS, etc.).**		
Type of Std.	EPA Recommendation	**Priority:**	3

Guidance for Assessor	Evaluate when first entering space. Your nose can quickly become accustomed to odors, but upon first entering a room, notice smells that indicate pollutant sources may be present and/or the ventilation system is not providing adequate ventilation.
Default Corr. Action	
Importance	Odors may indicate the presence of contaminants of concern such as mold, VOCs, combustion gases or other contaminants. Even if contaminants don't pose a significant hazard, identifying and addressing objectionable odors may reduce complaints associated with indoor air quality.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Kit#http://www.epa.gov/iaq/schools/actionkit.html#Available_for_Download IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf
Assessment Standard	**Temperature & relative humidity within acceptable ranges (ASHRAE comfort zone).**
Type of Std.	ASHRAE 55 **Priority:** 4
Guidance for Assessor	Measure temperature and relative humidity and then plot on ASHRAE comfort chart to ensure proper thermal comfort.
Default Corr. Action	
Importance	A number of variables interact to determine whether people are comfortable with the temperature and relative humidity of the indoor air. The amount of clothing, activity level, age, and physiology of people in schools vary widely, so the thermal comfort requirements vary for each individual. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55-1992, describes the temperature and humidity ranges that are comfortable for 80% of people engaged in largely sedentary activities. That information is summarized in the chart below. The ASHRAE standard assumes "normal" indoor clothing. Added layers of clothing reduce the rate of heat loss. Uniformity of temperature is important to comfort. Rooms that share a common heating and cooling system controlled by a single thermostat may be at different temperatures. Temperature stratification is a common problem caused by convection, the tendency of light, warm air to rise, and heavier, cooler air to sink. If air is not properly mixed by the ventilation system, the temperature near the ceiling can be several degrees warmer or cooler than near the floor, where young children spend much of their time. Even if air is properly mixed, uninsulated floors over unheated spaces can create discomfort in some climate zones. Large fluctuations of indoor temperature can also occur when thermostats have a wide "dead band" (a temperature range in which neither heating or cooling takes place).
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings.

However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance

IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf

IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/hvac.html

Assessment Standard

Design outdoor ventilation rate and current operational set point are known and delivering appropriate amounts of outside air.

Type of Std. ASHRAE Standard 62 **Priority:** 3

Guidance for Assessor

Review ventilation checklists, if available and interview staff.

Default Corr. Action

Importance

All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.

Background

The main purposes of a Heating, Ventilation, and Air-Conditioning (HVAC) system are to help maintain good indoor air quality through adequate ventilation with filtration and provide thermal comfort. HVAC systems are among the largest energy consumers in schools. The choice and design of the HVAC system can also affect many other high performance goals, including water consumption (water cooled air conditioning equipment) and acoustics.

Links to Detailed Guidance

IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf

IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/hvac.html

Assessment Standard

Building positively pressurized (i.e. air flows out).

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

To determine whether a room is positively or negatively pressurized, or neutral, release puffs of chemical smoke near the top and bottom of a slightly opened door or window, and observe the direction of flow. Example: If the smoke flows inward at both the top and bottom of a slightly opened door, the room is negatively pressurized when compared to the space on the other side of the door. (Chemical smoke is available with various dispensing mechanisms, including smoke "bottles," "guns," "pencils," or "tubes." The dispensers allow smoke to be released in controlled quantities and directed at specific locations. It is often more informative to use a number of small

	puffs of smoke as you move along an air pathway rather than releasing a large amount in a single puff. Caution: Chemical smoke devices use titanium tetrachloride to produce smoke. While the chemicals forming the smoke normally are not hazardous in the small quantities produced during testing, avoid inhaling smoke from smoke devices. Concentrated fumes from smoke devices are very corrosive.)
Default Corr. Action	
Importance	A room can be positively or negatively pressurized when compared to the spaces surrounding it. These spaces include another room, a corridor, or outdoors. Negative pressurization may cause problems with natural draft combustion appliances, or cause outdoor pollutants such as pollens or vehicle exhaust in loading docks to be drawn into the building through openings.
Background	Airflow patterns in buildings result from the combined action of mechanical ventilation systems, human activity, and natural forces. Differences in air pressure created by these forces move airborne pollutants from areas of higher pressure to areas of lower pressure through any available openings. An inflated balloon is an example of this driving force. As long as the opening to the balloon is kept shut, no air will flow, but when open, air will move from inside (area of higher pressure) to the outside (area of lower pressure). Even if the opening is small, air will move until the pressures inside and outside are equal. If present, the HVAC ducts are generally the predominant pathway and driving force for air movement in buildings. However, all of a building's components (walls, ceilings, floors, doors, windows, HVAC equipment, and occupants) interact to affect how air movement distributes pollutants within a building. For example, as air moves from supply outlets to return inlets, it is diverted or obstructed by walls and furnishings, and redirected by openings that provide pathways for air movement. On a localized basis, the movements of people have a major impact on the movement of pollutants. Some of the pathways change as doors and windows open and close. It is useful to think of the entire building -- the rooms with connecting corridors and utility passageways between them -- as part of the air distribution system. Air movement can transfer emissions from the pollutant source: into adjacent rooms or spaces that are under lower pressure, into other spaces through HVAC system ducts, from lower to upper levels in multi-story schools ,transport of pollutants into the building through either infiltration of outdoor air or reentry of exhaust air to various points within the room. Most public and commercial buildings are designed to be positively pressurized, so that unconditioned air does not enter through openings in the building envelope causing discomfort or air quality problems. The interaction between pollutant pathways and intermittent or variable driving forces can lead to a single source causing IAQ complaints in an area of the school that is distant from the pollutant source.
Links to Detailed Guidance	IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/hvac.html

Subtopic **Animal Management**

Assessment Standard	**Animals in classrooms are selected and managed to minimize exposure of students and staff to allergens and disease agents.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect. Assure that animals are kept in cages (as much as possible), cages are clean and placed away from ventilation supply and return vents; sensitive/allergic students are known and appropriate precautions taken.		
Default Corr. Action			
Importance	Many schools allow animals to be kept in classrooms as a learning tool. According to the National Science Teachers Association, the instructional reasons for animals in the classrooms are: to stimulate interest in the study of animal behavior; to develop skills of observation and comparison; to develop an appreciation for the unity, interrelationship and complexity of life; to give students a unique perspective of the life processes through experimentation; to develop a sense of stewardship and responsibility. However, some animals may also transmit diseases to humans, and some children are allergic to animal allergens.		

Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf
Assessment Standard	**Hand washing facilities available in rooms with animals.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Many schools allow animals to be kept in classrooms as a learning tool. According to the National Science Teachers Association, the instructional reasons for animals in the classrooms are: to stimulate interest in the study of animal behavior; to develop skills of observation and comparison; to develop an appreciation for the unity, interrelationship and complexity of life; to give students a unique perspective of the life processes through experimentation; to develop a sense of stewardship and responsibility. However, some animals may also transmit diseases to humans, and some children are allergic to animal allergens.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf

Subtopic **Art Supplies**

Assessment Standard	**All art material conforms to ASTM D-4236.**
Type of Std.	Regulation -- Labeling of Hazardous Art Materials Act **Priority:** 3

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Chronic hazard prevention.
Background	On November 18, 1988, the President signed into law the Labeling of Hazardous Art Materials Act (Public Law 100-695). This law requires that all art materials be reviewed to determine the potential for causing a chronic hazard and that appropriate warning labels be put on those art materials found to pose a chronic hazard. The term "art material" includes "any substance marketed or represented by the producer or repackager as suitable for use in any phase of the creation of any work of visual or graphic art of any medium." (15 U.S.C. 1277(b)(1). The law applies to many children's toy products such as crayons, chalk, paint sets, modeling clay, coloring books, pencils, and any other products used by children to produce a work of visual or graphic art. The "Labeling of Hazardous Art Materials Act" (LHAMA) amended the Federal Hazardous Substances Act (FHSA) by adding Section 23 and designating the ASTM Standard Practice for Labeling Art Materials for Chronic Health Hazards (ASTM D-4236-88) as a regulation under Section 3(b) of the FHSA. The requirements of the LHAMA became effective on November 18,1990.These requirements apply to art materials that are intended for use in the household or by children, which are initially introduced into interstate commerce on and after November 18, 1990. Note: Additional requirements may apply.
Links to Detailed Guidance	Consumer Product Safety Commission--Review and Labeling of Art Materials#http://www.cpsc.gov/cpscpub/pubs/5016.html# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html#

Subtopic **Sinks**

Assessment Standard	**Hot and cold water available at all lavatories.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Hot water temperature does not exceed 120 degrees (F).**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Measure water temperature		
Default Corr. Action			

Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Tap Water Scalds#http://www.cpsc.gov/cpscpub/pubs/5098.html#		
Assessment Standard	**Sinks clean.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Drains unclogged.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards--Sanitation#http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9790# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Soap and disposable hand towels or air drier present.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Clean and sanitary conditions.
Background	Note: Additional requirements may apply. See 29 CFR 1910.141
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Area/Topic **Hallways and Stairwells**

Subtopic **General**

Assessment Standard	**Furniture or other items not stored on the floor.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.22 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.22		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Drinking Fountains**

Assessment Standard	**Drinking water dispensers are sanitary, capable of being closed, and equipped with a tap.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Standards--Sanitation#http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9790# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Floors -- Carpet**

Assessment Standard	**Not installed in areas likely to get wet.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			

Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html#Carpet Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/

Area/Topic **Restrooms**

Subtopic **General**

Assessment Standard	**All fixtures in good repair and operating properly.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Floors clean and dry.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf		

Subtopic **Sinks**

Assessment Standard	**Hot and cold water available at all lavatories.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		

Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Hot water temperature does not exceed 120 degrees (F).**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Measure water temperature		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Tap Water Scalds#http://www.cpsc.gov/cpscpub/pubs/5098.html#		
Assessment Standard	**Sinks clean.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Drains unclogged.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Clean and sanitary conditions.
Background	Note: Additional requirements may apply. See 29 CFR 1910.141
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#
Assessment Standard	**Soap and disposable hand towels or air dryer present.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Clean and sanitary conditions.
Background	Note: Additional requirements may apply. See 29 CFR 1910.141
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Toilets**

Assessment Standard	**Toilet paper provided for each toilet in proper dispensers.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Clean and sanitary conditions.
Background	Note: Additional requirements may apply. See 29 CFR 1910
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

	NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Clean (top and undersides).**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Flush properly.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Test operation		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Toilet seats secure and properly fitted.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			

Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Toilet partitions clean and secure.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Indoor Air Quality**

Assessment Standard	**Exhaust fan on throughout school day.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Remove moisture and odors.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf		
Assessment Standard	**No excessive odors.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		

Default Corr. Action	
Importance	Odors may indicate the presence of contaminants of concern such as mold, VOCs, combustion gases or other contaminants. Even if contaminants don't pose a significant hazard, identifying and addressing objectionable odors may reduce complaints associated with indoor air quality.
Background	
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf

Area/Topic **Custodial Closets**

Subtopic **General**

Assessment Standard	**Closet door equipped with operable lock.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf		
Assessment Standard	**Access restricted to authorized individuals at all times.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf		
Assessment Standard	**Equipped with continuously operating exhaust fans.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Remove VOCs and odors from stored janitorial supplies.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf		

Subtopic **Hazard Communication**

Assessment Standard	**Material Safety Data Sheets (MSDS) readily accessible to staff for all hazardous chemicals used or stored in custodial closet.**		
Type of Std.	OSHA Regulation-29 CFR 1910 Subpart N (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Verify that MSDS' are readily available.		
Default Corr. Action			
Importance	Access to safety information.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 Subpart N.		
Links to Detailed Guidance	OSHA Regulations#http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=PREAMBLES&p_toc_level=0&p_keyvalue=&p_status=CURRENT# OSHA Hazard Communication Standard#http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=PREAMBLES&p_id=933&p_text_version=FALSE# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/# NIOSH HazCom Helper Software (OSHA Version)#http://www.cdc.gov/niosh/mining/products/product44.htm#..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc#_Hlk181004395 1,1714,1812,0,,NIOSH HazCom Helper Software (OS		
Assessment Standard	**Containers of hazardous materials, including mercury products, are labeled with the identity of the material, the date the material was acquired, the words "hazardous material" and the hazard associated with the material (e.g., toxicity, corrosivity, ignitability, reactivity).**		
Type of Std.	OSHA Regulation-29 CFR 1910 Subpart N (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	1
Guidance for Assessor	Verify that hazardous materials are properly labeled.		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 Subpart N.		
Links to Detailed Guidance	NEWMOA Mercury in Schools and Communities#http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/schools/checklist.cfm# EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Area/Topic	**Science Rooms and Laboratories**
Subtopic	**General**

Assessment Standard	**Adult supervision present throughout all instructional periods.**		
Type of Std.	NIOSH Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background			
Links to Detailed Guidance	NIOSH Environmental and Occupational Safety and Health Plan Checklist#http://www.cdc.gov/niosh/docs/2004-101/chklists/r1n01v~1.htm# NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Lab door(s) equipped with operable lock(s).**		
Type of Std.	Good practice	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance			
Assessment Standard	**Lab kept locked and inaccessible to students during unoccupied periods.**		
Type of Std.	Good practice	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance			
Assessment Standard	**Placards posted indicating the location of all safety & emergency equipment.**		

Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Life safety, injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.151.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Food or drinks prohibited.**		
Type of Std.	OSHA Regulation-29 CFR 1910.141(g)(2) (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Master gas shutoff valve located in room and clearly labeled.**		
Type of Std.	NIOSH Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Life safety		
Background			
Links to Detailed Guidance	NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Assessment Standard	**First aid kit accessible to staff.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Emergency preparedness.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.151.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Chemical Hygiene Plan**

Assessment Standard	**Ensure the school has a written and complete chemical hygiene plan.**		
Type of Std.	OSHA Reg.--29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review the written chemical hygiene plan. The chemical hygiene plan should include each of the following: 1) the identity of the person responsible for implementing the plan (designated person); 2) responsibilities of the designated person; 3) information (e.g. MSDSs, labeling) and training; 4) a chemical inventory list; 5) procedures for chemical storage; 6) requires the use of the current supply of chemicals before using newer chemicals (“first-in, first-out” policy); 7) instructions for safety equipment and personal protective equipment; 8) waste management and disposal procedures; 9) emergency response procedures, including spill control procedures for elemental mercury; and 10) record-keeping requirements.		
Default Corr. Action			
Importance	Many chemicals contain pesticides and toxic ingredients that can be harmful to humans, animals, or the environment. Over 85,000 synthetic chemicals are in commercial use today, many now known to cause cancer and damage to the brain and the nervous and reproductive systems. Chemicals can also irritate the skin, eyes, nose and throat if mismanaged. A chemical hygiene plan is a critical element of chemical management; the plan ensures that chemicals are properly stored, handled, and disposed of.		
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Chemical management creates a healthy atmosphere for school occupants and the surrounding environment. The purpose of the chemical hygiene plan is to comply with the OSHA Laboratory Standard, Title 29 Code of Federal Regulations 1910.1450 by implementing standard operation procedures for the use, storage, and disposal of chemicals. The plan must contain hazardous chemicals information and training, guidelines for the use of engineering controls and personal protective equipment, measures to ensure proper fume hood operation, provisions for protection for work with select carcinogens and reproductive toxins, and provisions for medical examinations. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know"		

reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities (such as schools), their uses, and releases into the environment. Although the chemical hygiene plan applies to chemicals used in laboratories, the elements of a chemical hygiene plan also constitute good practice for all potentially hazardous chemicals found in schools. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Waste Minimization Partnership Program focuses on reducing or eliminating the generation of hazardous waste containing any of 30 Waste Minimization Priority Chemicals. Incorporating these programs into chemical management encourages students and staff to reduce the amount of waste that is generated from chemical use.

Links to Detailed Guidance

OSHA Occupational and Health Standards--Chemical Hygiene Plan#http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10106#

OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#

Subtopic **Hazard Communication**

Assessment Standard

Material Safety Data Sheets (MSDS) readily accessible to staff & students for all hazardous chemicals used or stored in the lab.

Type of Std.

OSHA Regulation -- 29 CFR 1910.1200 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)

Priority: 2

Guidance for Assessor

Review files for MSDS', interview staff

Default Corr. Action

Importance

Access to safety information.

Background

Note: Additional requirements may apply. See 29 CFR 1910.1200.

Links to Detailed Guidance

OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910#

Chemical Emergency Preparedness and Management#http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/EPCRA.htm?OpenDocument#

Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#

OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Assessment Standard

Containers of hazardous materials, including mercury products, are labeled with the identity of the material, the date the material was acquired, the words "hazardous material" and the hazard associated with the material (e.g., toxicity, corrosivity, ignitability, reactivity).

Type of Std.

EPA Reg--40 CFR 262.34; OSHA Reg--29 CFR 1910.1200 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)

Priority: 2

Guidance for Assessor

Verify that hazardous materials are properly labeled.

Default Corr. Action	
Importance	Accident and injury prevention.
Background	Note: Additional requirements may apply. See 40 CFR 262 and 29 CFR 1910.1200.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Chemical Storage**

Assessment Standard	**Comprehensive chemical inventory list and disposal log on hand and updated within past year.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Chemical storage room door or individual cabinets equipped with operable locks.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html#		

	OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Chemicals kept locked during non-class periods.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**All chemicals stored according to chemically compatible families.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Flammable and corrosive liquids stored separately in approved cabinets.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			

Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Chemical storage rooms vented via mechanical exhaust system.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Remove VOCs and odors from stored chemicals.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Anti-roll lips on all chemical storage shelves.**		
Type of Std.	OSHA Regulation (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Free of chemicals stored in fume hoods or on floors.**		
Type of Std.	OSHA Regulation (OSHA regulations apply to public employees in	**Priority:**	2

	26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Accident and injury prevention.
Background	Note: Additional requirements may apply. See 29 CFR 1910
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#
Assessment Standard	**Chemical spill kit accessible to instructor.**
Type of Std.	OSHA Regulation (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Containing spills promptly and effectively.
Background	Note: Additional requirements may apply. See 29 CFR 1910
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Emergency Equipment -- Safety Showers**

Assessment Standard	**Located within 50' of all lab workstations.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	

Importance	Emergency preparedness.
Background	Note: Additional requirements may apply. See 29 CFR 1910.151.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#
Assessment Standard	**Showers operational.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Test operation
Default Corr. Action	
Importance	Emergency preparedness.
Background	Note: Additional requirements may apply. See 29 CFR 1910.151.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Emergency Equipment -- Eyewash Stations**

Assessment Standard	**Within 25' of all lab workstations.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Emergency preparedness.
Background	Note: Additional requirements may apply. See 29 CFR 1910.151.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#
Assessment Standard	**Eyewash operational.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to **Priority:** 2

	public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Emergency preparedness.
Background	Note: Additional requirements may apply. See 29 CFR 1910.151.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Personal Protective Equipment**

Assessment Standard	**Appropriate personal protective equipment accessible to all students and staff.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 Subpart I (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 Subpart I.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Goggles worn during demonstrations and experiments.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 Subpart I (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 Subpart I.		

Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Other personal protective equipment worn whenever appropriate.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 Subpart I (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910 Subpart I.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Ventilation**

Assessment Standard	**Local exhaust systems (including dust collection systems, paint booths, fume hoods) installed at all airborne contaminant sources.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Exhaust fans operable.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Test operation		
Default Corr. Action			

Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Exhaust ventilation provided where hazardous chemicals generated, used or stored.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Exhaust fans on during chemical demonstrations, lab experiments and other activity periods where airborne contaminants generated.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		

Area/Topic	**Visual Arts, Industrial Arts & Vocational Ed. Rooms**
Subtopic	**General**

Assessment Standard	**Door(s) equipped with operable lock(s).**		
Type of Std.	Good practice	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		

Assessment Standard	**Room kept locked and inaccessible to students during unoccupied periods.**		
Type of Std.	Good practice	**Priority:**	2
Guidance for Assessor	Interview staff		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		

Assessment Standard	**Placards posted indicating the location of all safety & emergency equipment.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.145 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Emergency preparedness.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.145.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		

	California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Food or drinks prohibited.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect for signs		
Default Corr. Action			
Importance	Accident and injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Master gas shutoff valve and electric panel clearly marked and accessible.**		
Type of Std.	NIOSH Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Life safety		
Background			
Links to Detailed Guidance	NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html#		
Assessment Standard	**All machines appropriately guarded.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.212 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		

Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.212.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Equipment danger zones clearly marked.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.145 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	1
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.145.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards--Accident Prevention Signs and Tags#http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9794# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**No paints, glazes or other finishes containing lead, cadmium, or other heavy metals.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Chronic illness prevention.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html#		

Assessment Standard	**Personal protective equipment accessible and in use when appropriate.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 Subpart I (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	1
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Sinks**

Assessment Standard	**Hot and cold water available at all lavatories.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		
Assessment Standard	**Hot water temperature does not exceed 120 degrees (F).**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Measure water temperature		

Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Tap Water Scalds#http://www.cpsc.gov/cpscpub/pubs/5098.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		
Assessment Standard	**Sinks clean.**		
Type of Std.	OSHA Regulation--29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		
Assessment Standard	**Drains unclogged.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		
Assessment Standard	**Soap and disposable hand towels or air dryer present.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to	**Priority:**	3

	public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Clean and sanitary conditions.
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Chemical Hygiene Plan**

Assessment Standard	**School has a written chemical hygiene plan.**		
Type of Std.	OSHA Reg.--29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review the written chemical hygiene plan. Plan should include each of the following: 1) the identity of the person responsible for implementing the plan (designated person); 2) responsibilities of the designated person; 3) information (e.g. MSDSs, labeling) and training; 4) a chemical inventory list; 5) procedures for chemical storage; 6) requires the use of the current supply of chemicals before using newer chemicals (“first-in, first-out” policy); 7) instructions for safety equipment and personal protective equipment; 8) waste management and disposal procedures; 9) emergency response procedures, including spill control procedures for elemental mercury; and 10) record keeping requirements.		
Default Corr. Action			
Importance	Many chemicals contain pesticides and toxic ingredients that can be harmful to humans, animals, or the environment. Over 85,000 synthetic chemicals are in commercial use today, many now known to cause cancer and damage to the brain and the nervous and reproductive systems. Chemicals can also irritate the skin, eyes, nose and throat if mismanaged. A chemical hygiene plan is a critical element of chemical management; the plan ensures that chemicals are properly stored, handled, and disposed of.		
Background	Many acute and highly toxic chemicals are found in school facilities. Schools use chemicals in classrooms, science laboratories and vocational shops as well as in facility maintenance. Chemical management creates a healthy atmosphere for school occupants and the surrounding environment. The purpose of the chemical hygiene plan is to comply with the OSHA Laboratory Standard, Title 29 Code of Federal Regulations 1910.1450 by implementing standard operation procedures for the use, storage, and disposal of chemicals. The plan must contain hazardous chemicals information and training, guidelines for the use of engineering controls and personal protective equipment, measures to ensure proper fume hood operation, provisions for protection for work with select carcinogens and reproductive toxins, and provisions for medical examinations. The Environmental Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities		

(such as schools), their uses, and releases into the environment. Although the chemical hygiene plan applies to chemicals used in laboratories, the elements of a chemical hygiene plan also constitute good practice for all potentially hazardous chemicals found in schools. The EPA sponsors various programs that pertain to chemical management. The Pollution Prevention (P2) program offers general information about P2 practices, identifies the various source reduction programs and initiatives administered by EPA and other organizations, and provides contacts for further information. In addition, EPA sponsors an Environmentally Preferable Purchasing (EPP) program that assists agencies in the purchasing of environmentally preferable products and services. EPA's National Waste Minimization Partnership Program focuses on reducing or eliminating the generation of hazardous waste containing any of 30 Waste Minimization Priority Chemicals. Incorporating these programs into chemical management encourages students and staff to reduce the amount of waste that is generated from chemical use.

Links to Detailed Guidance

OSHA Standards--#http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10106#

Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#

California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html#

OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic: Hazard Communication

Assessment Standard

Material Safety Data Sheets (MSDS) readily accessible to staff & students for all hazardous chemicals used or stored in the classroom.

Type of Std.

OSHA Regulation -- 29 CFR 1910.1200 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)

Priority: 2

Guidance for Assessor

Review files for MSDS', interview staff

Default Corr. Action

Importance

Many vocational, industrial, and visual arts programs involve processes or activities that result in waste materials that need to be managed or disposed of. Schools typically have sinks and drains that are connected to a publicly owned treatment works (POTW). Discharges to a POTW are regulated under the CWA. Schools must determine if the POTW allows drain disposal of paints, inks or other materials used in this area. If the school discharges to a septic tank system, no chemicals should be disposed down the drain. Management and disposal of spent solvents and other waste materials may be regulated under RCRA hazardous waste regulations. It is the school's responsibility to make this determination. Schools must ensure that RCRA hazardous waste is safely accumulated and transported off-site for proper disposal. Depending on the quantity of waste generated by a school, additional requirements for storage, handling and emergency response may apply. Schools should consult the MSDSs for these materials and should consider replacing those that are regulated under RCRA with less hazardous or toxic substitutes if possible.

Background

Note: Additional requirements may apply. See 29 CFR 1910.1200.

Links to Detailed Guidance

OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910#

California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html#

NIOSH HazCom Helper Software (OSHA Version)#http://www.cdc.gov/niosh/mining/products/product44.htm#..\Documents and Settings\spangenbergjg\Desktop\Test Findings_bob_2007-10-24.doc#_Hlk181004675 1,2173,2271,0,,NIOSH HazCom Helper Software (OS

OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Assessment Standard	**Containers of hazardous materials, including mercury products, are labeled with the identity of the material, the date the material was acquired, the words "hazardous material" and the hazard associated with the material (e.g., toxicity, corrosivity, ignitability, reactivity).**		
Type of Std.	EPA Reg--40 CFR 262.34; OSHA Reg--29 CFR 1910.1200 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Verify that hazardous materials are properly labeled.		
Default Corr. Action			
Importance	Many vocational, industrial, and visual arts programs involve processes or activities that result in waste materials that need to be managed or disposed of. Schools typically have sinks and drains that are connected to a publicly owned treatment works (POTW). Discharges to a POTW are regulated under the CWA. Schools must determine if the POTW allows drain disposal of paints, inks or other materials used in this area. If the school discharges to a septic tank system, no chemicals should be disposed down the drain. Management and disposal of spent solvents and other waste materials may be regulated under RCRA hazardous waste regulations. It is the school's responsibility to make this determination. Schools must ensure that RCRA hazardous waste is safely accumulated and transported off-site for proper disposal. Depending on the quantity of waste generated by a school, additional requirements for storage, handling and emergency response may apply. Schools should consult the MSDSs for these materials and should consider replacing those that are regulated under RCRA with less hazardous or toxic substitutes if possible.		
Background	Note: Additional requirements may apply. See 40 CFR 262.34 and 29 CFR 1910.1200.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#		

Subtopic **Chemical Storage**

Assessment Standard	**Comprehensive chemical inventory list and disposal log on hand and updated within past year.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Review inventory and log		
Default Corr. Action			
Importance	Many vocational, industrial, and visual arts programs involve processes or activities that result in waste materials that need to be managed or disposed of. Schools typically have sinks and drains that are connected to a publicly owned treatment works (POTW). Discharges to a POTW are regulated under the CWA. Schools must determine if the POTW allows drain disposal of paints, inks or other materials used in this area. If the school discharges to a septic tank system, no chemicals should be disposed down the drain. Management and disposal of spent solvents and other waste materials may be regulated under RCRA hazardous waste regulations. It is the school's responsibility to make this determination. Schools must ensure that RCRA hazardous waste is safely accumulated and transported off-site for proper disposal. Depending on the quantity of waste generated by a school, additional requirements for storage, handling and emergency response may apply. Schools should consult the MSDSs for these materials and should consider		

	replacing those that are regulated under RCRA with less hazardous or toxic substitutes if possible.		
Background			
Links to Detailed Guidance	EPA School Chemical Cleanout Campaign--What Can You Do#http://www.epa.gov/epaoswer/osw/conserve/clusters/schools/schools.htm Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		
Assessment Standard	**Chemical storage room door or individual cabinets equipped with operable locks.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html#		
Assessment Standard	**Chemicals kept locked during non-class periods.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# Maryland--Chemicals: Managing, Handling, Disposing#http://www.mdk12.org/instruction/curriculum/science/safety/chemicals.html#		
Assessment Standard	**All chemicals stored according to chemically compatible families.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			

Importance	Accident and injury prevention.
Background	Note: Additional requirements may apply. See 30 CFR and 29 CFR 1910
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#
Assessment Standard	**Flammable and corrosive materials stored separately in approved cabinets.**
Type of Std.	OSHA Regulation -- 29 CFR 1910 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Accident and injury prevention.
Background	Note: Additional requirements may apply. See 30 CFR and 29 CFR 1910
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#
Assessment Standard	**Chemicals not stored in fume hoods or on floors.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.106 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Accident and injury prevention.
Background	Note: Additional requirements may apply. See 30 CFR and 29 CFR 1910.106.
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26# NIOSH Safety Checklist Program for Schools#http://www.cdc.gov/niosh/docs/2004-101/#

Subtopic **Ventilation**

Assessment Standard	**Local exhaust systems (including dust collection systems, paint booths, fume hoods) installed at all airborne contaminant sources.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Exhaust fans operable.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Test operation		
Default Corr. Action			
Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Local exhaust systems on during activity periods where airborne contaminants generated.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Removal of contaminants from occupied spaces.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf		
Assessment Standard	**Exhaust ventilation provided where hazardous chemicals generated, used or stored.**		
Type of Std.	EPA Recommendation	**Priority:**	3

Guidance for Assessor	Visually inspect, interview staff
Default Corr. Action	
Importance	Removal of contaminants from occupied spaces.
Background	
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf
Assessment Standard	**Kiln exhaust fan operational and on during kiln operation.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Determine that fan is on and drawing air out of the space. Tissue paper or chemical smoke can be used to determine air movement. (Chemical smoke is available with various dispensing mechanisms, including smoke "bottles," "guns," "pencils," or "tubes." The dispensers allow smoke to be released in controlled quantities and directed at specific locations. It is often more informative to use a number of small puffs of smoke as you move along an air pathway rather than releasing a large amount in a single puff. Caution: Chemical smoke devices use titanium tetrachloride to produce smoke. While the chemicals forming the smoke normally are not hazardous in the small quantities produced during testing, avoid inhaling smoke from smoke devices. Concentrated fumes from smoke devices are very corrosive.)
Default Corr. Action	
Importance	Measures should be taken to ensure that adequate ventilation is provided to minimize impacts on indoor air quality.
Background	
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#

Subtopic **Chemical Disposal Logs**

Assessment Standard	**Maintained for all chemicals.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Review logs, interview staff
Default Corr. Action	
Importance	Accident and injury prevention.
Background	
Links to Detailed Guidance	EPA School Chemical Cleanout Campaign#http://www.epa.gov/epaoswer/osw/conserve/clusters/schools/index.htm# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#

Subtopic	Art Supplies		
Assessment Standard	**All art material conforms to ASTM D-4236.**		
Type of Std.	Labeling of Hazardous Art Materials Act	**Priority:**	3
Guidance for Assessor	Visually inspect labels		
Default Corr. Action			
Importance	Chronic hazard prevention.		
Background	On November 18, 1988, the President signed into law the Labeling of Hazardous Art Materials Act (Public Law 100-695). This law requires that all art materials be reviewed to determine the potential for causing a chronic hazard and that appropriate warning labels be put on those art materials found to pose a chronic hazard. The term "art material" includes "any substance marketed or represented by the producer or repackager as suitable for use in any phase of the creation of any work of visual or graphic art of any medium." (15 U.S.C. 1277(b)(1). The law applies to many children's toy products such as crayons, chalk, paint sets, modeling clay, coloring books, pencils, and any other products used by children to produce a work of visual or graphic art. The "Labeling of Hazardous Art Materials Act" (LHAMA) amended the Federal Hazardous Substances Act (FHSA) by adding Section 23 and designating the ASTM Standard Practice for Labeling Art Materials for Chronic Health Hazards (ASTM D-4236-88) as a regulation under Section 3(b) of the FHSA.The requirements of the LHAMA became effective on November 18,1990. These requirements apply to art materials that are intended for use in the household or by children, which are initially introduced into interstate commerce on and after November 18, 1990. Note: Additional requirements may apply.		
Links to Detailed Guidance	Consumer Product Safety Commission--Review and Labeling of Art Materials#http://www.cpsc.gov/cpscpub/pubs/5016.html# California Guidelines for the Safe Use of Arts and Crafts Materials#http://www.oehha.ca.gov/education/art/artguide.html# Healthy School Environments Web Portal--Chemical Management#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=26#		

Area/Topic	**Home Economic Rooms**
Subtopic	**General**

Assessment Standard	**Free of signs of vermin or pests.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.		
Background	The term pesticide refers not only to insecticides, but also to herbicides, fungicides, and various other substances used to control pests. Pesticides are used both indoors and outdoors and are generally recognized by their advertised brand names. Examples include disinfectants and sanitizers, fungicides, fumigants, herbicides, insecticides, microbials, repellents, and rodenticides. Children may be especially sensitive to health risks posed by pesticides. EPA regulates the use of pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the basis for regulation, sale, distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use of pesticides. The Integrated Pest Management (IPM) is a safer and usually less costly option for effective pest management in the school community.		
Links to Detailed Guidance	IAQ Tools for Schools IPM Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklstbkgd.pdf EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf Pesticides: Controlling Pests#http://www.epa.gov/pesticides/controlling/index.htm#		
Assessment Standard	**Food service area is clean.**		
Type of Std.	EPA Recommendation; NIOSH Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Laboratory studies show that pesticides can cause health problems such as cancer, birth defects, and nerve damage. Children may be especially sensitive to health risks posed by pesticides		

	because their internal organs are still developing and maturing. Pesticides may harm a developing child by blocking the absorption of important food nutrients necessary for normal healthy growth and may also cause harm is if a child's excretory system is not fully developed by preventing the body from removing pesticides. Implementation of an integrated pest management plan ensures that pesticides are managed by trained professionals, reducing school occupants' risk of exposure.
Background	The term pesticide refers not only to insecticides, but also to herbicides, fungicides, and various other substances used to control pests. Pesticides are used both indoors and outdoors and are generally recognized by their advertised brand names. Examples include disinfectants and sanitizers, fungicides, fumigants, herbicides, insecticides, microbials, repellents, and rodenticides. Children may be especially sensitive to health risks posed by pesticides. EPA regulates the use of pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provides the basis for regulation, sale, distribution and use of pesticides in the U.S. The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set maximum residue levels, or tolerances, for pesticides used in or on foods or animal feed. The Food Quality Protection Act of 1996 (FQPA) amended FIFRA and FFDCA setting tougher safety standards for new and old pesticides. EPA's IPM Program aims to develop and implement Integrated Pest Management (IPM) practices in schools to reduce childrens' exposure to pesticide applications on school structures and grounds. The program uses current, comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. IPM programs take advantage of all pest management options possibly including, but not limited to, the judicious use of pesticides. The Integrated Pest Management (IPM) is a safer and usually less costly option for effective pest management in the school community.
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf Pesticides: Controlling Pests#http://www.epa.gov/pesticides/controlling/index.htm# IAQ Tools for Schools IPM Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklstbkgd.pdf EPA IPM in Schools#http://www.epa.gov/pesticides/ipm#
Assessment Standard	**First aid kit stocked and accessible.**
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) **Priority:** 2
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Emergency preparedness.
Background	Note: Additional requirements may apply. See 29 CFR 1910.151
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram

Subtopic **Cooking Area**

Assessment Standard	**Exhaust fans on during cooking, dishwashing, and cleaning.**
Type of Std.	EPA Recommendation **Priority:** 3

Guidance for Assessor	Determine that fan is on and drawing air out of the space. Tissue paper or chemical smoke can be used to determine air movement. (Chemical smoke is available with various dispensing mechanisms, including smoke "bottles," "guns," "pencils," or "tubes." The dispensers allow smoke to be released in controlled quantities and directed at specific locations. It is often more informative to use a number of small puffs of smoke as you move along an air pathway rather than releasing a large amount in a single puff. Caution: Chemical smoke devices use titanium tetrachloride to produce smoke. While the chemicals forming the smoke normally are not hazardous in the small quantities produced during testing, avoid inhaling smoke from smoke devices. Concentrated fumes from smoke devices are very corrosive.)
Default Corr. Action	
Importance	Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school and excess moisture contributes to mold and pest problems. Ensure local exhaust fans are used to remove moisture and odors while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf
Assessment Standard	**Gas appliances vented to outdoors and working properly.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Inspect
Default Corr. Action	
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues. No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary

	measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf

Subtopic **Waste Management**

Assessment Standard	**Waste stored in appropriate containers.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Proper waste management promotes good indoor air quality (IAQ), decreases the need for pesticides, and controls odors, contaminants, and vermin.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Waste Management Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklst.pdf IAQ Tools for Schools Waste Management Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklstbkgd.pdf Municipal solid waste - recycling#http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm# EPA's WasteWise Program - recycling#http://www.epa.gov/wastewise/wrr/recycle.htm#		

Subtopic **Sinks**

Assessment Standard	**Hot and cold water available at all lavatories.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		

Assessment Standard	**Hot water temperature does not exceed 120 degrees (F).**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Measure water temperature		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Tap Water Scalds#http://www.cpsc.gov/cpscpub/pubs/5098.html#		

Assessment Standard	**Sinks clean.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		

Assessment Standard	**Drains unclogged.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		

Assessment Standard	**Soap and disposable hand towels or air dryer present.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		

Subtopic **Combustion Appliances**

Assessment Standard	**Air monitored regularly for CO where combustion appliances are present.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Interview facilities staff		
Default Corr. Action			
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues. No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.		
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.		
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf Consumer Product Safety Commission Questions and Answers on CO#http://www.cpsc.gov/cpscpub/pubs/466.html		

Area/Topic	**Computer and CADD Labs**
Subtopic	**Energy Star**
Assessment Standard	**Monitor power management software on computer networks is installed.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview information technology personnel.
Default Corr. Action	
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality can be improved while improving the energy efficiency of a building.
Background	Electricity is generated from both renewable and nonrenewable energy sources. Energy efficiency/conservation is important because consumption of nonrenewable fossil fuels impacts the environment by polluting the water and air. Using fossil fuel energy more efficiently avoids emissions from power plants, can avoid the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.
Links to Detailed Guidance	ENERGY STAR Monitor Power Management#http://www.energystar.gov/powermanagement#

Area/Topic	**Music Rooms**
Subtopic	**General**
Assessment Standard	**Cleaning supplies provided for instrument maintenance and headphones.**
Type of Std.	Good practice **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Clean and sanitary conditions.
Background	
Links to Detailed Guidance	

Area/Topic	**Auditoriums**
Subtopic	**General**

Assessment Standard	**All risers, platforms, and guardrails structurally intact.**		
Type of Std.	OSHA Regulations (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		
Assessment Standard	**Guardrails present at every open-sided floor, platform or balcony 30” or more above adjacent floor excepting stage fronts.**		
Type of Std.	OSHA Regulations (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		
Assessment Standard	**Stage curtains clean.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Maintain a cleaner school with reduced effort by using two simple techniques: 1) Reduce the amount of dust and dirt that enters the school through walk-off mats (see Building Entrances); and 2) Reduce the amount of dust released from vacuum bags and dust cloths. Cleaner schools positively affect students and staff both physically and psychologically. Buildings with high dust levels have been associated with increased complaints, illnesses, and discomfort. Specifically, dust		

	mites have been found to trigger asthma attacks. In addition to dust, these techniques reduce other particles (such as pollens), that are known to cause allergic reactions. Use high-efficiency vacuum bags. Standard paper or cloth bags allow dust to pass completely through the vacuum and back into the air and onto surfaces. When possible, use micro-filtration bags that retain dust and particles in the 3 micron size range or even smaller. Although these bags cost more initially, using them can reduce labor costs. When dusting, ensure dust is collected and not released back into the air. Use wet cloths to collect dust, and dust in a circular motion rather than a flicking motion.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf

Area/Topic	**Cafeterias and Student Dining Areas**
Subtopic	**General**

Assessment Standard	**Free of signs of vermin or pests.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e., the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf IAQ Tools for Schools IPM Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklst.pdf IAQ Tools for Schools IPM Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklstbkgd.pdf		
Assessment Standard	**Food service area is clean.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local		

exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e., the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.

Background

Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance

IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf

IAQ Tools for Schools IPM Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklst.pdf

IAQ Tools for Schools IPM Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ipmcklstbkgd.pdf

Subtopic **Cooking Area**

Assessment Standard

Exhaust fans on during cooking, dishwashing, and cleaning.

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

Determine that fan is on and drawing air out of the space. Tissue paper or chemical smoke can be used to determine air movement. (Chemical smoke is available with various dispensing mechanisms, including smoke "bottles," "guns," "pencils," or "tubes." The dispensers allow smoke to be released in controlled quantities and directed at specific locations. It is often more informative to use a number of small puffs of smoke as you move along an air pathway rather than releasing a large amount in a single puff. Caution: Chemical smoke devices use titanium tetrachloride to produce smoke. While the chemicals forming the smoke normally are not hazardous in the small quantities produced during testing, avoid inhaling smoke from smoke devices. Concentrated fumes from smoke devices are very corrosive.)

Default Corr. Action

Importance

COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e.,

	the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf
Assessment Standard	**Gas appliances vented to outdoors and working properly.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e., the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf

Subtopic **Waste Management**

Assessment Standard	**Waste stored in appropriate containers.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e., the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram Municipal solid waste - recycling#http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm# EPA's WasteWise Program - recycling#http://www.epa.gov/wastewise/wrr/recycle.htm#		

Subtopic **Receiving**

Assessment Standard	**Idling vehicles not present in receiving area.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		

Default Corr. Action	
Importance	COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e., the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample
Assessment Standard	**Doors to receiving area kept closed.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	COOKING AREA: Cooking activities can attract pests and generate odors, moisture, food waste, and trash—all of which must be managed carefully to avoid indoor air quality (IAQ) problems. Food odors can be a distraction to students and staff if they circulate through the school. Ensure local exhaust fans are used while cooking, washing dishes, and cleaning. Noisy exhaust fans may indicate a problem or discourage employees from using them. FOOD HANDLING AND STORAGE: A clean kitchen with food stored in secure containers discourages vermin and other pests. Complete the Integrated Pest Management Checklist to prevent and resolve pest problems. IPM minimizes the need for pesticides and discourages pests by eliminating food sources, pathways, and shelter. WASTE MANAGEMENT: Selecting appropriate waste containers helps minimize odor and pest problems. Proper placement of dumpsters prevents odors from entering the building and decreases opportunities for insects and vermin to enter the building. DELIVERIES: The kitchen is often the busiest area in the school for deliveries. Because fans exhaust air from the kitchen (i.e., the kitchen is negatively pressurized), air from an adjacent loading dock can be drawn into the kitchen. If delivery trucks or other vehicles idle at the dock, exhaust fumes can enter the school and cause air quality problems.

Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample

Area/Topic **Library / Media Center**

Subtopic **General**

Assessment Standard	**Free of visible mold or dust accumulations on books or shelves.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Mold spores waft through the indoor and outdoor air continually. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems. Molds can produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf		

Assessment Standard	**Free of excessive accumulation of dust on library shelves.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Maintain a cleaner school with reduced effort by using two simple techniques: 1) Reduce the amount of dust and dirt that enters the school through walk-off mats (see Outside Entrances and Exits); and 2) Reduce the amount of dust released from vacuum bags and dust cloths. Cleaner schools positively affect students and staff both physically and psychologically. Buildings with high dust levels have been associated with increased complaints, illnesses, and discomfort. Specifically, dust mites have been found to trigger asthma attacks. In addition to dust, these techniques reduce other particles (such as pollens), that are known to cause allergic reactions. Use high-efficiency vacuum bags. Standard paper or cloth bags allow dust to pass completely through the vacuum and back into the air and onto surfaces. When possible, use micro-filtration bags that retain dust and particles in the 3 micron size range or even smaller. Although these bags cost more initially, using them can reduce labor costs. When dusting, ensure dust is collected and not released back into the air. Use wet cloths to collect dust, and dust in a circular motion rather than a flicking motion.		
Background			
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf		

Subtopic	Energy Star		
Assessment Standard	**Power management software on computer networks is installed.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Interview information technology personnel.		
Default Corr. Action			
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality can be improved while improving the energy efficiency of a building.		
Background	Electricity is generated from both renewable and nonrenewable energy sources. Energy efficiency/conservation is important because consumption of nonrenewable fossil fuels impacts the environment by polluting the water and air. Using fossil fuel energy more efficiently avoids emissions from power plants, can avoid the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.		
Links to Detailed Guidance	ENERGY STAR Monitor Power Management#http://www.energystar.gov/powermanagement#		

Area/Topic **Indoor Athletic Facilities**

Subtopic **Gymnasiums**

Assessment Standard	**Gym equipment safe and in proper working order.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	Health, Mental Health and Safety Guidelines for Schools#http://www.nationalguidelines.org/guideline.cfm?guideNum=6-08#		
Assessment Standard	**Exercise mats in good condition.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	Health, Mental Health and Safety Guidelines for Schools#http://www.nationalguidelines.org/guideline.cfm?guideNum=6-08#		
Assessment Standard	**Cleaning supplies provided for mat cleaning.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background			
Links to Detailed Guidance	Health, Mental Health and Safety Guidelines for Schools#http://www.nationalguidelines.org/guideline.cfm?guideNum=6-08#		
Assessment Standard	**Appropriate protective matting behind basketball hoops.**		

Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	Health, Mental Health and Safety Guidelines for Schools#http://www.nationalguidelines.org/guideline.cfm?guideNum=6-08#		

Subtopic **Locker Rooms**

Assessment Standard	**Hot & cold running water supplied to all showers and faucets.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		
Assessment Standard	**Free of visible mold or mildew on any surfaces.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Locker room conditions that affect IAQ include standing water, high humidity, warm temperatures, and damp or dirty clothing. In addition, some of the methods necessary to control germs and odors in the locker room (for example, use of disinfectants) may themselves contribute to IAQ problems if used improperly. It is important to maintain cleanliness and reduce excess moisture in the locker room. Verify that showers and other locker room areas are cleaned regularly and properly. In addition, you should dry wet towels promptly, wash and dry soiled practice uniforms regularly, encourage students to take soiled clothes home, and operate exhaust fans to remove moisture. Ensure that the local exhaust fan in the locker room is functioning and that drain traps contain water so that sewer gases do not enter the room.		
Background			

Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html# IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf
Assessment Standard	**Drain traps servicing floors, sinks, and toilets fully wet at all times.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Locker room conditions that affect IAQ include standing water, high humidity, warm temperatures, and damp or dirty clothing. In addition, some of the methods necessary to control germs and odors in the locker room (for example, use of disinfectants) may themselves contribute to IAQ problems if used improperly. It is important to maintain cleanliness and reduce excess moisture in the locker room. Verify that showers and other locker room areas are cleaned regularly and properly. In addition, you should dry wet towels promptly, wash and dry soiled practice uniforms regularly, encourage students to take soiled clothes home, and operate exhaust fans to remove moisture. Ensure that the local exhaust fan in the locker room is functioning and that drain traps contain water so that sewer gases do not enter the room.
Background	
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf
Assessment Standard	**Shower and toilet areas equipped with operable exhaust fan(s).**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Locker room conditions that affect IAQ include standing water, high humidity, warm temperatures, and damp or dirty clothing. In addition, some of the methods necessary to control germs and odors in the locker room (for example, use of disinfectants) may themselves contribute to IAQ problems if used improperly. It is important to maintain cleanliness and reduce excess moisture in the locker room. Verify that showers and other locker room areas are cleaned regularly and properly. In addition, you should dry wet towels promptly, wash and dry soiled practice uniforms regularly, encourage students to take soiled clothes home, and operate exhaust fans to remove moisture. Ensure that the local exhaust fan in the locker room is functioning and that drain traps contain water so that sewer gases do not enter the room.
Background	
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf
Assessment Standard	**Operational showers not used for storage.**
Type of Std.	EPA Recommendation **Priority:** 4

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Locker room conditions that affect IAQ include standing water, high humidity, warm temperatures, and damp or dirty clothing. In addition, some of the methods necessary to control germs and odors in the locker room (for example, use of disinfectants) may themselves contribute to IAQ problems if used improperly. It is important to maintain cleanliness and reduce excess moisture in the locker room. Verify that showers and other locker room areas are cleaned regularly and properly. In addition, you should dry wet towels promptly, wash and dry soiled practice uniforms regularly, encourage students to take soiled clothes home, and operate exhaust fans to remove moisture. Ensure that the local exhaust fan in the locker room is functioning and that drain traps contain water so that sewer gases do not enter the room.
Background	
Links to Detailed Guidance	IAQ Tools for School Teacher's Classroom Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklst.pdf IAQ Tools for Schools Teacher's Classroom Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/teacherchklstbkgd.pdf

Area/Topic	**Attics / Mezzanines**
Subtopic	**General**

Assessment Standard	**Free of evidence of roof or plumbing leaks.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Mold prevention.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf		

Assessment Standard	**Free of animal or insect nests, waste, or debris.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Waste from birds and other pests (e.g., rats) can disrupt proper operation of the HVAC system, promote microbial growth and cause human disease. The use of outdoor air intake grilles with vertical louvers, as opposed to horizontal louvers, will reduce the potential for roosting. Grilles protecting air intakes should be bird- and rodent-proofed to prevent perching, roosting, and nesting.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf		

Area/Topic	**Mechanical Rooms**
Subtopic	**General**

Assessment Standard	**Access restricted to authorized individuals at all times.**		
Type of Std.	Good practice	**Priority:**	3
Guidance for Assessor	Interview staff		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background	Refer to applicable state and local building codes		
Links to Detailed Guidance			
Assessment Standard	**Door(s) equipped with operable lock(s).**		
Type of Std.	Good practice	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background	Refer to applicable state and local building codes		
Links to Detailed Guidance			
Assessment Standard	**Door kept locked and inaccessible to students.**		
Type of Std.	Good practice	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background	Refer to applicable state and local building codes		
Links to Detailed Guidance			
Assessment Standard	**Boiler certificate on file.**		

Type of Std.	American Society of Mechanical Engineers Standard	**Priority:**	3
Guidance for Assessor	Review files		
Default Corr. Action			
Importance	Equipment safety.		
Background	Refer to applicable state and local building codes		
Links to Detailed Guidance			
Assessment Standard	**Floors free from slips, trips and fall hazards.**		
Type of Std.	OSHA Regulation--29 CFR 1910.22 and 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.22 and 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		
Assessment Standard	**Free of storage of items that inhibit or restrict routine maintenance or cleaning.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Facilitate proper maintenance of equipment.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Building and Grounds Maintenance Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklst.pdf IAQ Tools for Schools Building and Grounds Maintenance Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/bldgmaintchklstbkgd.pdf		

Area/Topic **Clinics / Health Officer / School Nurse**

Subtopic **Facilities**

Assessment Standard	**Handicapped accessible toilet.**		
Type of Std.	Americans with Disabilities Act	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Appropriate facilities.		
Background			
Links to Detailed Guidance	National Clearinghouse for Educational Facilities--School Health Centers#http://www.edfacilities.org/pubs/healthctr.html# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Cot and mattress with waterproof cover.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Appropriate facilities.		
Background			
Links to Detailed Guidance	Ohio Department of Public Safety Emergency Guidelines for Schools#http://www.schoolhealth.org/content/emerGuide.pdf IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Telephone**		
Type of Std.	Good practice	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Appropriate facilities.		
Background			

Links to Detailed Guidance	National Clearinghouse for Educational Facilities--School Health Centers#http://www.edfacilities.org/pubs/healthctr.html# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Locked storage for medications and syringes.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Prevent unauthorized access.		
Background			
Links to Detailed Guidance	National Clearinghouse for Educational Facilities--School Health Centers#http://www.edfacilities.org/pubs/healthctr.html# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		

Subtopic **Sinks**

Assessment Standard	**Hot and cold water available at all lavatories**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Hot water temperature does not exceed 120 degrees (F).**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Measure temperature		

Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Tap Water Scalds#http://www.cpsc.gov/cpscpub/pubs/5098.html# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Sinks clean.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Drains unclogged.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		

Assessment Standard	**Soap and disposable hand towels or air dryer present.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.141 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.141.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		

Subtopic **Equipment and Durable Supplies**

Assessment Standard	**Current National American Red Cross First Aid Manual or equivalent.**		
Type of Std.	Good Practice	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Emergency preparedness.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**First aid kit stocked and accessible.**		
Type of Std.	OSHA Regulation -- 29 CFR 1910.151 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.)	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Emergency preparedness.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.151		

Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Sharps container.**		
Type of Std.	OSHA Reg--29 CFR 1910.1030 (OSHA regulations apply to public employees in 26 states with approved state plans; other states may consider using the OSHA standard as recommended guidance.) CDC Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury and illness prevention.		
Background	Note: Additional requirements may apply. See 29 CFR 1910.1030.		
Links to Detailed Guidance	OSHA Occupational Safety and Health Standards#http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910# IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		
Assessment Standard	**Non-mercury thermometer/ sphygmomanometers.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Reduce mercury hazards.		
Background			
Links to Detailed Guidance	EPA Safe Mercury Management#http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf		

Subtopic **Ventilation**

Assessment Standard	**Ventilation system is properly operating.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect, interview staff		

Default Corr. Action	
Importance	Since sick students and staff frequent the health office, it is important to take steps that can help prevent transmission of airborne diseases to uninfected students and staff. Use this checklist to identify and prevent IAQ problems associated with the health office. Ventilation is the process by which air is circulated throughout the school. Stale indoor air is exhausted to the outside, and outdoor air is drawn into the building. Schools may either have mechanical ventilation (supplied by fans) or natural ventilation (i.e., operable windows). Improperly operated or poorly maintained ventilation systems can cause serious IAQ problems. In addition, the ventilation system can carry air pollutants from one location in the school to another.
Background	
Links to Detailed Guidance	IAQ Tools for Schools Health Officer Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklst.pdf IAQ Tools for Schools Health Officer Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/healthofficerchklstbkgd.pdf

Area/Topic **Administrative Areas**

Subtopic **Copy Rooms**

Assessment Standard	**Room equipped with functioning exhaust fan.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	The printing facility of the school includes areas and activities related to the operation and routine maintenance of various types of off-set printing, high-speed and color copying equipment and related services. Small quantities of chemicals, including inks, solvents and adhesives are stored and used by printing facility personnel. Current MSDSs for each chemical should be maintained along with an inventory of the quantity stored. Calculations should be conducted to determine if any of these chemicals exceed the threshold triggering reporting requirements under CERCLA or EPCRA. Operation of photocopiers, spirit duplicating machines, mimeograph machines, blueprint machines, stencil makers and computer printers have the potential to impact indoor air quality. This equipment should be located in areas with adequate ventilation and should be regularly serviced and inspected.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Administrative Staff Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/adminstaffchklst.pdf		

Assessment Standard	**Exhaust fan on during work periods where airborne contaminants are generated.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	The printing facility of the school includes areas and activities related to the operation and routine maintenance of various types of off-set printing, high-speed and color copying equipment and related services. Small quantities of chemicals, including inks, solvents and adhesives are stored and used by printing facility personnel. Current MSDSs for each chemical should be maintained along with an inventory of the quantity stored. Calculations should be conducted to determine if any of these chemicals exceed the threshold triggering reporting requirements under CERCLA or EPCRA. Operation of photocopiers, spirit duplicating machines, mimeograph machines, blueprint machines, stencil makers and computer printers have the potential to impact indoor air quality. This equipment should be located in areas with adequate ventilation and should be regularly serviced and inspected.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Administrative Staff Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/adminstaffchklst.pdf		

Subtopic **Break Rooms**

Assessment Standard	**All food stored in refrigerator or in sealed containers.**

Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Remove food available for pests.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Food Service Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf		

Area/Topic	**Outside Entrances and Exits**
Subtopic	**Walk-off Mats**

Assessment Standard	**5-step walk-off mats at every building entrance.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect. The entry mat system should be at least 20 feet long, as wide as the entry doors, and employ three different types of matting.		
Default Corr. Action			
Importance	Entry mat systems are critical in trapping soil, pollutants, and moisture that otherwise would spread into and throughout the building, as well as in reducing the cost to properly maintain the building. Entry mat systems should be addressed during the design-phase of the building rather than as a maintenance issue after the fact. The International Sanitary Supply Association reports that most of the dirt within a building is tracked in on people's shoes, and that 85% of this can be removed if entry mats are properly designed and maintained. Without an entry mat system: 1) entrances and lobbies can quickly become unsightly, providing a poor first-impression about the maintenance and condition of the building; 2) dirt and pollutants can spread to larger areas, thereby requiring higher maintenance costs than otherwise would have been necessary; 3) moisture tracked onto hard-surface floors can increase the chance of injuries and can reduce the life of carpet; and 4) increased grit tracked onto smooth-surface flooring can grind away the protective finish and carpets can quickly become loaded with pollutants. To effectively remove most pollutants from shoes requires a combination of mat materials, textures, and lengths. The combination may vary depending on your climate and location. For example, a snowy climate may require a greater amount of scraper mat; a rainy location more adsorption mat; and a muddy location more of each of the mats.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://epa.gov/iaq/schooldesign/controlling.html#Entry%20Mat%20Barriers		

Assessment Standard	**Clean and dry.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Entry mat systems are critical in trapping soil, pollutants, and moisture that otherwise would spread into and throughout the building, as well as in reducing the cost to properly maintain the building. Entry mat systems should be addressed during the design-phase of the building rather than as a maintenance issue after the fact. The International Sanitary Supply Association reports that most of the dirt within a building is tracked in on people's shoes, and that 85% of this can be removed if		

	entry mats are properly designed and maintained. Without an entry mat system: 1) entrances and lobbies can quickly become unsightly, providing a poor first-impression about the maintenance and condition of the building; 2) dirt and pollutants can spread to larger areas, thereby requiring higher maintenance costs than otherwise would have been necessary; 3) moisture tracked onto hard-surface floors can increase the chance of injuries and can reduce the life of carpet; and 4) increased grit tracked onto smooth-surface flooring can grind away the protective finish and carpets can quickly become loaded with pollutants. To effectively remove most pollutants from shoes requires a combination of mat materials, textures, and lengths. The combination may vary depending on your climate and location. For example, a snowy climate may require a greater amount of scraper mat; a rainy location more adsorption mat; and a muddy location more of each of the mats.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://epa.gov/iaq/schooldesign/controlling.html#Entry%20Mat%20Barriers
Assessment Standard	**Flat on floor with no slippage.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Entry mat systems are critical in trapping soil, pollutants, and moisture that otherwise would spread into and throughout the building, as well as in reducing the cost to properly maintain the building. Entry mat systems should be addressed during the design-phase of the building rather than as a maintenance issue after the fact. The International Sanitary Supply Association reports that most of the dirt within a building is tracked in on people's shoes, and that 85% of this can be removed if entry mats are properly designed and maintained. Without an entry mat system: 1) entrances and lobbies can quickly become unsightly, providing a poor first-impression about the maintenance and condition of the building; 2) dirt and pollutants can spread to larger areas, thereby requiring higher maintenance costs than otherwise would have been necessary; 3) moisture tracked onto hard-surface floors can increase the chance of injuries and can reduce the life of carpet; and 4) increased grit tracked onto smooth-surface flooring can grind away the protective finish and carpets can quickly become loaded with pollutants. To effectively remove most pollutants from shoes requires a combination of mat materials, textures, and lengths. The combination may vary depending on your climate and location. For example, a snowy climate may require a greater amount of scraper mat; a rainy location more adsorption mat; and a muddy location more of each of the mats.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S.

	Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://epa.gov/iaq/schooldesign/controlling.html#Entry%20Mat%20Barriers

Subtopic	**Floors -- Carpet**		
Assessment Standard	**Not installed in areas likely to get wet.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	All flooring—including vinyl, wood, terrazzo, tile, and carpet—requires daily attention to ensure cleanliness. Contact floor suppliers or manufacturers for recommended maintenance techniques and follow specific guidelines for properly maintaining carpets. Determine the appropriate frequency of vacuuming required for each area. (Guidelines are available from the Carpet and Rug Institute at (800) 882-8846 or www.carpet-rug.com and the Resilient Floor Covering Institute at www.RFCI.com). Use a vacuum with brushes, beater bars, strong suction, and a high-efficiency filter bag that will filter particles down to the 3 micron or smaller range. Remove spots and stains immediately. Use care to prevent excess moisture to ensure that cleaned areas will dry quickly. Perform restorative maintenance as necessary (for example, stripping and recoating floors or intensively cleaning carpets). The Carpet and Rug Institute recommends periodic extraction cleaning (wet or dry); be sure to remove all moisture and cleaning agents after cleaning.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://www.epa.gov/iaq/schooldesign/controlling.html#Carpet Carpet and Rug Institute#http://www.carpet-rug.com/ Reslient Floor Covering Institute#http://rfci.com/		

Area/Topic	**Building Exterior**
Subtopic	**Adjacent Grounds**
Assessment Standard	**Free of evidence of water ponding within 10' of building foundation.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.
Background	Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas, using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#pagetop IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf
Assessment Standard	**Visible slope to grade within 10' of building foundation.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building

envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.

Background

Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas, using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.

Links to Detailed Guidance

IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf

IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#pagetop

IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf

Assessment Standard

Irrigation water spray lines not on building or within 3' of foundation.

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

Visually inspect.

Default Corr. Action

Importance

Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.

Background

Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas,

	using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.		
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#pagetop IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf		
Assessment Standard	**Grass clippings or other organic debris not accumulating adjacent to foundation.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Minimize water contact with building envelope.		
Background			
Links to Detailed Guidance	EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# IPM Institute of North America#http://www.ipminstitute.org/school.htm#		
Assessment Standard	**Vegetation not in contact with building.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Minimize water contact with building envelope.		
Background			
Links to Detailed Guidance	EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# IPM Institute of North America#http://www.ipminstitute.org/school.htm#		
Assessment Standard	**18” non-vegetation border around building perimeter.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Minimize water contact with building envelope.		
Background			

Links to Detailed Guidance	EPA IPM in Schools#http://www.epa.gov/pesticides/ipm# IPM Institute of North America#http://www.ipminstitute.org/school.htm#

Subtopic **Adjacent Grounds -- No air contaminants within 25' of building envelope**

Assessment Standard	**Idling vehicles not present.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Intakes should not be placed within 25 feet of any potential sources of air contaminants, including sewer vents, exhaust air from the school, loading docks, bus loading areas, garbage receptacles, boiler or generator exhausts, and mist from cooling towers. If the source is large or contains strong contaminants, or if there is a dominant wind direction in the area, the minimum separation distance may need to be increased. Air admittance valves, an inexpensive and code-approved one-way air valve, can be added to sewer vents to eliminate the potential for release of gases into the surrounding air. Intake Screens must be accessible for inspection and cleaning. In existing schools, an insufficient amount of ventilation air is often the result of clogged intake screens that are inaccessible for inspection and cleaning. Screens hidden by an intake grille should be designed with a grille that is easily opened, such as a hinged grille with two quick-release latches, or in the worst case, a grille with four one-quarter turn fasteners. All screens should be easily removable for cleaning.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools--HVAC#http://www.epa.gov/iaq/schooldesign/hvac.html#Location%20of%20Outdoor%20Air%20Intakes%20and%20Exhaust IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf		
Assessment Standard	**Free of bird, animal, or insect nests.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Intakes should not be placed within 25 feet of any potential sources of air contaminants, including sewer vents, exhaust air from the school, loading docks, bus loading areas, garbage receptacles, boiler or generator exhausts, and mist from cooling towers. If the source is large or contains strong contaminants, or if there is a dominant wind direction in the area, the minimum separation distance may need to be increased. Air admittance valves, an inexpensive and code-approved one-way air valve, can be added to sewer vents to eliminate the potential for release of gases into the surrounding air. Intake screens must be accessible for inspection and cleaning. In existing schools, an insufficient amount of ventilation air is often the result of clogged intake screens that are inaccessible for inspection and cleaning. Screens hidden by an intake grille should be designed with a grille that is easily opened, such as a hinged grille with two quick-release latches, or in the worst case, a grille with four one-quarter turn fasteners. All screens should be easily removable for cleaning.		
Background			

Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools--Controlling Pollutants#http://www.epa.gov/iaq/schooldesign/controlling.html IAQ Design Tools for Schools--HVAC#http://www.epa.gov/iaq/schooldesign/hvac.html#Location%20of%20Outdoor%20Air%20Intakes%20and%20Exhaust
Assessment Standard	**Paint, roofing materials, or other sealants/coatings applied during unoccupied periods.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Intakes should not be placed within 25 feet of any potential sources of air contaminants, including sewer vents, exhaust air from the school, loading docks, bus loading areas, garbage receptacles, boiler or generator exhausts, and mist from cooling towers. If the source is large or contains strong contaminants, or if there is a dominant wind direction in the area, the minimum separation distance may need to be increased. Air admittance valves, an inexpensive and code-approved one-way air valve, can be added to sewer vents to eliminate the potential for release of gases into the surrounding air. Intake screens must be accessible for inspection and cleaning. In existing schools, an insufficient amount of ventilation air is often the result of clogged intake screens that are inaccessible for inspection and cleaning. Screens hidden by an intake grille should be designed with a grille that is easily opened, such as a hinged grille with two quick-release latches, or in the worst case, a grille with four one-quarter turn fasteners. All screens should be easily removable for cleaning.
Background	
Links to Detailed Guidance	IAQ Tools for Schools Renovation and Repair Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/renrepairchklst.pdf IAQ Design Tools for Schools--HVAC#http://www.epa.gov/iaq/schooldesign/hvac.html#Location%20of%20Outdoor%20Air%20Intakes%20and%20Exhaust

Subtopic	**Outside Air Intakes**
Assessment Standard	**Air contaminant sources not within 25’ of outside air intake.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Intakes should not be placed within 25 feet of any potential sources of air contaminants, including sewer vents, exhaust air from the school, loading docks, bus loading areas, garbage receptacles, boiler or generator exhausts, and mist from cooling towers. If the source is large or contains strong contaminants, or if there is a dominant wind direction in the area, the minimum separation distance may need to be increased. Air admittance valves, an inexpensive and code-approved one-way air valve, can be added to sewer vents to eliminate the potential for release of gases into the surrounding air. Intake screens must be accessible for inspection and cleaning. In existing schools, an insufficient amount of ventilation air is often the result of clogged intake screens that are inaccessible for inspection and cleaning. Screens hidden by an intake grille should be designed with a grille that is easily opened, such as a hinged grille with two quick-release latches, or in the worst case, a grille with four one-quarter turn fasteners. All screens should be easily removable for cleaning.

Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/hvac.html#Location%20of%20Outdoor%20Air%20Intakes%20and%20Exhaust
Assessment Standard	**Intake screens intact & unobstructed (boards, leaves, vegetation, snow, etc.).**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Proper location of outdoor air intakes can minimize the blockage of airflow and intake of contaminated air. The bottom of air intakes should be at least 8 inches above horizontal surfaces (generally the ground or the roof) to prevent blockage from leaves or snow. In northern locations, more separation may be needed due to greater snow depths or drifting snow.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf IAQ Design Tools for Schools--HVAC#http://www.epa.gov/iaq/schooldesign/hvac.html#Location%20of%20Outdoor%20Air%20Intakes%20and%20Exhaust
Assessment Standard	**Areas in an around air intakes free of bird or animal nests or droppings.**
Type of Std.	EPA Recommendation **Priority:** 3

Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Waste from birds and other pests (e.g., rats) can disrupt proper operation of the HVAC system, promote microbial growth and cause human disease. The use of outdoor air intake grilles with vertical louvers, as opposed to horizontal louvers, will reduce the potential for roosting. Grilles protecting air intakes should be bird- and rodent-proofed to prevent perching, roosting, and nesting.
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf

Subtopic **Gutters, Downspouts, Scuppers and Storm Drains**

Assessment Standard	**Intact and properly connected.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.		
Background	Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages		

	building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas, using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.		
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html		
Assessment Standard	**Downspouts drain to storm sewer or visibly sloped grade.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.		
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Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html		
Assessment Standard	**Free of evidence of storm water overflow or obstruction.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			

Importance	Discharge of storm water from schools, other than from construction projects involving one acre or more of land, is generally not regulated under federal Phase II National Pollutant Discharge Elimination System (NPDES) storm water regulations. However, many activities occur at schools that do have the potential to impact water quality and many areas of the school, as well as the community that utilizes the school grounds, can become involved in the implementation of best management practices to reduce or prevent water contamination.		
Background			
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html		
Assessment Standard	**Free of excessive debris or standing water in gutters.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.		
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Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#pagetop		

Subtopic **Walls**

Assessment Standard	**Free of visible bowing or structural cracks.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect.		

Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.
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Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#pagetop
Assessment Standard	**Bricks and mortar joints intact.**
Type of Std.	Good practice **Priority:** 4
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.
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Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities		
Assessment Standard	**Wood siding & trim intact.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.		
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Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities		
Assessment Standard	**Edge joints properly caulked & sealed.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect.		

Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.
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Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities
Assessment Standard	**Walls free of peeling, cracked, or blistering paint.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because, when exposed, their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death. Regular inspection and maintenance of lead paint protects building occupants by reducing exposure to lead-contaminated dust and paint flakes.
Background	In 1978, paint containing more than 0.06 percent lead was banned; however, old stocks of leaded paint were still used for more than a decade. As a general guideline, schools built prior to 1978 are likely to have lead-based paint on the premises. It is unlikely that schools built after 1992 have lead-based paint on the premises. Deteriorating lead-based paint releases lead dust and/or paint flakes that pose an immediate safety hazard for young children. Children exposed to lead may experience nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. As part of EPA's ongoing efforts to protect children from lead poisoning, the EPA introduced new standards in the Toxic Substances Control Act (TSCA) Section 403 (2001). Under the new standards, lead is considered a hazard if there are greater than 40 micrograms of lead in dust per square foot on floors, 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200

	ppm average for bare soil in the rest of the yard. Identifying lead hazards through these standards will allow inspectors and risk assessors to assist property owners in deciding how to address lead problems. The Indoor Air Quality Tools for Schools (IAQ TFS) Program helps schools prevent, identify, and resolve indoor air quality problems related to lead. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality. The EPA offers additional resources pertaining to lead and the evaluation of lead-based paint on the following website: http://www.epa.gov/opptintr/lead/leadpbed.htm		
Links to Detailed Guidance	EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html#		
Assessment Standard	**Walls free of visible mold.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Mold spores waft through the indoor and outdoor air continually and thrive in areas with excessive moisture or water accumulation. Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Delayed maintenance or insufficient maintenance can exacerbate moisture problems. Molds produce allergens, irritants, and in some cases toxins that have the potential to cause health effects such as asthma episodes and allergic reactions. In addition, mold can deteriorate building materials and cause odor problems. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.		
Background	Molds can be found almost anywhere and can grow on virtually any organic surface or substance, provided moisture is present. Molds are a source of indoor allergens, which can contribute to poor indoor air quality. Federal Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold. EPA's Indoor Air Quality Tools for Schools Program assists schools in managing mold and moisture problems. The asthma companion piece for the IAQ Tools for Schools Program entitled, "Managing Asthma in the School Environment," also offers guidance for mold clean up and control moisture. In addition to the IAQ Tools for Schools Program, EPA has published supplementary literature on the subject including, "Mold Remediation in Schools and Commercial Buildings." The guidance assists schools in evaluating mold problems and employing remediation methods to maintain a healthy school environment.		
Links to Detailed Guidance	Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#		

Subtopic **Windows**

Assessment Standard	**Panes & frames intact.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger		

	mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.
Background	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas, using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.
Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities
Assessment Standard	**Glazed/caulked joints intact.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Mold is usually not a problem indoors unless there is excess moisture. It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities.
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Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities		
Assessment Standard	**Weather stripping intact.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas, using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.		
Background			
Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities		
Assessment Standard	**Window surfaces free of visible mold.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			

Importance	In winter, water vapor in the indoor air can condense onto cold surfaces such as windows, walls, and the underside of roof decks. In summer, condensing can occur on cool surfaces like water pipes and ducts conveying cold air.
Background	
Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities Mold Remediation in Schools and Commercial Buildings#http://www.epa.gov/iaq/molds/mold_remediation.html#
Assessment Standard	**Properly caulked and sealed.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp construction cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs. Water also enters construction cavities through a process of moisture migration. Moisture migrates from the warm and humid side of the construction assembly to the cold dry side of the construction assembly. Air pressure differentials can also drive moisture into interior and exterior walls, creating mold-favorable environments, and they can do so in both heating climates and hot, humid climates. In hot, humid climates, even slight negative interior pressures can pull hot outdoor moisture into chilled wall cavities during cooling periods if the building envelope is not properly designed and constructed. Similarly, during heating periods, positive pressures can push warm, moist air from indoors into chilled exterior walls. In either case, this uncontrolled moisture can lead to mold growth that impairs indoor air quality and damages building materials. Thus, assuring the integrity of exterior walls (or interior walls where moisture migration may be a problem) is the first line of defense for preventing this problem in all climates. For hot, humid climates, a slightly positively pressurized building may also help, as a slightly negatively pressurized building may help in heating climates. However, in mixed climate areas, using positive or negative pressures can create problems as the weather changes. Ultimately, the most reliable solution is the proper construction of the building envelope.
Background	
Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities

Subtopic **Roof -- General**

Assessment Standard	**Roof coatings not applied during occupied periods.**
Type of Std.	EPA Recommendation **Priority:** 2
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Roofing work often involves the use of tar and pollutant-producing chemicals, which can cause indoor air problems if fumes enter the building. School officials and roofers should cooperate to

schedule work for times when the building is unoccupied and to prevent contaminants from entering the building. Avoid introducing odors and contaminants into the building through the ventilation system. For example, warn staff and students to keep doors and windows closed until the roofing work is finished. Temporarily close outdoor air intakes, especially rooftop intakes in the vicinity of (and downwind from) the work area. To avoid creating IAQ problems from under-ventilation, provide temporary means (such as fans and/or ducts) to supply outdoor air and reduce pollutant-generating activities indoors.

Background

Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, information and training on how to reduce exposure to airborne contaminants is available from the State Occupational Safety and Health Administration (OSHA). Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.

Links to Detailed Guidance

IAQ Tools for Schools Renovation and Repair Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/renrepairchklst.pdf

IAQ Tools for Schools Renovation and Repair Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/renrepairchklstbkgd.pdf

Subtopic **Roof -- Exhaust Stacks / Vents / Chimney Flues**

Assessment Standard

Located away from outside air intakes, windows, and doors.

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

Visually inspect.

Default Corr. Action

Importance

Intakes should not be placed within 25 feet of any potential sources of air contaminants, including sewer vents, exhaust air from the school, loading docks, bus loading areas, garbage receptacles, boiler or generator exhausts, and mist from cooling towers. If the source is large or contains strong contaminants, or if there is a dominant wind direction in the area, the minimum separation distance may need to be increased.

Background

Links to Detailed Guidance

IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf

IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/controlling.html

IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf

Assessment Standard

Stack heights to extend above outdoor air intakes located within 25' of stack.

Type of Std. EPA Recommendation **Priority:** 3

Guidance for Assessor

Visually inspect.

Default Corr. Action

Importance	Intakes should not be placed within 25 feet of any potential sources of air contaminants, including sewer vents, exhaust air from the school, loading docks, bus loading areas, garbage receptacles, boiler or generator exhausts, and mist from cooling towers. If the source is large or contains strong contaminants, or if there is a dominant wind direction in the area, the minimum separation distance may need to be increased.
Background	
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/controlling.html IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf

Subtopic **Roof -- Roof Deck**

Assessment Standard	**Free of excessive water ponding.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Molds are a major source of indoor allergens. Molds can also trigger asthma. Even when dead or unable to grow, mold can cause health effects such as allergic reactions.		
Background	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs.		
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf		
Assessment Standard	**Free of accumulations of organic material or visible mold growth.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Molds are a major source of indoor allergens. Molds can also trigger asthma. Even when dead or unable to grow, mold can cause health effects such as allergic reactions.		
Background	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction		

	cavities. Wet or damp cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf
Assessment Standard	**Deck material intact and in good condition with no cracks, gaps, or openings.**
Type of Std.	EPA Recommendation **Priority:** 3
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Molds are a major source of indoor allergens. Molds can also trigger asthma. Even when dead or unable to grow, mold can cause health effects such as allergic reactions.
Background	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs.
Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities
Assessment Standard	**Flashings intact.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect.
Default Corr. Action	
Importance	Pay close attention to both the design and proper installation of roof flashing, pan flashing for windows and doors, capillary breaks for footings, and other areas where moisture can enter the building envelope. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Molds are a major source of indoor allergens. Molds can also trigger asthma. Even when dead or unable to grow, mold can cause health effects such as allergic reactions.
Background	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs.

Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities IAQ Tools for Schools Renovation and Repair Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/renrepairchklstbkgd.pdf		
Assessment Standard	**Patches and seals intact.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Molds are a major source of indoor allergens. Molds can also trigger asthma. Even when dead or unable to grow, mold can cause health effects such as allergic reactions.		
Background	It is extremely important to prevent uncontrolled moisture from entering the building envelope through window and door openings, seams, footings, roofs or other openings. In virtually all areas of the country, provide an exterior weather barrier to prevent moisture from entering construction cavities. Wet or damp cavities (e.g., spaces between interior and exterior walls), attics, and plenums are major sources of mold and can contribute significantly to indoor air quality problems. In addition, moisture can damage the structure and degrade the performance of insulation, increasing energy and operating costs.		
Links to Detailed Guidance	IAQ Design Tools for Schools--Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html#Construction%20Cavities IAQ Tools for Schools Renovation and Repair Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/renrepairchklstbkgd.pdf		

Area/Topic	**Grounds**		
Subtopic	**General**		
Assessment Standard	**Free of excessively cracked or uneven pavement.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance			
Assessment Standard	**Free of excessive litter or trash on school grounds.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background			
Links to Detailed Guidance			
Assessment Standard	**All school grounds clean, orderly, and in a sanitary condition.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Clean and sanitary conditions.		
Background			
Links to Detailed Guidance			
Assessment Standard	**All areas of the school have sufficient lighting.**		

Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention and security.		
Background			
Links to Detailed Guidance			

Subtopic **Parking Areas and Driveways**

Assessment Standard	**Vehicles not idling on school grounds.**		
Type of Std.	EPA Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.		
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.		
Links to Detailed Guidance	EPA's Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample		
Assessment Standard	**PARKING and NO PARKING areas clearly marked.**		
Type of Std.	Good practice	**Priority:**	4
Guidance for Assessor	Visually inspect		
Default Corr. Action			

Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.
Links to Detailed Guidance	EPA's Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample

Subtopic	**Bus Loading and Unloading Areas**		
Assessment Standard	**Buses not idling on school grounds.**		
Type of Std.	EPA & CDC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.		
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.		
Links to Detailed Guidance	EPA's Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample		
Assessment Standard	**Away from building outside air intakes.**		
Type of Std.	EPA Recommendation	**Priority:**	3

Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Common sources of carbon monoxide (CO) in schools are from improperly vented furnaces, malfunctioning gas ranges, or exhaust fumes that have been drawn back into the building. Worn or poorly adjusted and maintained combustion devices such as boilers and furnaces can be significant sources of CO. Exhaust flues that are improperly sized, blocked, disconnected, or leaking can allow carbon monoxide to enter occupied spaces. Auto, truck, or bus exhaust from attached garages, nearby roads, or idling vehicles in parking areas can also be sources. Many people using gasoline-powered tools such as high-pressure washers, concrete cutting saws (walk-behind/hand-held), power trowels, floor buffers, welders, pumps, compressors, and generators in buildings or semi-enclosed spaces have been poisoned by CO. Carbon monoxide can cause harmful health effects at both low and high levels by reducing oxygen delivery to the body's organs (including the heart and brain) and tissues.
Background	No standards for CO have been agreed upon for indoor air. However, the U.S. National Ambient Air Quality Standards for outdoor air are 9 ppm (40,000 micrograms per meter cubed) for 8 hours, and 35 ppm for 1 hour. EPA recommends that combustion equipment is regularly maintained and properly adjusted. Vehicular use adjacent to buildings and in vocational programs should be carefully managed. Additional ventilation should be used as a temporary measure when high levels of CO are expected for short periods of time. These precautionary measures will reduce the risk of carbon monoxide exposure and poisoning.
Links to Detailed Guidance	IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Ventilation Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/ventchklst.pdf Anti-Idling Practices#http://www.epa.gov/otaq/schoolbus/antiidling.htm#sample
Assessment Standard	**Loading/unloading zones clearly marked.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Keep pollutants away from air intakes, building openings and building envelope.
Background	
Links to Detailed Guidance	EPA's Clean School Bus USA Program#http://www.epa.gov/cleanschoolbus/# IAQ Tools for Schools Walkthrough Inspection Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklst.pdf IAQ Tools for Schools Walkthrough Inspection Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/walkthruchklstbkgd.pdf

Subtopic **Sidewalks, Walkways and Stairs**

Assessment Standard	**Intact with no significant cracks, uneven pavement or other tripping hazards.**
Type of Std.	Good practice **Priority:** 4
Guidance for Assessor	Visually inspect
Default Corr. Action	

Importance	Injury prevention.
Background	
Links to Detailed Guidance	
Assessment Standard	**Pedestrian walkways across roads, driveways and other areas open to vehicular traffic clearly marked.**
Type of Std.	Good practice **Priority:** 3
Guidance for Assessor	Visually inspect
Default Corr. Action	
Importance	Injury prevention.
Background	
Links to Detailed Guidance	

Subtopic **Lawn Areas, Plant Beds and Athletic Fields**

Assessment Standard	**Grass mowed frequently enough so that only one third the height of the grass is removed at each mowing.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview maintenance staff.
Default Corr. Action	
Importance	Reduce the need for lawn maintenance pesticides.
Background	Pests come in a variety of forms: weeds, insects, animals, molds, and fungi to name a few. Pesticides provide relief from many pests, but they are not the only solution to every problem. The need to control outdoor pests varies. Having some weeds in your garden, or some grubs in your lawn, may be more tolerable; however, certain pests present serious threats in some years. Some pests can damage human and animal health, such as mosquitoes that carry diseases. The most effective strategy for controlling pests may be to combine methods in an approach known as Integrated Pest Management (IPM) that emphasizes preventing pest damage. In IPM, information about pests and available pest control methods is used to manage pest damage with the least possible hazard to people, property, and the environment. Check with your state or county Cooperative Extension Service to determine what grass varieties and pest management methods are suitable for your climate and growing conditions. Grass varieties and pests vary widely across the U.S. Lawncare professionals may also be able to provide you with information.
Links to Detailed Guidance	Pesticides: Controlling Pests#http://www.epa.gov/pesticides/controlling/index.htm# IPM Institute of North America#http://www.ipminstitute.org/school.htm# Greenscaping Your Lawn and Garden#http://www.epa.gov/epaoswer/non-hw/green/pubs/home-gs.pdf Healthy Lawn, Healthy Environment#http://www.epa.gov/oppfead1/Publications/lawncare.pdf

Subtopic **Solid Waste Disposal Areas**

Assessment Standard	**Trash dumpsters located at least 25 ft. away from building exterior.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Proper management of solid waste is important in maintaining healthy indoor air quality and in minimizing the presence of insects and vermin. Daily pick up of trash from classrooms is essential and use of plastic liners and regular cleaning of containers will help to control odors and associated pests.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Waste Management Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklst.pdf IAQ Tools for Schools Waste Management Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklstbkgd.pdf		
Assessment Standard	**Refuse containers equipped with tight-fitting lids.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Proper management of solid waste is important in maintaining healthy indoor air quality and in minimizing the presence of insects and vermin. Daily pick up of trash from classrooms is essential and use of plastic liners and regular cleaning of containers will help to control odors and associated pests.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Waste Management Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklst.pdf IAQ Tools for Schools Waste Management Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklstbkgd.pdf		
Assessment Standard	**Refuse container lids kept closed.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Proper management of solid waste is important in maintaining healthy indoor air quality and in minimizing the presence of insects and vermin. Daily pick up of trash from classrooms is essential and use of plastic liners and regular cleaning of containers will help to control odors and associated pests.		
Background			

Links to Detailed Guidance	IAQ Tools for Schools Waste Management Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklst.pdf IAQ Tools for Schools Waste Management Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklstbkgd.pdf		
Assessment Standard	**Recycling containers clearly and properly labeled and conveniently located.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Proper collection and storage of recyclable material is important in maintaining its marketability. It is important that personnel responsible for collecting materials know the requirements for acceptability for recycling each waste stream. For example, office paper may have to be separated from other types of paper or certain types of plastic may not be recyclable. Once collected, it is important that the material is stored in a manner to retain its market value, for example, paper must be kept dry. Also, it must be stored so that it is easy to pick up for transportation off-site for recycling. All storage areas should be secured (fenced and locked, if outside) and under the control of the personnel responsible for the program.		
Background			
Links to Detailed Guidance	IAQ Tools for Schools Waste Management Checklist#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklst.pdf IAQ Tools for Schools Waste Management Backgrounder#http://www.epa.gov/iaq/schools/pdfs/kit/checklists/wastemgmtchklstbkgd.pdf		

Area/Topic **Playgrounds**

Subtopic **General Safety**

Assessment Standard	**Students supervised by staff.**		
Type of Std.	CPSC Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect, interview staff		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		
Assessment Standard	**Equipment structurally sound and in good overall condition.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		

Subtopic **Playground Materials -- Chromated Copper Arsenate (CCA)**

Assessment Standard	**Wooden decks or playground equipment treated with Chromated Copper Arsenate have been identified.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Outdoor wood playground equipment, playsets or decks built or installed before December 31, 2003, are likely to have been constructed with CCA-treated wood. As a practical matter, CCA has been the principal chemical used to treat wood for decks and other outdoor uses around the home, as well as schools. Generally, if the deck or playset has not been constructed with redwood or cedar, it is likely the deck or playset was constructed with CCA-treated wood. Alternatively, if you know who constructed the deck or playset, you may want to call and ask. Playsets have been constructed from a variety of materials, including CCA-treated wood, but CCA-treated playsets represent a smaller percentage than CCA-treated decks. Sealants other than paint have been found in preliminary studies to be effective at reducing chemical migration.		
Default Corr. Action			
Importance	Public awareness of wood treated with chromated copper arsenate or “CCA,” a chemical preservative that prevents wood deterioration from insects and fungi, was heightened in 2001 when		

several environmental groups petitioned the U.S. Consumer Product Safety Commission (CPSC) to ban its use in playground equipment because of potential human health concerns. EPA, which regulates pesticide products, including CCA, has not concluded that CCA-treated wood poses any unreasonable risk to the public or the environment because the risk assessment is still preliminary, and EPA is conducting a comprehensive review of CCA. Nevertheless, arsenic is a known human carcinogen and, thus, the Agency believes that any reduction in the levels of potential exposure to arsenic is desirable. EPA believes that the voluntary transition to non-arsenical wood preservatives for residential sites (and other sites where there are exposure concerns, e.g., schools and public playgrounds), is a responsible action by the registrants. In addition, preliminary studies of the effectiveness of surface sealants in reducing chemical migration of chemicals have been completed, suggesting that annual sealing of CCA-treated wood is effective. Schools are encouraged to stay abreast of new information on CCA-treated wood as it becomes available.

Background

CCA and other pesticides are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) by the U.S. Environmental Protection Agency (EPA). In March 2003, the EPA granted a request by manufacturers to cancel the registration of CCA for use in wood for most residential structures (e.g., playgrounds, decks, picnic tables, etc.) after December 30, 2003. While this action prohibits the future residential use of wood treated with CCA, it does not address the potential exposure to chemical residues (e.g., arsenic) from existing structures made with CCA-treated wood or from structures made with new CCA-treated wood from existing stock supplies that were available to consumers after the cancellation date. CCA was first produced over 60 years ago and in 1997 the American Wood-Preservers' Association (AWPA) estimated that there were over 85 million metric tons of "in service" CCA-treated wood in the U.S. (Cooper, 2004). In an effort to find ways to mitigate exposure, CPSC staff in collaboration with the EPA, is evaluating the ability of surface coatings (e.g., deck stains, sealants, and paint) to reduce chemical migration from CCA-treated wood under natural weathering conditions. EPA and CPSC staff are conducting parallel studies employing similar methodologies with the primary differences being the study location (CPSC: Gaithersburg, Maryland; EPA: Research Triangle Park, NC) and the CCA wood source (CPSC is using new CCA-treated wood; EPA is using one-year old and seven-year old weathered CCA-treated wood). The studies began in August 2003.

Links to Detailed Guidance

Chromated Copper Arsenate (CCA)#http://www.epa.gov/oppad001/reregistration/cca/

Chromated Copper Arsenate (CCA): Health and Safety Information#http://www.epa.gov/oppad001/reregistration/cca/health_safety.htm

Consumer Product Safety Commission#http://www.cpsc.gov/whatsnew.html

Assessment Standard

CCA-treated decks and playground structures have been sealed within the past 12 months.

Type of Std. EPA Recommendation **Priority:** 4

Guidance for Assessor

Outdoor wood playground equipment, playsets or decks built or installed before December 31, 2003, are likely to have been constructed with CCA-treated wood. As a practical matter, CCA has been the principal chemical used to treat wood for decks and other outdoor uses around the home, as well as schools. Generally, if the deck or playset has not been constructed with redwood or cedar, it is likely the deck or playset was constructed with CCA-treated wood. Alternatively, if you know who constructed the deck or playset, you may want to call and ask. Playsets have been constructed from a variety of materials, including CCA-treated wood, but CCA-treated playsets represent a smaller percentage than CCA-treated decks. Sealants other than paint have been found in preliminary studies to be effective at reducing chemical migration.

Default Corr. Action

Importance

Public awareness of wood treated with chromated copper arsenate or "CCA," a chemical preservative that prevents wood deterioration from insects and fungi, was heightened in 2001 when several environmental groups petitioned the U.S. Consumer Product Safety Commission (CPSC) to ban its use in playground equipment because of potential human health concerns. EPA, which regulates pesticide products, including CCA, has not concluded that CCA-treated wood poses any unreasonable risk to the public or the environment because the risk assessment is still preliminary, and EPA is conducting a comprehensive review of CCA. Nevertheless, arsenic is a known human carcinogen and, thus, the Agency believes that any reduction in the levels of potential exposure to arsenic is desirable. EPA believes that the voluntary transition to non-arsenical wood preservatives for residential sites (and other sites where there are exposure concerns, e.g., schools and public playgrounds), is a responsible action by the registrants. In addition, preliminary studies of the

	effectiveness of surface sealants in reducing chemical migration of chemicals have been completed, suggesting that annual sealing of CCA-treated wood is effective. Schools are encouraged to stay abreast of new information on CCA-treated wood as it becomes available.
Background	CCA and other pesticides are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) by the U.S. Environmental Protection Agency (EPA). In March 2003, the EPA granted a request by manufacturers to cancel the registration of CCA for use in wood for most residential structures (e.g., playgrounds, decks, picnic tables, etc.) after December 30, 2003. While this action prohibits the future residential use of wood treated with CCA, it does not address the potential exposure to chemical residues (e.g., arsenic) from existing structures made with CCA-treated wood or from structures made with new CCA-treated wood from existing stock supplies that were available to consumers after the cancellation date. CCA was first produced over 60 years ago and in 1997 the American Wood-Preservers' Association (AWPA) estimated that there were over 85 million metric tons of "in service" CCA-treated wood in the U.S. (Cooper, 2004). In an effort to find ways to mitigate exposure, CPSC staff in collaboration with the EPA, is evaluating the ability of surface coatings (e.g., deck stains, sealants, and paint) to reduce chemical migration from CCA-treated wood under natural weathering conditions. EPA and CPSC staff are conducting parallel studies employing similar methodologies with the primary differences being the study location (CPSC: Gaithersburg, Maryland; EPA: Research Triangle Park, NC) and the CCA wood source (CPSC is using new CCA-treated wood; EPA is using one-year old and seven-year old weathered CCA-treated wood). The studies began in August 2003.
Links to Detailed Guidance	Chromated Copper Arsenate (CCA)#http://www.epa.gov/oppad001/reregistration/cca/ Chromated Copper Arsenate (CCA): Health and Safety Information#http://www.epa.gov/oppad001/reregistration/cca/health_safety.htm Consumer Product Safety Commission#http://www.cpsc.gov/whatsnew.html

Subtopic	**Playground Materials and Coatings**		
Assessment Standard	**Materials of construction to be non-toxic.**		
Type of Std.	CPSC Recommendation	**Priority:**	2
Guidance for Assessor	Interview staff.		
Default Corr. Action			
Importance	Illness prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		
Assessment Standard	**Lead based paints not used.**		
Type of Std.	EPA Recommendation	**Priority:**	2
Guidance for Assessor	Interview staff.		
Default Corr. Action			
Importance	Illness prevention.		
Background			

Links to Detailed Guidance	EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html#

Subtopic	**Protective Surfacing**
Assessment Standard	**Depth of shock absorbing material appropriate for height of equipment and material used to absorb shock.**
Type of Std.	CPSC Recommendation **Priority:** 4
Guidance for Assessor	Review CPSC Guidance for specific recommendations
Default Corr. Action	
Importance	Injury prevention.
Background	
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#

Subtopic	**Fall Zones**
Assessment Standard	**Stationary equipment includes appropriate use zones.**
Type of Std.	CPSC Recommendation **Priority:** 3
Guidance for Assessor	Review CPSC Guidance for specific recommendations
Default Corr. Action	
Importance	Injury prevention.
Background	
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#
Assessment Standard	**Appropriate fall zones for single and double axis swings.**
Type of Std.	CPSC Recommendation **Priority:** 3
Guidance for Assessor	Review CPSC Guidance for specific recommendations
Default Corr. Action	
Importance	Injury prevention.
Background	
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#

Assessment Standard	**Appropriate platform heights on all slides.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Review CPSC Guidance for specific recommendations		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		

Subtopic **Swing Safety**

Assessment Standard	**Free of protruding mounting bracket bolts or other components on the suspended members of swing assemblies.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		
Assessment Standard	**“S” hooks closed.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		
Assessment Standard	**Swing types conform to CPSC recommendations.**		
Type of Std.	CPSC Recommendation	**Priority:**	3

Guidance for Assessor	Visually inspect. NO 1) animal figure swings; 2) multiple occupancy swings; 3) rope swings; 4) swinging dual exercise rings and trapeze bars
Default Corr. Action	
Importance	Injury prevention.
Background	The following types of swings are not recommended for use in public playgrounds: 1) animal figure swings; 2) multiple occupancy swings; 3) rope swings; 4) swinging dual exercise rings and trapeze bars
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#

Subtopic **Head Entrapment**

Assessment Standard	**No openings between 3.5” and 9”**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		

Subtopic **Protrusion Hazards**

Assessment Standard	**All equipment free of protrusion hazards.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		
Assessment Standard	**All equipment free of pinch, crush or shearing points.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		

Default Corr. Action	
Importance	Injury prevention.
Background	
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#

Subtopic **Tripping Hazards**

Assessment Standard	**Playground free of tripping hazards.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		

Subtopic **Sharp Points and Edges**

Assessment Standard	**All equipment free of sharp points, edges and splinters.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#		

Subtopic **Guardrails**

Assessment Standard	**Guardrails on platforms and ramps.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			

Importance	Injury prevention.
Background	
Links to Detailed Guidance	CPSC--Handbook for Public Playground Safety#http://www.cpsc.gov/cpscpub/pubs/325.pdf#

Area/Topic	**Outdoor Athletic Facilities**
Subtopic	**Stadiums, Bleachers and Grandstands**

Assessment Standard	**Bleacher and guardrail components structurally sound and operational.**		
Type of Std.	CPSC Recommendation	**Priority:**	2
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Guidelines for Retrofitting Bleachers#http://www.cpsc.gov/cpscpub/pubs/330.pdf#		
Assessment Standard	**Guardrails present on the backs and the open ends of bleachers where the footboard, seatboard, or aisle is 30 inches or more above the floor or ground level.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Guidelines for Retrofitting Bleachers#http://www.cpsc.gov/cpscpub/pubs/330.pdf#		
Assessment Standard	**Top rail of the guardrail located at least 42” above the leading edge of the footboard, seatboard, or aisle, whichever is adjacent.**		
Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Guidelines for Retrofitting Bleachers#http://www.cpsc.gov/cpscpub/pubs/330.pdf#		
Assessment Standard	**Any openings between, under or around guardrail components should prevent the passage of a 4” diameter sphere.**		

Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Guidelines for Retrofitting Bleachers#http://www.cpsc.gov/cpscpub/pubs/330.pdf#		
Assessment Standard	**Any opening between seating components should prevent the passage of a 4” diameter sphere.**		

Type of Std.	CPSC Recommendation	**Priority:**	3
Guidance for Assessor	Visually inspect.		
Default Corr. Action			
Importance	Injury prevention.		
Background			
Links to Detailed Guidance	CPSC--Guidelines for Retrofitting Bleachers#http://www.cpsc.gov/cpscpub/pubs/330.pdf#		

Area/Topic	**Relocatable/Portable Classrooms**
Subtopic	**Specifications**
Assessment Standard	**Purchasing specifications include provisions to ensure adequate ventilation and minimize pollutant sources.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review purchasing specifications
Default Corr. Action	
Importance	Portable -- or "relocatable" -- classrooms have been a feature of many school districts for years. From a district's perspective, the two advantages of portable classrooms are low initial cost and short time between specification and occupancy. They are intended to provide flexibility to school districts, enabling quick response to demographic changes and providing the ability to be moved from one school to another as demographics change. In reality, portable classrooms are seldom moved and become permanent fixtures of the school. Recent surges in student population fueled an explosion in the use of portable classrooms in many parts of the country, raising concerns about the healthfulness of portable classrooms. The most common problems with portable classrooms include: Poorly functioning HVAC systems that provide minimal ventilation with outside air; Poor acoustics from loud ventilation systems; Chemical off-gassing from pressed wood and other high-emission materials, which may be of greater concern because of rapid occupancy after construction; Water entry and mold growth; Site pollution from nearby parking lots or loading areas. The effects of poor indoor air quality in portable classrooms are no different than those in permanent classrooms. All school buildings use similar construction and furnishing materials, so the types of chemicals present in indoor air are not likely to be different for portable versus permanent classrooms. However, pressed-wood products which may contain higher concentrations of formaldehyde are used more in the factory-built portable units than in buildings constructed on-site. As result, levels of airborne chemicals may be higher in new portable classrooms, especially if ventilation is reduced. Although portables are often the lowest cost option for housing students, they range in quality. Care should be taken during specification and selection to ensure that the students' health is not compromised for inexpensive, low quality designs. When districts specify a portable design, they typically create a term contract that other districts can use to purchase the same (or slightly different) design. This practice (often called "piggy-backing") can save a district valuable time and money on specifications and approvals, but it can also compound poor decisions made in the original procurement. Like all school facilities, portable classrooms should contain appropriate building and indoor surface materials and properly designed ventilation systems to minimize the presence of indoor pollutants. Commissioning and regular maintenance are also important to maintain the quality of the indoor environment. The recommendations applicable to school facilities also apply to portable classrooms.
Background	Specify the appropriate vapor barrier location for exterior wall construction, consistent with the climate where the classroom will be used. When specifying a new portable classroom, ensure that the HVAC system can: (a) provide a minimum of 450 cfm (based on 30 occupants at 15 cfm/occupant) of outside air; and (b) heat and cool this volume of outdoor air at design outdoor temperatures for the specific geographic location where each classroom is installed. Some manufacturers of portable units do not include outdoor air intakes in their standard classroom models. It is important that an additional "outdoor air kit" be ordered for this purpose. Further, installation of an outdoor air intake must be specified as part of the exhaust system. Outdoor air intakes should not be located under portable units; these areas are typically not well ventilated and are prone to moisture, biological contaminants and other pollutants. Lack of an exhaust in the HVAC system with an outdoor air intake will result in inadequate removal of pollutants from the room. Outdoor air should be supplied continuously when a classroom is occupied. Demand-controlled HVAC package systems often used in portable classrooms typically operate only when the temperature of a space is different from the thermostat's set point. In order to provide a continuous outdoor air supply, it is important to ensure that the HVAC thermostat fan switch is set in the "on" or continuous mode when occupied. Air filters are needed for protection of HVAC components and reduction of airborne dust, pollens and microorganism from re-circulated and outdoor air streams. Air filters should have a dust-spot rating between 35% and 80% or a Minimum Efficiency Rating Value (MERV) of between 8 and 13. If carpet is specified, use carpet that has been tested under the Carpet and Rug Institute's Indoor Air Quality Carpet Testing Program. Do

not use carpet in entryways to classrooms with direct outdoor access. Supply waterproof mats over carpeted entryways and other areas used for drying clothing and umbrellas. Locate classroom away from locations where: (a) vehicles idle, (b) water accumulates after rains, or (c) there are other major sources of air pollution. Ensure that at least one supply air outlet and return air inlet are located in each enclosed area. Ensure that building air intakes are located away from any exhaust outlet(s) or other contaminant sources. Specify operable windows to provide user-controlled ventilation when needed. Consider covered entries with an exterior entry mat. Check that special-use classrooms (e.g., for chemistry, biology, fine arts, etc.) have local exhaust ventilation (e.g., hoods or window fans) and appropriate ventilation rates. Locate HVAC and air handler units as far away as possible from teaching areas to reduce noise. If specifying duct board or internal duct lining for thermal and/or acoustical control, be sure to consider the potential for uncontrolled moisture to enter the duct over the life of the system. Ensure that HVAC ducts and plenums have easy access for inspection and cleaning. Specify that low VOC emitting building materials be used in construction. Specify complete documentation of operation and maintenance requirements.

Links to Detailed Guidance

IAQ Design Tools for Schools--Portable Classrooms#http://www.epa.gov/iaq/schooldesign/portables.html

California Advisory on Relocatable and Renovated Classrooms#http://www.cal-iaq.org/ADVISORY.pdf

Subtopic **Commissioning**

Assessment Standard

New portable/relocatable classrooms are occupied only after a commissioning period, during which HVAC and systems are tested and contaminants introduced during the manufacturing process are flushed out.

Type of Std. EPA Recommendation **Priority:** 4

Guidance for Assessor

Interview staff.

Default Corr. Action

Importance

Portable -- or "relocatable" -- classrooms have been a feature of many school districts for years. From a district's perspective, the two advantages of portable classrooms are low initial cost and short time between specification and occupancy. They are intended to provide flexibility to school districts, enabling quick response to demographic changes and providing the ability to be moved from one school to another as demographics change. In reality, portable classrooms are seldom moved and become permanent fixtures of the school. Recent surges in student population fueled an explosion in the use of portable classrooms in many parts of the country, raising concerns about the healthfulness of portable classrooms. The most common problems with portable classrooms include: Poorly functioning HVAC systems that provide minimal ventilation with outside air; Poor acoustics from loud ventilation systems; Chemical off-gassing from pressed wood and other high-emission materials, which may be of greater concern because of rapid occupancy after construction; Water entry and mold growth; Site pollution from nearby parking lots or loading areas. The effects of poor indoor air quality in portable classrooms are no different than those in permanent classrooms. All school buildings use similar construction and furnishing materials, so the types of chemicals present in indoor air are not likely to be different for portable versus permanent classrooms. However, pressed-wood products which may contain higher concentrations of formaldehyde are used more in the factory-built portable units than in buildings constructed on-site. As result, levels of airborne chemicals may be higher in new portable classrooms, especially if ventilation is reduced. Although portables are often the lowest cost option for housing students, they range in quality. Care should be taken during specification and selection to ensure that the students' health is not compromised for inexpensive, low quality designs. When districts specify a portable design, they typically create a term contract that other districts can use to purchase the same (or slightly different) design. This practice (often called "piggy-backing") can save a district valuable time and money on specifications and approvals, but it can also compound poor decisions made in the original procurement. Like all school facilities, portable classrooms should contain appropriate building and indoor surface materials and properly designed ventilation systems to minimize the presence of indoor pollutants. Commissioning and regular maintenance are also important to maintain the quality of the indoor environment. The recommendations applicable to school facilities also apply to portable classrooms.

Background

Prior to use of any new portable units by staff or students, operate HVAC systems at their maximum outdoor air intake rate continuously for several days. Start the "flush out" as soon as the

HVAC system is operational, and continue after furniture installation. During this period, do not re-circulate return air. Outdoor air should be thermally conditioned (i.e., heated or cooled), as needed, to typical indoor temperatures. Measure the amount of outdoor air entering the outdoor air intake of the HVAC unit to ensure it meets or exceeds the amount specified or 15 cfm per person, whichever is greater. Do not "bake-out" the unit. "Bake-out" is defined as increasing temperatures up to 100F in order to "artificially age" building materials. It's effectiveness has not been proven and it may in fact damage parts of the HVAC system or building components. Continue "flush-out" ventilation during periods of first use. Efforts to minimize exposures of school children and staff to building material emissions should continue in the weeks following construction. Emissions of VOCs are highest during this period. Flush-out periods of 1-2 weeks are recommended, although longer periods may be required. For the first days to weeks of occupant use, continue to operate HVAC systems at the maximum outdoor air setting. Finally, monitor occupants' comfort, and follow-up complaints to identify problems early. Establish and implement an Integrated Pest Management plan.

Links to Detailed Guidance

IAQ Design Tools for Schools--Portable Classrooms#http://www.epa.gov/iaq/schooldesign/portables.html

California Advisory on Relocatable and Renovated Classrooms#http://www.cal-iaq.org/ADVISORY.pdf

Subtopic **Operations and Maintenance**

Assessment Standard

School has on file a plan for testing, inspecting, and performing specific maintenance tasks for all relocatable/portable classrooms located on school grounds.

Type of Std. EPA Recommendation **Priority:** 4

Guidance for Assessor

Inspect files for plans that include the following elements: Regular inspection of roofs, ceilings, walls, floor, and carpet for evidence of water leakage or stains, and for mold growth or odor; and requirements for cleaning and/or replacement of water damaged materials and prompt correction of leaks.

Default Corr. Action

Importance

Portable -- or "relocatable" -- classrooms have been a feature of many school districts for years. From a district's perspective, the two advantages of portable classrooms are low initial cost and short time between specification and occupancy. They are intended to provide flexibility to school districts, enabling quick response to demographic changes and providing the ability to be moved from one school to another as demographics change. In reality, portable classrooms are seldom moved and become permanent fixtures of the school. Recent surges in student population fueled an explosion in the use of portable classrooms in many parts of the country, raising concerns about the healthfulness of portable classrooms. The most common problems with portable classrooms include: Poorly functioning HVAC systems that provide minimal ventilation with outside air; Poor acoustics from loud ventilation systems; Chemical off-gassing from pressed wood and other high-emission materials, which may be of greater concern because of rapid occupancy after construction; Water entry and mold growth; Site pollution from nearby parking lots or loading areas. The effects of poor indoor air quality in portable classrooms are no different than those in permanent classrooms. All school buildings use similar construction and furnishing materials, so the types of chemicals present in indoor air are not likely to be different for portable versus permanent classrooms. However, pressed-wood products which may contain higher concentrations of formaldehyde are used more in the factory-built portable units than in buildings constructed on-site. As result, levels of airborne chemicals may be higher in new portable classrooms, especially if ventilation is reduced. Although portables are often the lowest cost option for housing students, they range in quality. Care should be taken during specification and selection to ensure that the students' health is not compromised for inexpensive, low quality designs. When districts specify a portable design, they typically create a term contract that other districts can use to purchase the same (or slightly different) design. This practice (often called "piggy-backing") can save a district valuable time and money on specifications and approvals, but it can also compound poor decisions made in the original procurement. Like all school facilities, portable classrooms should contain appropriate building and indoor surface materials and properly designed ventilation systems to minimize the presence of indoor pollutants. Commissioning and regular maintenance are also important to maintain the quality of the indoor environment. The recommendations applicable to school facilities also apply to portable classrooms.

Background

Establish a regular and timely plan for testing, inspecting, and performing specific maintenance

	tasks. Inspect roofs, ceilings, walls, floor, and carpet for evidence of water leakage or stains, and for mold growth or odor. Replace water damaged materials promptly and fix leaks as soon as possible. Inspect air supply outlets and return air inlets, to ensure that they are open, operable and unobstructed. Check airflow rates at the outlets and inlets periodically. Inspect air plenums for mold growth, excess dirt, or obstructions. Establish a periodic air filter replacement schedule. Clean condensate pans (monthly) and do not allow free standing water to accumulate. When carpets are cleaned, ensure that proper procedures are followed for moisture extraction and provide adequate ventilation for them to dry within 24 hours. Provide for the proper storage of cleaning/janitorial supplies (preferably in a separate building or separately exhausted closet). Maintain documentation of completed tasks.
Links to Detailed Guidance	IAQ Design Tools for Schools--Portable Classrooms#http://www.epa.gov/iaq/schooldesign/portables.html California Advisory on Relocatable and Renovated Classrooms#http://www.cal-iaq.org/ADVISORY.pdf
Assessment Standard	**Teachers and staff have received instruction on proper use and settings of thermostat and ventilation controls and each relocatable/portable classroom contains hardcopy (plastic-covered) instruction sheets.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Interview teachers and staff. Check classrooms for presence of written instructions.
Default Corr. Action	
Importance	Portable -- or "relocatable" -- classrooms have been a feature of many school districts for years. From a district's perspective, the two advantages of portable classrooms are low initial cost and short time between specification and occupancy. They are intended to provide flexibility to school districts, enabling quick response to demographic changes and providing the ability to be moved from one school to another as demographics change. In reality, portable classrooms are seldom moved and become permanent fixtures of the school. Recent surges in student population fueled an explosion in the use of portable classrooms in many parts of the country, raising concerns about the healthfulness of portable classrooms. The most common problems with portable classrooms include: Poorly functioning HVAC systems that provide minimal ventilation with outside air; Poor acoustics from loud ventilation systems; Chemical off-gassing from pressed wood and other high-emission materials, which may be of greater concern because of rapid occupancy after construction; Water entry and mold growth; Site pollution from nearby parking lots or loading areas. The effects of poor indoor air quality in portable classrooms are no different than those in permanent classrooms. All school buildings use similar construction and furnishing materials, so the types of chemicals present in indoor air are not likely to be different for portable versus permanent classrooms. However, pressed-wood products which may contain higher concentrations of formaldehyde are used more in the factory-built portable units than in buildings constructed on-site. As result, levels of airborne chemicals may be higher in new portable classrooms, especially if ventilation is reduced. Although portables are often the lowest cost option for housing students, they range in quality. Care should be taken during specification and selection to ensure that the students' health is not compromised for inexpensive, low quality designs. When districts specify a portable design, they typically create a term contract that other districts can use to purchase the same (or slightly different) design. This practice (often called "piggy-backing") can save a district valuable time and money on specifications and approvals, but it can also compound poor decisions made in the original procurement. Like all school facilities, portable classrooms should contain appropriate building and indoor surface materials and properly designed ventilation systems to minimize the presence of indoor pollutants. Commissioning and regular maintenance are also important to maintain the quality of the indoor environment. The recommendations applicable to school facilities also apply to portable classrooms.
Background	Establish a regular and timely plan for testing, inspecting, and performing specific maintenance tasks. Inspect roofs, ceilings, walls, floor, and carpet for evidence of water leakage or stains, and for mold growth or odor. Replace water damaged materials promptly and fix leaks as soon as possible. Inspect air supply outlets and return air inlets, to ensure that they are open, operable and unobstructed. Check airflow rates at the outlets and inlets periodically. Inspect air plenums for mold growth, excess dirt, or obstructions. Establish a periodic air filter replacement schedule. Clean condensate pans (monthly) and do not allow free standing water to accumulate. When carpets are

	cleaned, ensure that proper procedures are followed for moisture extraction and provide adequate ventilation for them to dry within 24 hours. Provide for the proper storage of cleaning/janitorial supplies (preferably in a separate building or separately exhausted closet). Maintain documentation of completed tasks.
Links to Detailed Guidance	IAQ Design Tools for Schools--Portable Classrooms#http://www.epa.gov/iaq/schooldesign/portables.html California Advisory on Relocatable and Renovated Classrooms#http://www.cal-iaq.org/ADVISORY.pdf

Area/Topic	**Construction and Renovation**
Subtopic	**Siting**

Assessment Standard	**The site selection process or decision to renovate/ expand existing building has taken into account community goals and needs. Smart Growth principles have been considered and integrated into the site selection process.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review school siting policy in conjunction with community master plan; ensure that community has a voice in the process.		
Default Corr. Action			
Importance	The location of a school affects not only the school itself, but the entire community around it. School boards, educational facility planners, and communities will have to meet many goals—educational, environmental, economic, social, and fiscal—with their siting decisions. Choosing to renovate or expand an existing building, or choosing to build a new school in a central location accessible by foot and bicycle as well as by car, can improve the quality of the community as well as the school. Once educational goals are met, school district staff should consider how the investment in a new or renovated school can meet other community goals and needs.		
Background	The principles of smart growth encourage development that expands economic opportunity, protects public health and the environment, and creates and enhances places that people love. These principles, when applied to school siting decisions, can encourage a school to locate in a central area where infrastructure already exists and where the site is easy to walk or bike to, uses less land, and is a vital part of an economically, environmentally, and socially healthy community. Smart Growth Principles: 1) Mix land uses; 2) Take advantage of compact building design 3) Create a range of housing opportunities and choices; 4) Create walkable neighborhoods; 5) Foster distinctive, attractive communities with a strong sense of place; 6) Preserve open space, farmland, natural beauty, and critical environmental areas; 7) Strengthen and direct development towards existing communities; 8) Provide a variety of transportation choices; 9) Make development decisions predictable, fair, and cost effective; 10) Encourage community and stakeholder collaboration in development decisions.		
Links to Detailed Guidance	EPA Smart Growth Web Site#http://www.epa.gov/smartgrowth/ Smart Growth and Schools#http://www.epa.gov/dced/schools.htm Smart Schools, Smart Growth Web Site#http://www.smart-schools.org		
Assessment Standard	**ASTM Phase I site assessment completed before site acquisition.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review Phase 1 site assessment report.		
Default Corr. Action			
Importance	Selection of sites on which to build new schools is largely a local issue with no direct Federal role. It is also often controversial. Many issues related to the availability and cost of land, community values, and a host of other factors come into play. Unfortunately, for a variety of reasons, schools are still being built on or close to existing sources of air, water, and/or soil contamination. This contamination can impact the indoor air quality of the school and in extreme cases, even force the closure and abandonment of multi-million dollar facilities.		
Background	Prior to site acquisition, complete a Phase I Environmental Site Assessment using ASTM Standard Practice E1527-00. If preliminary assessment suggests significant potential sources of contamination, conduct a Phase II Environmental Site Assessment using ASTM Standard Practice E1903-97. Ensure that soil contamination is cleaned up or avoid site. Provide opportunities for participation in the school site acquisition process by school administrators and staff, parents, age-		

	appropriate students, and community members.
Links to Detailed Guidance	IAQ Design Tools for Schools--Preliminary Design Phases#http://www.epa.gov/iaq/schooldesign/predesign.html

Subtopic **Stormwater**

Assessment Standard	**Pre-construction self-audit storm water environmental checklist has been completed.**		
Type of Std.	EPA Regulation -- 40 CFR Part 122 (use of checklist recommended but not a requirement)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		
Default Corr. Action			
Importance	Over land or via storm sewer systems, polluted stormwater runoff is discharged, often untreated, directly into local water bodies. When left uncontrolled, this water pollution can result in the destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public health due to contaminated food, drinking water supplies, and recreational waterways. Mandated by Congress under the Clean Water Act, the NPDES Stormwater Program is a national program for addressing the non-agricultural sources of stormwater discharges which adversely affect the quality of our nation's waters. The Storm Water Pollution Prevention Plan is required under a NPDES permit and is the key to controlling pollutants in storm water discharges. During site development and landscape planning, after construction, or as part of an NPDES Construction Permit, consider the inclusion of outdoor classrooms such as constructed wetlands, rain gardens, biofiltration, porous paving, and vegetated swales. Signage and classroom/field exercises are educational and can include the benefits of native and drought -tolerant plants. Conservation considerations can include green roofs, rain barrels, cisterns and reuse of rain water for irrigation.		
Background	Before beginning any construction project, you must consider the stormwater discharges from your site. These discharges are generated by runoff from or across disturbed land, vegetative areas, and impervious areas (e.g., paved streets, parking lots, and building rooftops) during rainfall and snow events. Stormwater discharges often contain pollutants in quantities that could adversely affect water quality. If your project disturbs one or more acres, or disturbs less than one acre but is part of a larger common plan of development or sale that will disturb one or more acres, you may need a stormwater permit. To get a permit, you must meet either the requirements of the EPA Construction General Permit (CGP), state-specific general stormwater permits, or site-specific stormwater permits. Note: Additional requirements may apply.		
Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html Storm water Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_stormwater.pdf List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_stormwater.pdf		

Subtopic **Dredge and Fill/Wetlands**

Assessment Standard	**Pre-construction self-audit dredge and fill/wetlands environmental checklist has been completed.**		
Type of Std.	Regulation -- Section 404 Clean Water Act; 40 CFR Parts 230-233 (use of checklist recommended but not a requirement)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		

Default Corr. Action	
Importance	If your construction project requires you to perform work in waters of the United States or wetlands, most likely you will need to obtain a Clean Water Act (CWA) Section 404 permit. The regulatory text discussing this program (40 CFR Parts 230-233) can be found at http://ecfr.gpoaccess.gov under “Title 40 - Protection of the Environment.” The U.S. Army Corps of Engineers (COE) and EPA regulate the discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. You need a Section 404 permit if your construction project will result in the discharge of dredged material (i.e., material excavated from waters) or fill material (i.e., material placed in waters such that dry land replaces water—or a portion thereof—or the water’s bottom elevation changes) into a water of the United States. You must obtain a permit (or permit coverage) prior to starting construction. Approval of individual permits might take approximately three months, although general permit authorizations typically take far less time.
Background	The United States Army Corps of Engineers (COE) and U.S. Environmental Protection Agency (EPA) regulate discharges of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). When preparing for any construction project, it must be determined if dredged material (i.e., material excavated from waters) or fill materials (i.e., material placed in waters such that dry land replaces any portion of water or the bottom elevation of waters is changed) will be discharged into waters of the United States. A permit may be needed if the construction activity impacts a water of the United States. Impacts include the discharge of dredged material, discharge of fill material, and disturbance of hydrological support to wetlands (i.e., cut off of water supply). Specific activities impacting wetlands that require a permit include, but are not limited to, placement of dredged or fill material in a water of the United States, ditching activities when excavated material is sidecast, levee and dike construction, mechanized land clearing, land leveling, road construction, dam construction, and draining wetlands. Depending on the impacts, a Section 404 permit may be required prior to performing any construction activities. A waiting period of 45 days or more after permit application may be required before the construction project can start, depending on the type of permit necessary. Waters of the United States include wetlands. You must determine whether any wetlands or other waters are present in your construction area. COE and EPA define wetlands as “areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Wetlands are covered by water or have waterlogged soils for parts of the growing season. Some wetlands are easy to recognize (e.g., swamps and marshes); however, others may be dry during part of the year and difficult to recognize (e.g., bottomland forests, pocosins, pine savannahs, wet meadows, and wet tundra). Contact your COE district office or state environmental department for further information. Use the following web site to locate your COE district office: http://www.usace.army.mil/where.html#State Note: Additional requirements may apply.
Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html Dredge and Fill Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_dredgeandfill.pdf Dredge and Fill Wetlands Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_dredgeandfill.pdf U.S. Army Corps of Engineers District Offices#http://www.usace.army.mil/cw/cecwo/reg/district.htm

Subtopic **Hazardous Waste**

Assessment Standard	**Pre-construction self-audit hazardous waste checklist has been completed.**		
Type of Std.	EPA Regulation -- 40 CFR Parts 260-279 (use of checklist recommended but not a requirement)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		
Default Corr. Action			

Importance	During your construction project, you will likely generate solid wastes. EPA classifies solid wastes as being either non-hazardous or hazardous. These wastes are regulated under the Resource Conservation and Recovery Act (RCRA). The regulatory text discussing this program (40 CFR Parts 260-299) can be found at http://ecfr.gpoaccess.gov under “Title 40 - Protection of the Environment.” Construction projects typically generate much more non-hazardous waste than hazardous waste; however, you should understand the requirements for both types of wastes to assure proper handling and disposal of these wastes.
Background	Hazardous wastes are regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA), 40 CFR Parts 260 - 279. EPA may authorize states to take the lead on RCRA Subtitle C programs. EPA also authorizes states to establish regulatory programs for solid wastes, using federal guidelines provided in Subtitle D of RCRA. In addition, states regulate construction and demolition (C&D) debris. Construction projects may be subject to state or local regulations under RCRA Subtitle C. Check with the EPA Region or state in which the construction project is located to determine the hazardous and non-hazardous solid waste handling requirements that apply to the site. Note: Additional requirements may apply.
Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html Hazardous Waste Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_hazardwaste.pdf Hazardous Waste List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_solidwaste.pdf

Subtopic	**Oil Spill Prevention**		
Assessment Standard	**Pre-construction self-audit oil spill prevention checklist has been completed.**		
Type of Std.	EPA Regulation -- 40 CFR Part 112 (use of checklist recommended but not a requirement)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		
Default Corr. Action			
Importance	If you are using, consuming, storing, transferring, or otherwise handling oils at your construction site, you will need to take the appropriate actions to prevent spills, and be prepared to take action in case of a spill. You will need to follow EPA’s Spill Prevention Control and Countermeasures Plan (SPCC Plan) requirements if certain criteria are met (see Background), which were developed under authority of Section 311 of the Clean Water Act (CWA). If a spill occurs, you must follow the spill response procedures outlined in your SPCC plan., including notifying, among others, the National Response Center at 1-800-424-8802 for spills that trigger the “sheen rule” (see 40 CFR Part 110). The regulatory text discussing this program (40 CFR Part 112) can be found at http://ecfr.gpoaccess.gov under “Title 40 - Protection of the Environment.” On July 16, 2002, EPA promulgated a revised final SPCC Regulation that became effective August 17, 2002. EPA subsequently extended the regulatory compliance schedule included in the new SPCC rule.		
Background	If a construction site consumes, stores, transfers, or otherwise handles oils, appropriate preparation will need to be taken to prevent oil spills, and to take action in case of a spill. For oil spill prevention and response, construction sites must follow EPA’s Spill Prevention Control and Countermeasures Plan (SPCC Plan) requirement. A construction project must meet SPCC requirements if it meets the following three criteria: 1. The site stores, uses, transfers, or otherwise handles oil; 2. The site has a maximum aboveground storage capacity greater than 1,320 gallons of oil (which includes both bulk and operational storage volumes) OR total underground storage capacity greater than 42,000 gallons of oil; AND 3. There is a reasonable expectation (based on location of the site) that an oil spill would reach navigable waters or adjoining shorelines of the United States. Note: Additional requirements may apply.		

Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html Oil Spill Prevention Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_oilspill.pdf Oil Spill Prevention List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_oilspill.pdf

Subtopic **Hazardous Substances**

Assessment Standard	**Pre-construction self-audit hazardous substance (Superfund liability) checklist has been completed.**		
Type of Std.	EPA Regulation -- 40 CFR Part 302 and Parts 350-372 (use of checklist recommended but not a requirement)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		
Default Corr. Action			
Importance	Before beginning any construction or demolition activities at your construction site, you should evaluate the site for existing hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as “Superfund”). CERCLA was originally enacted to address hazardous substances at inactive or abandoned sites. The Superfund program is administered by EPA in cooperation with individual states and tribal governments. The program includes a revolving Trust Fund used by EPA and other agencies to clean up hazardous waste sites where no responsible party can be identified. CERCLA also requires you to immediately report to the National Response Center any releases of hazardous substances at your construction site if the amount released meets or exceeds the reportable quantity. Brownfield—redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant, not including sites that are part of a planned or ongoing removal action or are on the National Extremely Hazardous Substances (EHSs)— Chemicals. SARA Title III, better known as the Emergency Planning and Community Right-to-Know Act (EPCRA), originated from CERCLA. EPCRA requires the use of emergency planning and provides citizens, local governments, and local response authorities with information regarding the potential hazards in their community. The regulatory text discussing these programs (40 CFR Part 302 and Parts 350-372) can be found at http://ecfr.gpoaccess.gov under “Title 40 - Protection of the Environment.”		
Background	Hazardous substance requirements fall under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as “Superfund”) and the Emergency Planning and Community Right-to-Know Act (EPCRA). The requirements of Superfund and EPCRA include emergency planning and release reporting requirements. The construction site may be affected by Superfund if: 1) The site is listed on the National Priorities List (NPL); 2) The site is a brownfield site; soil, surface water, or groundwater tests indicate the presence of a hazardous substance, as defined by CERCLA; or 3) A hazardous substance, as defined by CERCLA, is discovered during construction or demolition activities. If the site meets any of the above, site personnel should work with EPA to clean up any hazardous substances. If site personnel discover a hazardous substance at the site, they must notify the National Response Center (1-800-424-8802). If a CERCLA-listed hazardous substance is released, the site may be subject to reporting requirements. Notify the National Response Center (1-800-424-8802) when there is a hazardous substance release in an amount equal to or greater than the reportable quantity for that substance (CERCLA Section 103(a)).The construction site may be affected by EPCRA emergency planning requirements if it stores an extremely hazardous substance (EHS) as defined by EPCRA, or any substance regulated by state or local authorities, and stores the substance above the designated Threshold Planning Quantity, which varies by substance. Planning requirements include providing information to State Emergency Response Commissions (SERC) and Local Emergency Planning Committees (LERC). If a hazardous substance (defined by EPCRA) or an EHS release occurs, the site may be subject to reporting requirements under EPCRA Section 304. However, EPA has found that most construction sites do not produce, use, or store EPCRA-listed hazardous substances or EHS (Part II - Self-Audit Checklists V-1 http://www.cicacenter.org/links Managing Your		

	Environmental Responsibilities Section V - Hazardous Substances Checklist) and are not subject to the requirements of EPCRA. The list of hazardous substances subject to CERCLA and EPCRA reporting requirements (and the respective reportable quantities) can be found in EPA's Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act (EPA 550-B-01-003, http://yosemite.epa.gov/oswer/ceppoweb.nsf/ vwResourcesByFilename/title3.pdf/$File/title3.pdf Note: Additional requirements may apply.
Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html Hazardous Substances Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_hazsubstances.pdf Hazardous Substances List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_hazsubstances.pdf

Subtopic	**Polychlorinated Biphenyls (PCBs)**		
Assessment Standard	**Pre-construction self-audit polychlorinated biphenyls (PCBs) checklist has been completed.**		
Type of Std.	EPA Regulation -- 40 CFR Part 761 (use of checklist recommended but not a requirement)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		
Default Corr. Action			
Importance	Before beginning any construction activities on existing buildings, you should evaluate the potential for generating PCB-laden waste. The PCB regulations and requirements apply to both PCB waste materials and PCBs still in use. Because of potential harmful effects on human health and the environment, federal law banned U.S. production of PCBs as of July 2, 1979. However, PCB-containing materials may be present at construction and demolition sites.		
Background	Polychlorinated biphenyls are regulated under 40 CFR Part 761 as a part of the Toxic Substances Control Act (TSCA). The PCB regulations and requirements apply to both PCB waste materials and PCBs still in use. States and the Federal Government regulate the use, storage, and disposal of equipment containing PCBs, depending upon the concentration of PCBs present. EPA's Office of Prevention, Pesticides and Toxic Substances provides interpretive guidance on PCB waste regulations including the PCB Questions and Answers Manual at http://www.epa.gov/pcb/guidance.html. Because they are regulated under TSCA, PCBs are not considered hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act (RCRA). PCB wastes can become hazardous wastes if they are mixed with a listed hazardous waste (regulated under the RCRA mixture rule) or they exhibit a characteristic of hazardous waste (regulated under RCRA). Under 40 CFR Part 261.8, the disposal of PCB-containing dielectric fluids regulated under TSCA, that are hazardous only for the toxicity characteristic, is exempt from RCRA. If hazardous debris is also a waste PCB and covered by both RCRA and TSCA, the debris is covered by the most stringent requirement. Refer to the Hazardous Solid Waste Self-Audit Checklist for more information on RCRA Subtitle C requirements. This section includes a checklist for TSCA requirements for generators of PCB waste. Operators of construction projects can use the checklist to identify who will be responsible for addressing each requirement, and to conduct a self-audit of their construction site. The checklist also can be used by compliance inspectors to conduct an inspection of a construction project. Note: Additional requirements may apply.		
Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html Polychlorinated Biphenyl Self-Audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_pcb.pdf Polychlorinated Biphenyl (PCB) Waste Requirements List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_pcb.pdf		

Subtopic	Asbestos		
Assessment Standard	**Pre-construction self-audit asbestos checklist has been completed.**		
Type of Std.	EPA Reglation -- 40 CFR 61.145; 40 CFR Part 763, OSHA Reg. -- 29 CFR 1910.1001 and 29 CFR 1926.1101, (Public schools in some states are not under OSHA authority; however, the requirements of the Asbestos Worker Protection Rule will apply in those states)	**Priority:**	2
Guidance for Assessor	Review pre-construction self-audit checklist.		
Default Corr. Action			
Importance	Asbestos products, with few exceptions, are not currently banned in the US. Thousands of school buildings still contain asbestos-containing materials which are subject to the requirements of the Asbestos Hazard Emergency Response Act. (AHERA). For health reasons, it is best to manage the asbestos in place, preventing the material to deteriorate and become friable. Exposure to asbestos fibers increases the risk of future lung cancer and mesothelioma. There is no known safe level of exposure to asbestos. If the asbestos-containing material is greater than 1% (bulk analysis) and the amount exceeds 260 linear feet on pipes, 160 sq. feet on other facility components or 35 cubic feet off of facility components, renovation or demolition projects are most likely subject to the asbestos NESHAP regulations. Notification requirements and procedures for control of emissions to the air from asbestos containing products are described in 40 CFR 61.145. Before beginning any demolition or renovation activities on existing buildings, you should evaluate the potential for releasing asbestos. Because exposure to asbestos can cause serious health problems such as asbestosis (diffuse fibrous scarring of the lung tissue) and certain types of cancer, EPA and the Occupational Safety and Health Administration (OSHA) have promulgated rules regulating its production, use, and disposal. These rules include the Asbestos School Hazard Abatement Reauthorization Act (ASHARA), the Asbestos Hazard Emergency Response Act (AHERA), and the Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP), promulgated under the Clean Air Act. The regulatory text discussing this program (40 CFR Part 302 and Part 763) can be found at http://ecfr.gpoaccess.gov under “Title 40 - Protection of the Environment.” OSHA regulates private sector and some public sector employees’ exposure to asbestos and specifies work practices and engineering controls for removing and handling asbestos. The OSHA rules can be found in Title 29 of the Code of Federal Regulations (29 CFR 1910.1001, 29 CFR 1915.100, and 29 CFR 1926.1101).		
Background	Activities that could result in the release of asbestos from asbestos-containing materials (ACM) are covered by the Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP), promulgated under the Clean Air Act. Before beginning any demolition or renovation activities on existing buildings, the site should evaluate the potential for releasing asbestos. This should include an inspection of the affected facility to determine the presence and quantities of Category I and Category II ACM as well as friable asbestos material. Owners, developers, architects, contractors, and subcontractors can use the checklist to identify who will be responsible for addressing each requirement, and to conduct a self-audit. The checklist can also be used by compliance inspectors to conduct an inspection of a construction site. Check with the state and local authorities to confirm the appropriate Administrator for the site asbestos activities. NOTE: Additional requirements apply to asbestos products “managed-in-place” in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). See additional asbestos assessment actions under Central Office--Hazardous Materials.		
Links to Detailed Guidance	Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/index.html EPA Asbestos Self-audit Checklist#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer2_asbestos.pdf List of Questions for Owners and Contractors#http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1b_asbestos.pdf OSHA-approved State Plans#http://www.osha.gov/fso/osp/faq.html#oshaprogram		

Subtopic	Lead Paint		
Assessment Standard	**If built prior to 1978, school has taken measures to ensure that applicable lead regulations as well as non-regulatory recommendations will be complied with prior to any renovation activity that may disturb paint.**		
Type of Std.	EPA Regulation -- 40 CFR 745 (only for facilities constructed prior to 1978 and occupied by children under age 6 such as kindergarten classrooms, daycares and pre-schools) Recommendation for all other schools constructed prior to 1978.	**Priority:**	2
Guidance for Assessor	Interview the general contractor.		
Default Corr. Action			
Importance	Lead can cause serious damage to the brain, kidneys, nervous system, and red blood cells. Children are particularly vulnerable because their bodies tend to absorb more lead than the average adult. In low levels, lead exposure can delay physical development, lower IQ levels, shorten attention spans, and increase behavioral problems. High levels of lead can have devastating effects including seizures, unconsciousness, and, in some cases, death.		
Background	Exposure to lead contaminated dust is the most common way to get lead poisoning. Children exposed to lead may experience nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X) establishes a comprehensive federal strategy for reducing lead paint hazard exposure. The Act provides the authority for additional regulations by amending the Toxic Substances Control Act (TSCA) to include Title IV (Lead Exposure Reduction). The Residential Lead Hazard Standards also pertain to lead paint in schools and child care facilities where children under age 6 spend a significant amount of time. A child-occupied facility is defined as a building, or portion of a building, constructed prior to 1978, visited by the same child, 6 years of age or under, on at least 2 different days within any week, provided that each days visit lasts at least 3 hours, the combined weekly visit lasts at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may include, but are not limited to, day-care centers, preschools and kindergarten classrooms. Under the new standards, lead is considered a hazard at concentrations greater than: 40 micrograms of lead in dust per square foot on floors; 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard. EPA's Office of Pollution Prevention and Toxics (OPPT) oversees the Federal Lead Poisoning Prevention Program. The program contains an extensive amount of information on lead including education and outreach materials, training and certification, links to additional resources, and background information. As part of the program, EPA has developed training courses to provide instruction regarding lead-safe work practices during renovation, remodeling, rehabilitation, maintenance, sampling/evaluation, and abatement. The training guidance is particularly valuable to District and school administrators that have facilities potentially containing lead-based paint that are undergoing renovation and/or repair.		
Links to Detailed Guidance	EPA-- Lead in paint, dust, and soil#http://www.epa.gov/opptintr/lead/index.html# Federal Register 1.5.2001--Final Rule-Identification of Dangerous Levels of Lead#http://www.epa.gov/fedrgstr/EPA-TOX/2001/January/Day-05/t84.pdf# Healthy School Environments Web Portal--Lead#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=41&s_id=29#		

Subtopic	Indoor Air Quality		
Assessment Standard	**Recommendations in EPA's Indoor Air Quality Design Tools for Schools have been considered and integrated into the school renovation or construction design process.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Interview members of the design team.		

Default Corr. Action	
Importance	Indoor air quality is a critically important aspect of creating and maintaining school facilities. Evidence continues to emerge showing that poor indoor air quality can cause illness requiring absence from school, and can cause acute health symptoms that decrease academic performance. From the very beginning of the design process, indoor air quality issues should be addressed to minimize the potential for indoor air quality problems. Renovation is one of the major causes of poor indoor air quality in schools, and is often conducted while the building is occupied, resulting in occupants' potentially harmful exposure to dust, fumes, and hazardous contaminants such as lead or asbestos. Poor job-site practices can compromise school building designs by allowing moisture and other contaminants to become potential long term problems. Incorporating the IAQ Design Tools for Schools into renovation projects will prevent residual problems with indoor air quality in the completed building and reduce undue health risks for workers.
Background	Few federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, many states and localities have enacted legislation and/or established regulations, standards or guidelines that will affect school design and construction issues in the community. EPA's IAQ Design Tools for Schools provides both detailed guidance as well as links to other information resources to help design new schools as well as repair, renovate and maintain existing facilities. Though its primary focus is on indoor air quality, it is also intended to encourage school districts to embrace the concept of designing High Performance Schools, an integrated, "whole building" approach to addressing a myriad of important – and sometimes competing – priorities, such as energy efficiency, indoor air quality, day-lighting, materials efficiency, and safety. Using IAQ Design Tools for Schools, school districts and facility planners will be able to design the next generation of schools with superior indoor air quality features, which will contribute to a healthy learning environment.
Links to Detailed Guidance	IAQ Design Tools for Schools#http://epa.gov/iaq/schooldesign/# Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#
Assessment Standard	**High performance goals (including superior indoor air quality) are included in new school construction specifications.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review specifications.
Default Corr. Action	
Importance	Indoor air quality is a critically important aspect of creating and maintaining school facilities. Evidence continues to emerge showing that poor indoor air quality can cause illness requiring absence from school, and can cause acute health symptoms that decrease academic performance. From the very beginning of the design process, indoor air quality issues should be addressed to minimize the potential for indoor air quality problems. Renovation is one of the major causes of poor indoor air quality in schools, and is often conducted while the building is occupied, resulting in occupants' potentially harmful exposure to dust, fumes, and hazardous contaminants such as lead or asbestos. Poor job-site practices can compromise school building designs by allowing moisture and other contaminants to become potential long term problems. Incorporating the IAQ Design Tools for Schools into renovation projects will prevent residual problems with indoor air quality in the completed building and reduce undue health risks for workers.
Background	Set high performance goals early and include them in your educational specifications: 1) Minimize the impact of the site; 2) Select a design team with necessary qualifications and experience in high performance design; 3) Communicate goals to designers; 4) Pursue integrated design; 5) Communicate goals to contractors; 6) Monitor construction; 7) Verify goals; and 8) Train maintenance and school administration staff.

Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/predesign.html# Collaborative for High Performance Schools#http://chps.net Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#
Assessment Standard	**Requirements for limiting all potential indoor air pollution sources are included in all pre-design, design and construction documents.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review documents.
Default Corr. Action	
Importance	Indoor air quality is a critically important aspect of creating and maintaining school facilities. Evidence continues to emerge showing that poor indoor air quality can cause illness requiring absence from school, and can cause acute health symptoms that decrease academic performance. From the very beginning of the design process, indoor air quality issues should be addressed to minimize the potential for indoor air quality problems. Renovation is one of the major causes of poor indoor air quality in schools, and is often conducted while the building is occupied, resulting in occupants' potentially harmful exposure to dust, fumes, and hazardous contaminants such as lead or asbestos. Poor job-site practices can compromise school building designs by allowing moisture and other contaminants to become potential long term problems. Incorporating the IAQ Design Tools for Schools into renovation projects will prevent residual problems with indoor air quality in the completed building and reduce undue health risks for workers.
Background	Limiting potential indoor air pollution sources during the design process can be achieved by: 1) Designing barriers to infiltration of outdoor pollutant sources into the school; 2) Selecting low-toxicity, low-emitting, moisture-resistant materials that can be safely installed and maintained; 3) Specifying the required sequence of work (for example, installing soft finishes after painting); 4) Specifying the required duration of ventilation during and after installation; 5) Protecting ducts and the ventilation system during construction or renovation; 6) Ensuring that requirements are included in all pre-design, design, and construction documents
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/controlling.html# Collaborative for High Performance Schools#http://chps.net Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#
Assessment Standard	**HVAC system design provides for use of natural ventilation and/or energy recovery equipment, where appropriate, and ensures appropriate amounts of outside air are delivered to occupied spaces.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review documents.
Default Corr. Action	
Importance	All schools need ventilation, which is the process of supplying outdoor air to the occupied areas in the school. As outdoor air is drawn into the school, indoor air is exhausted by fans or allowed to escape through openings, thus removing indoor air pollutants. Often, this exhaust air is taken from areas that produce air pollutants such as restrooms, kitchens, science-storage closets, and fume hoods. Modern schools generally use mechanical ventilation systems to introduce outdoor air during occupied periods, but some schools use only natural ventilation or exhaust fans to remove odors and contaminants. In naturally ventilated buildings, unacceptable indoor air quality is

	particularly likely when occupants keep the windows closed because of extreme hot or cold outdoor temperatures. Even when windows and doors are open, under ventilation is likely when air movement forces are weakest, such as when there is little wind, or when there is little temperature difference between inside and outside (stack effect). The amount of outdoor air considered adequate for proper ventilation has varied substantially over time. Because updating building codes often takes several years, the building code, if any, that was in force when your school HVAC system was designed, may well have required a lower amount of ventilation than what is currently considered adequate. ASHRAE ventilation standards are used as the basis for most building ventilation codes.
Background	The main purposes of a Heating, Ventilation, and Air-Conditioning (HVAC) system are to help maintain good indoor air quality through adequate ventilation with filtration and provide thermal comfort. HVAC systems are among the largest energy consumers in schools. The choice and design of the HVAC system can also affect many other high performance goals, including water consumption (water cooled air conditioning equipment) and acoustics.
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/hvac.html Collaborative for High Performance Schools#http://chps.net
Assessment Standard	**Requirements for controlling moisture from precipitation, condensation, building materials, humidity, and building envelope migration are included in all pre-design, design and construction documents.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Review documents.
Default Corr. Action	
Importance	Uncontrolled moisture indoors can cause major damage to the building structure, as well as to furnishings and to finish materials like floors, walls, and ceilings. Uncontrolled moisture can trigger mold growth which not only damages the school facility, but can lead to health and performance problems for students and staff. Primary causes of indoor moisture problems in new schools include: 1) Use of building materials that were repeatedly or deeply wetted before the building was fully enclosed; 2) Poor control of rain and snow, resulting in roof and flashing leaks; 3) Wet or damp construction cavities; 4) Moisture-laden outdoor air entering the building; and 5) Condensation on cool surfaces. Controlling moisture entry into buildings and preventing condensation are critical in protecting buildings from mold and other moisture-related problems, including damage to building components.
Background	Indoor air quality is a critically important aspect of creating and maintaining school facilities. Evidence continues to emerge showing that poor indoor air quality can cause illness requiring absence from school, and can cause acute health symptoms that decrease academic performance. From the very beginning of the design process, indoor air quality issues should be addressed to minimize the potential for indoor air quality problems. Renovation is one of the major causes of poor indoor air quality in schools, and is often conducted while the building is occupied, resulting in occupants' potentially harmful exposure to dust, fumes, and hazardous contaminants such as lead or asbestos. Poor job-site practices can compromise school building designs by allowing moisture and other contaminants to become potential long term problems. Incorporating the IAQ Design Tools for Schools into renovation projects will prevent residual problems with indoor air quality in the completed building and reduce undue health risks for workers.
Links to Detailed Guidance	IAQ Design Tools for Schools. Moisture Control#http://www.epa.gov/iaq/schooldesign/moisturecontrol.html# Collaborative for High Performance Schools#http://chps.net Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#
Assessment Standard	**Requirements for 5-step walk-off mats at every building entrance included in design documents.**

Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review documents.		
Default Corr. Action			
Importance	Entry mat systems are critical in trapping soil, pollutants, and moisture that otherwise would spread into and throughout the building, as well as in reducing the cost to properly maintain the building. Entry mat systems should be addressed during the design-phase of the building rather than as a maintenance issue after the fact. The International Sanitary Supply Association reports that most of the dirt within a building is tracked in on people's shoes, and that 85% of this can be removed if entry mats are properly designed and maintained. Without an entry mat system: 1) entrances and lobbies can quickly become unsightly, providing a poor first-impression about the maintenance and condition of the building; 2) dirt and pollutants can spread to larger areas, thereby requiring higher maintenance costs than otherwise would have been necessary; 3) moisture tracked onto hard-surface floors can increase the chance of injuries and can reduce the life of carpet; and 4) increased grit tracked onto smooth-surface flooring can grind away the protective finish and carpets can quickly become loaded with pollutants. To effectively remove most pollutants from shoes requires a combination of mat materials, textures, and lengths. The combination may vary depending on your climate and location. For example, a snowy climate may require a greater amount of scraper mat; a rainy location more adsorption mat; and a muddy location more of each of the mats.		
Background	Poor indoor air quality is caused by indoor air pollutants such as biological contaminants, carbon monoxide, carbon dioxide, nitrogen oxides, radon, tobacco smoke, dust, pesticides, and other volatile organic compounds. Poor indoor air quality can impact the comfort and health of students and staff, which can in turn affect concentration, attendance, and student performance. Few Federal regulations exist for airborne contaminants and ventilation in non-industrial settings. Ventilation system capacity and specifications are often regulated through state and local government building codes. The U.S. Environmental Protection Agency (EPA) has developed the Indoor Air Quality Tools for Schools (IAQ TFS) Program to help schools prevent, identify, and resolve their indoor air quality problems. The kit is provided to schools at no cost and includes easy-to-follow checklists, videos, sample memos and policies, a recommended management plan, and a unique problem-solving wheel. Using the tools in the kit, school officials can educate staff, students, and parents about the importance of healthy indoor air quality.		
Links to Detailed Guidance	IAQ Design Tools for Schools--Controlling Pollutants and Sources#http://epa.gov/iaq/schooldesign/controlling.html#Entry%20Mat%20Barriers		
Assessment Standard	**Indoor air quality construction management plan in place.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review IAQ construction management plan.		
Default Corr. Action			
Importance	Poor job-site construction practices can frustrate even the best design by allowing moisture and other contaminants to become potential long term problems. Preventive job-site practices will reduce the potential for residual problems with indoor air quality in the completed building and reduce undue health risks for workers. The costs of poor indoor air quality are difficult to quantify, but considerable. They are the sum of illness and decreased student productivity paid by students and teachers, along with the district's cost of equipment replacement, workers compensation claims, and in the most severe cases, potential litigation. Unfortunately, serious health complaints have resulted from careless acts during construction projects, such as failure to clean up spilled adhesives or to properly ventilate during and after applying sealants in an occupied building. These mistakes have led to unpleasant headlines and costly lawsuits. Good IAQ strategies during construction will help eliminate these potential liabilities. Risk managers may be reluctant to take on the added responsibility of indoor air quality planning and preventive job-site practices.		

	However, school districts and project architects across the country have experienced litigation related to poor indoor air quality resulting from construction activities. Addressing these issues before and during construction will reduce exposure of the district and designers to potentially expensive litigation in the future.
Background	Indoor air quality is a critically important aspect of creating and maintaining school facilities. Evidence continues to emerge showing that poor indoor air quality can cause illness requiring absence from school, and can cause acute health symptoms that decrease academic performance. From the very beginning of the design process, indoor air quality issues should be addressed to minimize the potential for indoor air quality problems. Renovation is one of the major causes of poor indoor air quality in schools, and is often conducted while the building is occupied, resulting in occupants' potentially harmful exposure to dust, fumes, and hazardous contaminants such as lead or asbestos. Poor job-site practices can compromise school building designs by allowing moisture and other contaminants to become potential long term problems. Incorporating the IAQ Design Tools for Schools into renovation projects will prevent residual problems with indoor air quality in the completed building and reduce undue health risks for workers.
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/construction.html# Collaborative for High Performance Schools#http://chps.net Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#
Assessment Standard	**Occupied classrooms and school facilities are isolated from construction areas.**
Type of Std.	EPA Recommendation **Priority:** 4
Guidance for Assessor	Inspect the proximity of construction work to occupied areas and evaluate isolation practices..
Default Corr. Action	
Importance	Renovation is one of the major causes of poor indoor air quality in schools, and is often conducted while the building is occupied, resulting in occupants' potentially harmful exposure to dust, fumes, and hazardous contaminants such as lead or asbestos. Poor job-site renovation practices can compromise school building designs by allowing moisture and other contaminants to become potential long term problems. Incorporating the IAQ Design Tools for Schools into renovation projects will prevent residual problems with indoor air quality in the completed building and reduce undue health risks for workers.
Background	Indoor air quality is a critically important aspect of creating and maintaining school facilities. Evidence continues to emerge showing that poor indoor air quality can cause illness requiring absence from school, and can cause acute health symptoms that decrease academic performance. From the very beginning of the design process, indoor air quality issues should be addressed to minimize the potential for indoor air quality problems. Few federal regulations exist for airborne contaminants and ventilation in non-industrial settings. However, many states and localities have enacted legislation and/or established regulations, standards or guidelines that will affect school design and construction issues in the community. EPA's IAQ Design Tools for Schools provides both detailed guidance as well as links to other information resources to help design new schools as well as repair, renovate and maintain existing facilities. Though its primary focus is on indoor air quality, it is also intended to encourage school districts to embrace the concept of designing High Performance Schools, an integrated, "whole building" approach to addressing a myriad of important – and sometimes competing – priorities, such as energy efficiency, indoor air quality, day-lighting, materials efficiency, and safety. Using the tools in the kit, school districts and facility planners will be able to design the next generation of schools with superior indoor air quality features, which contributes to a healthy learning environment.
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/renovation.html# Collaborative for High Performance Schools#http://chps.net Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#

Subtopic	Radon -- Prevention		
Assessment Standard	**If renovation or construction is taking place in an area with a high potential for radon, radon resistant features have been incorporated into the building design.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Interview members of the design team.		
Default Corr. Action			
Importance	The EPA ranks indoor radon among the most serious environmental health problems facing us today. Radon is a known human lung carcinogen because of the wealth of biological and epidemiological evidence and data showing the connection between exposure to radon and lung cancer in humans. It is typically easier and much less expensive to design and construct a new building with radon-resistant and/or easy-to-mitigate features, than to add these features after the building is completed and occupied. Therefore, when building in an area with the potential for elevated radon levels, architects and engineers should use a combination of radon prevention construction techniques.		
Background	Radon is a naturally occurring gas that seeps into buildings from the surrounding soil. In some cases, well water may be a source of radon. Radon gas decays into radioactive particles that can get trapped in the lungs when breathing, which can cause lung cancer. Regional EPA offices and state radon offices maintain databases of radon-prone areas. Building requirements for areas with the potential for elevated radon levels will vary; some states have regulations pertaining to radon.		
Links to Detailed Guidance	Radon Prevention in the Design and Construction of Schools and Other Large Buildings#http://www.epa.gov/nrmrl/pubs/625r92016/625r92016.pdf Healthy School Environments Web Portal--Radon#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=35# IAQ Design Tools for Schools#http://epa.gov/iaq/schooldesign/#		

Subtopic	Commissioning		
Assessment Standard	**Key building systems (e.g., HVAC, building envelope, electrical, life safety) have been commissioned.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Review documentation.		
Default Corr. Action			
Importance	Building commissioning is a quality assurance program intended to demonstrate the building is constructed well and performs as designed. If the building materials, equipment and systems weren't installed properly or aren't operating as intended, the health, productivity and other benefits of high performance design will not be achieved. Commissioning is a powerful tool because it can indicate if the designers and contractors have done what they've been hired to do. If commissioning reveals problems with design or construction, the district then has the authority to make the responsible parties fix the problems up front instead of dealing with maintenance problems or poor performance down the road. In many ways, commissioning is similar to a "test run" or "systems check." It tests, verifies, and fine-tunes the performance of key building systems so that the highest levels of performance are achieved. Correctly implemented, commissioning is extremely cost-effective, and should improve the building delivery process, increase systems reliability, improve energy performance, ensure good indoor environmental quality, and improve operation and maintenance of the facility.		
Background	While all building systems can be commissioned, mechanical, electrical, and life safety systems are among the most important. The key elements of commissioning include: 1) Installation checks. Check installed equipment to ensure that all associated components and accessories are in place. 2) Operational checks. Verify and document that systems are performing as expected, and that all		

	sensors and other system control devices are properly calibrated. 3) Documentation. Confirm that all required documentation has been provided, such as a statement of the design intent and operating protocols for all building systems. 4) O&M manuals and training. Prepare comprehensive operation and maintenance (O&M) manuals, and provide training for building operations staff. 5) Ongoing monitoring. Conduct periodic monitoring after the school is occupied to ensure that equipment and systems continue to perform according to design intent.
Links to Detailed Guidance	IAQ Design Tools for Schools#http://www.epa.gov/iaq/schooldesign/commissioning.html# Collaborative for High Performance Schools#http://chps.net Healthy School Environments Web Portal--Renovation#http://cfpub.epa.gov/schools/top_sub.cfm?t_id=45&s_id=122#

Subtopic **Energy Management**

Assessment Standard	**Target Finder has been used to estimate energy performance and set goals during the design process.**		
Type of Std.	EPA Recommendation	**Priority:**	4
Guidance for Assessor	Interview the design team.		
Default Corr. Action			
Importance	The annual energy bill to run America's primary and secondary schools is a staggering $6 billion -- more than is spent on textbooks and computers combined. Schools can save money by using energy more efficiently with the help of EPA's ENERGY STAR. Top performing schools cost 40 cents per square foot less to operate than the average performers. By using less energy, schools can reduce air emissions and conserve resources because fewer fossil fuels are consumed. Qualifying schools (those whose performance rates 75 or better) may display the ENERGY STAR to symbolize their commitment to pollution prevention through energy efficiency. Indoor air quality can be improved while improving the energy efficiency of a building.		
Background	Electricity is generated from both renewable and nonrenewable energy sources. Energy efficiency/conservation is important because consumption of nonrenewable fossil fuels impacts the environment by polluting the water and air. Using fossil fuel energy more efficiently avoids emissions from power plants, can avoid the need for new power plants, and reduces energy bills. The Pollution Prevention Act of 1990 focuses on reducing pollution through cost-effective changes in production, operation, and raw materials use. The Act also promotes the efficient use of natural resources in order to protect our resource base through conservation. Although participation in EPA's programs under the Act was voluntary, organizations began to implement EPA's energy-efficient measures. EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, following these guidelines for energy management can assist school districts in improving their energy and financial performance while distinguishing it as an environmental leader.		
Links to Detailed Guidance	ENERGY STAR for New Building Design#http://www.energystar.gov/newbuildingdesign#		