Environmental Assessment Checklist for Healthy Schools Alaska Edition

Purpose

This *Environmental Assessment Checklist for Healthy Schools* was developed with the goal of protecting children from harmful environmental exposures in school settings. As children spend a significant proportion of time in school buildings and on school grounds, it is vital that these environments are as safe as possible. Healthy children make more successful learners, and are less likely to be absent from school. School staff also benefit from the clean air, water and land that exist in a healthy school environment.

Background

This assessment checklist was developed by partners in the Rural Alaska Children's Environmental Health Initiative, including EPA Region 10, Alaska Native Tribal Health Consortium, RurAL CAP, the Alaska Department of Education, Institute for Tribal Environmental Professionals, and the Alaska Department of Transportation Safe Routes to School Program.

This resource was designed specifically for schools in rural Alaska and Alaska Native Villages, with an eye toward the unique circumstances in these communities. This tool may be tailored to fit the needs of other schools and communities.

This checklist was created to be a tool for schools and communities to:

- ✓ Assess the health of school environments
- ✓ Identify areas for improvement
- ✓ Find and access resources for addressing issues that may exist.



Prepared by the US Environmental Protection Agency Region 10 and the Alaska Native Tribal Health Consortium. Last revised 11/1/12.

Use this assessment checklist as a guide to support:

- ✓ A comprehensive school environmental health walk-through
- \checkmark Interviews with school facilities staff or other key school staff
- ✓ Assessments in specific areas, such as indoor air quality or outdoor environment. (There are numerous components that could be used one at a time – starting with even one checklist section is a great step toward ensuring healthy school environments.)

How to Save the Checklist When Finished

If you are using this as an electronic form, click the **SAVE** button at the bottom of any page to save your changes as you progress through the checklist or you can click SAVE at the top of the first page to save the form to your computer when complete.

How to Use the Checklist as a Communication Tool

Information collected through this checklist can be presented to school staff, school boards, parent groups, Tribal Councils, or other entities to demonstrate the environmental health status of a school or to request assistance for addressing specific school health needs.

Who can use the checklist?

Anyone is welcome to use this tool. Ideas include:

- School maintenance/facilities staff
- Community organizations
- Local public health or environmental health workers
- Indian General Assistance Program (IGAP) workers
- Parent groups
- Tribal organizations or other community agencies or groups
- Teachers and other school staff
- Students/youth groups, with supervision

For Further Information and Materials

To support this educational tool for school staff, teachers, students, and community groups, there is an array of resources that can be accessed online, printed, and ordered in hard copy. Start by checking out this link: <u>epa.gov/schools</u>

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- Write down the items requiring follow-up in the box at the end of this section. For any problems identified, seek additional information from experts at the school, the school district, the public or environmental health department, or EPA.

AMBIENT (OUTDOOR) AIR QUALITY

Quick Overview

- The short- and long-term health of students and staff is affected by outdoor air quality, linked to health issues like headaches, dizziness, nausea, allergy attacks, asthma, heart, and respiratory problems.
- Emissions from activities at the school may impact those living and working nearby in the community.
- Most air pollution is evidenced by smoke, dust, and/or odors.
- Some air pollution is odorless and invisible (e.g. carbon monoxide).

- Outdoor pollution is often the source of poor indoor air quality.
- Exhaust can enter the school building through air intakes, doors, and windows and expose students and staff to harmful pollutants.
- Construction or repair activities can produce dust and debris.
- Dust and other pollutants can be inhaled outside or carried indoors on shoes or through ventilation systems.
- Heat and energy-producing equipment often emits air pollution.

The following questions will help you to identify and address possible outdoor air concerns.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
schoo	here any smoke stacks on roofs of ol or nearby buildings from which e or emissions can be regularly ?			 Track where those emissions typically travel and if they appear to be impacting the school or nearby residences. Investigate with the school officials whether there may be some corrective action that should be taken. Inspect outdoor areas regularly to check for new or changing emissions.
schoo	ny vehicles regularly idle near the ol entrance or the intake for the lation system?			 Develop a strategy to reduce the idling (e.g. limit to no more than five minutes) or relocate waiting areas to a location where school air quality will not be impacted. A "No Idling" sign and other outreach can help implement this policy.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
3.	Is road or construction dust often a problem near the school?			 Determine who is responsible for the dust and work with them to identify strategies for reducing it during school operating hours. Implement dust control measures (e.g. watering). Implement speed limits surrounding the school to reduce dust produced by cars, ATVs, and other vehicles.
4.	A) Does the school have any boilers, furnaces and/or power generators?B) Is maintenance currently needed on this equipment?			 Find out the type, size, capacity, fuel used, and the date each piece of equipment was installed. Ask the person responsible for maintenance and operation of equipment to provide background on his/her responsibilities and other information on how the equipment is kept in proper working order, e.g. recertification or inspection requirements. Increase awareness of equipment and potential problems to create opportunities to reduce emissions, increase equipment efficiency, and reduce fuel costs.
5.	 A) Does the school have a back-up generator? B) If yes, is the backup generator run periodically to ensure it will work safely and efficiently when needed? C) Is maintenance currently needed on this equipment? D) Is there a maintenance plan for the generator? 			 See possible actions for #4. In addition, consider the following actions: Determine if there is a maintenance plan for the back-up generators. Ensure that test runs are performed and included in the maintenance plan. During test runs, verify that the generator is functioning properly and not emitting harmful air pollutants. Record and make available test dates and times at the school district office.
6.	A) Is the village power generator located near the school?B) Is the school heated with the excess heat from the generator?			 Determine where smoke from power plant typically is blown by wind. o If up and away from school and community → little need for concern. o If exhaust from power plant can be detected at school, investigate whether school ventilation is bringing exhaust inside and can be adjusted to prevent this. o If there are further concerns, the school administration may need to work with the power plant to find a solution.

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
7. Are outside play areas bare ground or covered with grass, concrete, asphalt, crushed rock, wood chips, or other material?			 Investigate whether dust is visible near school and document when this occurs. Work with those responsible for dust to develop approaches to reduce exposure of students to this source of air pollution. Use appropriate materials on top of the ground. This may vary regionally.
8. Does the school maintain a tobacco-free campus policy which prohibits use of all tobacco products at all times by students, staff, and visitors on all school property, including grounds, buildings, parking areas, school vehicles, and at any school-sponsored event (on- or off-campus)?			 Preventing exposure to secondhand smoke protects the health of students, staff, and others using school facilities, as smoke is a mixture of gases and fine particles containing more than 4,000 chemicals, many of which can cause harmful health effects. Secondhand smoke contains over 50 chemicals known to cause cancer, such as benzene, chromium, and formaldehyde. Cyanide and carbon monoxide are also in secondhand smoke. Work with district school board to strengthen written policies to meet a tobacco-free environment (model student and facilities policies available through the State Tobacco Prevention and Control Program, http://dhss.alaska.gov/dph/Chronic/Pages/Tobacco/default.aspx). Develop strategies to communicate and enforce existing tobacco-free policies (adequate signage, announcements at school-sponsored events; communicated in student handbook, new employee hiring packets, newsletters, etc.).

Items Requiring Follow-up Investigation or Action:

- Mark an X in the second column if the answer to the question posed is 'Yes' and/or if follow-up is required.
- For open-ended questions (marked with), write notes and observations in the "Notes, Expanded Answer" column.
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	INDOOR AIR QUALITY								
	Quick Overview								
•	The short- and long-term health of students and staff is affected by indoor air quality, linked to health issues like headaches, dizziness, nausea, allergy attacks, asthma, heart, and respiratory problems. • Fumes from some cleaning products can linger long after they have been applied, which can exacerbate asthma symptoms and expose students and staff to potentially harmful substances.								
•	Some air pollution is odorless and invisible (e.g. carbon monoxide). • Chemicals kept in art classrooms, science laboratories, or janitorial closets can								
•	 Heat and energy-producing equipment often emits air pollution. Combustion appliances (e.g. kerosene heaters and unvented gas stoves and heaters) may be sources of carbon monoxide and other gases. Improper maintenance and operation can lead to the release of harmful air contaminants or to failure to filter new air contaminants. Mold can be a challenging and harmful indoor air issue, typically caused by excess moisture and inadequate ventilation. Mold is often an asthma trigger. Mold can be a challenging and harmful indoor air issue, typically caused by excess moisture and inadequate ventilation. Mold is often an asthma trigger. Animal dander from classroom pets is a common allergen and asthma trigger. 								
	The following questions will help you to identify and address possible indoor air concerns.								

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer		Possible Action(s)
 Are there health issues that indicate you may have an indoor air quality (IAQ) problem? A) Do many staff and students report having headaches, fatigue, shortness of breath, respiratory issues, or eye, nose, skin, and throat irritations? B) Do these symptoms disappear when students or staff leave the school building for a day or for extended periods of time? 			•	Ask school nurses, teachers, and/or administrative staff if they have noticed health issues such as headache, fatigue, shortness of breath, sinus congestion, cough, sneezing, eye, nose, throat, and skin irritation, dizziness, and/or nausea in a particular classroom or school building. Note: Diagnosing IAQ-related symptoms can be tricky, especially because acute (short-term) symptoms are similar to those from colds, allergies, fatigue, or the flu. Symptoms could be caused by air quality deficiencies, but may also be linked to other factors—poor lighting, stress, noise, and more.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
	C) Do health issues or reactions occur indoors but not outdoors?			• IAQ problems may affect people in different ways. Individuals that may be particularly susceptible to effects of indoor air contaminants include, but are not limited to, people with asthma, allergies, or chemical sensitivities, respiratory diseases, and suppressed immune systems.
2.	 A) Does the school have an operating plan for Heating, Ventilation and Air Conditioning (HVAC) and related systems to keep humidity, carbon monoxide (CO) and carbon dioxide (CO2) at healthy levels and to protect against the entrance of toxic fumes into the building? B) Is the plan being followed? 			 Locate or create a plan for operation and maintenance of school HVAC systems (see ASHRAE Standard 62-2001, Ventilation for Acceptable Indoor Air Quality). If maintenance is overdue, perform and record routine maintenance. Because carbon monoxide is toxic and odorless, ensure that appliances are properly vented to remove this gas. If adequate outside air for combustion is not available to an appliance, combustion gases may be drawn (backdrafted) indoors instead of exhausted outside.
3.	 A) Are carbon monoxide (CO) detectors appropriately located in all school buildings? B) Have they been tested? 			 Carbon Monoxide (CO) detectors should be located in mechanical rooms and other spaces where fuel burning devices are present. Ensure that smoke and carbon monoxide detectors are appropriately placed and maintained.
	C) Are they calibrated correctly?			 Identify where CO detectors are needed and install them. Locate or create a record for maintenance of all detectors.
	D) Is there someone who regularly checks these detectors and is there a record made of their maintenance?			
4.	A) Have there been any air quality complaints over the past several months?			 Locate or create a tracking log for air quality complaints. This is a valuable, low-cost action for protecting the health of
	B) If yes, describe them.	⇒		students and staff.
	C) Were the issues resolved and, if so, how?			 Document air quality complaints to track changes over time and to ensure that all issues are resolved.
		→		• Follow-up on any unresolved air quality issues, reaching out to other school staff and other partners/experts for support, as needed. (Checklists and <i>IAQ Coordinators Guide</i> in EPA's IAQ Tools for Schools Action Kit are helpful guidance).

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
5.	Is there a responsible party for addressing air quality concerns when they arise?			• Designating an individual whose responsibility it is to handle air quality concerns and ensure safe air is vital. Identify this individual and let staff and students know who this person is and how to reach him or her.
6.	A) Are any exhaust vapors or odors detectable inside the building?B) If yes, what is the likely source of the odors?	+		 Assess the indoor and outdoor environment to identify the source of odors. Sample tools/checklists found at http://www.epa.gov/iaq/schools/actionkit.html#Checklists. One possible source of odors is cleaning products. Choose the least-toxic cleaning methods and select appropriate products to control pollution. Limit use of high-odor dry eraser markers, oils, candles, and air fresheners, which can also be respiratory irritants. If products that are known pollutants are used, avoid use when school is occupied (i.e. wax floors after school on a Friday, mow lawns before or after school hours). When renovations are made, allow time for off-gassing before reoccupation of the building.
7.	Are there renovation, repair, or painting activities occurring inside generating dust and debris? If yes, please describe.	•		 EPA requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in pre-1978 schools be certified by EPA and that they use certified renovators who are trained by EPA-approved training providers to follow lead-safe work practices. Individuals can become certified renovators by taking an eight-hour training course from an EPA-approved training provider. Contact the National Lead Information Center at 1-800-424-LEAD (5323) to find out more information on training opportunities and to obtain lists of certified providers.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
8.	Do vehicles, such as school buses, cars, trucks, ATVs and snow machines, park or idle adjacent to the school buildings?			 Idling school buses and other vehicles can pollute air in and around the vehicle. Exhaust can also enter school buildings through air intakes, doors, and open windows. Diesel exhaust from excessive idling can be a health concern. School bus engines do not need to idle more than a few minutes to warm up; in fact, extended idling causes engine damage. Engine manufacturers generally recommend no more than three to five minutes of idling. Identify areas where fumes may enter the school and alternative parking spaces. Develop an anti-idling campaign with staff, parents, school bus companies, and youth. Post no-idling signs or promote a no-idling policy around the school.
9.	 A) Has the school undertaken any weatherization or energy efficiency projects in the last five years? B) Of what nature? C) Was the contractor certified for the particular kind of work? D) Did the work have any potential impact on air quality, such as through reduced ventilation? 	•		 When working with outside organizations/businesses on weatherization or energy efficiency, include in the contract language indoor air quality specifications covering notification and communication requirements, scheduling for minimizing occupant exposure, building materials, and protection of building systems, furnishings, and ventilation. If there are current weatherization or energy efficiency projects, assess contract language and procedures to ensure that air quality is protected.
10.	 A) Are there any animals in classrooms? B) Might these animals be causing health impacts to sensitive individuals with asthma or allergies? 			 Some people are allergic to pet dander. Isolated or repeated single exposure to allergens may cause a previously non-allergic or non-sensitive person to become allergic to that allergen. Repeated exposure may also cause increased sensitivity in a person who is already allergic. Pay attention to the needs of sensitive students, especially those with asthma. Request that the animals be kept in another location away from where students are learning. Consider restricting certain types of animals from classrooms if concerns are expressed by staff, students, or parents.

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
11. Are air supply vents and return grilles cleaned regularly?			 Periodically clean air supply vents and return grilles, as well as the ceiling and wall surfaces adjacent to the grilles and vents. Record cleanings in an HVAC maintenance log. Remove all visible dust.
 12. A) Has mold been, or is it, a problem, in any areas of the school and if so, which rooms or facilities are affected? B) Is there a maintenance plan in place that will regularly check for the signs of mold and identify sources of moisture that may lead to mold? C) Are there any areas where water leaks have caused water damage? 			 The key to controlling indoor mold growth in schools is to control moisture. Check for these common sources of moisture: Leaky roofs, pipes, windows, foundations, and other structural openings Water entry from floods, poor drainage, or misdirected sprinklers Moisture problems from scheduled maintenance activities, such as painting or carpet cleaning Moisture from conditions during school breaks such high humidity during the summer and reduced/no use of HVAC systems when school is not in session Conduct scheduled maintenance and building inspections to look for signs of mold, moisture, and leaks to prevent mold formation. Create a log for recording mold inspections and follow-up actions. Report all water leaks and moisture problems immediately to maintenance staff and identify appropriate parties for removing the mold. Damp or wet building materials and furnishings should be cleaned within 24–48 hours after a leak or spill to prevent mold growth. Keep indoor relative humidity between 30% and 50%. Ventilate bathrooms, locker rooms, and other moisture-generating sources to the outside. Use air conditioners and dehumidifiers to reduce moisture, as needed. Scrub mold off hard surfaces with water and detergent and dry completely. Remove and replace porous materials such as ceiling tiles or carpet that become moldy.

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
C (Continued) Are there any areas where water leaks have caused water damage?			 Avoid installing carpet in areas with perpetual moisture problems (i.e. near drinking fountains and classroom sinks, on concrete floors in contact with the ground and subject to frequent condensation). Insulate cold surfaces, such as cold water pipes. Ensure that the school operates exhaust systems, such as bathroom fans, together with air conditioning or heating systems.
13. Are there barrier floor mats at entrances?			 Barrier floor mats collect pollutants that would otherwise be tracked into schools from outside. Barrier floor mats at all entrances need to be long enough to allow five full steps for people entering the school. Most dirt will fall off on the mats rather than throughout the entire school, saving cleaning costs. Install barrier floor mats and vacuum each barrier mat daily using a beater brush or beater bar vacuum. Always vacuum in two directions (in-line and side-to-side).
14. Are high-efficiency vacuum bags being used?			 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.
15. Is dust being released into the air when dusting surfaces in the school?			 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.

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
16. Does the school maintain a tobacco-free campus policy which prohibits use of all tobacco products at all times by students, staff, and visitors on all school property, including grounds, buildings, parking areas, school vehicles, and at any school-sponsored event (on- or off- campus)?			 Preventing exposure to secondhand smoke protects the health of students, staff, and others using school facilities, as smoke is a mixture of gases and fine particles containing more than 4,000 chemicals, many of which can cause harmful health effects. Secondhand smoke contains over 50 chemicals known to cause cancer, such as benzene, chromium, and formaldehyde. Cyanide and carbon monoxide are also in secondhand smoke. Work with district school board to strengthen written policies to meet a tobacco-free environment (model student and facilities policies available through the State Tobacco Prevention and Control Program, tobacco@alaska.gov). Develop strategies to communicate and enforce existing tobacco-free policies (adequate signage, announcements at school-sponsored events; communicated in student handbook, new employee hiring packets, newsletters, etc.).
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 education courses. Outdated and improperly stored chemicals pose a hazard for students and staff. Many schools have asbestos containing materials. Intact, undisturbed asbestos materials may not actually pose a health risk, but must be identified and monitored. The Asbestos Hazard Emergency Response Act (AHERA) requires local education agencies to inspect their schools for asbestos-containing building repair and painting projects that disturb lead-based paint in homes, child care facilities and schools built before 1978 must be certified and must follow specific work practice to prevent lead contamination. Common sources of polychlorinated biphenyls (PCBs) in schools are caulk and light ballasts. Children exposed to PCBs are at risk for developmental and neurological disorders. PCBs break down very slowly in the environment and may pose a risk for many years after disposal. 	HAZARDOUS MATERIALS				
 materials are mandated by several Federal and State laws. Hazardous materials need special attention to ensure the materials are used and stored safely. Chemicals are very common in schools and are often found in school laboratories, janitorial closets, and classrooms used for art and technical education courses. Outdated and improperly stored chemicals pose a hazard for students and staff. Many schools have asbestos containing materials. Intact, undisturbed asbestos materials may not actually pose a health risk, but must be identified and monitored. The Asbestos Hazard Emergency Response Act (AHERA) requires local education agencies to inspect their schools for asbestos-containing building found in deteriorating lead-based paint, lead contaminated dust and contaminated soil. Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Under EPA's Renovation, Repair, and Painting Rule, contractors performing renovatior repair and painting projects that disturb lead-based paint in homes, child care facilities and schools built before 1978 must be certified and must follow specific work practice to prevent lead contamination. Common sources of polychlorinated biphenyls (PCBs) in schools are caulk and light ballasts. Children exposed to PCBs are at risk for developmental and neurological disorders. PCBs break down very slowly in the environment and may pose a risk for many years after disposal. 	Quic	:k Overview			
hazards harmful exposure occurs through inhalation, but it is also harmful by absorbance through the skin.	 materials are mandated by several Federal and State laws. Hazardous materials need special attention to ensure the materials are used and stored safely. Chemicals are very common in schools and are often found in school laboratories, janitorial closets, and classrooms used for art and technical education courses. Outdated and improperly stored chemicals pose a hazard for students and staff. Many schools have asbestos containing materials. Intact, undisturbed asbestos materials may not actually pose a health risk, but must be identified and monitored. The Asbestos Hazard Emergency Response Act (AHERA) requires local education agencies to inspect their schools for asbestos-containing building material and prepare management plans to prevent or reduce asbestos 	 found in deteriorating lead-based paint, lead contaminated dust and contaminated soil. Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Under EPA's Renovation, Repair, and Painting Rule, contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination. Common sources of polychlorinated biphenyls (PCBs) in schools are caulk and light ballasts. Children exposed to PCBs are at risk for developmental and neurological disorders. PCBs break down very slowly in the environment and may pose a risk for many years after disposal. Mercury and its compounds, both organic and inorganic, are health hazards. The most harmful exposure occurs through inhalation, but it is also harmful by absorbance 			

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
 A) Does the school have a hazard communication plan? B) Is the plan being followed? C) Who is responsible in the event of a chemical hazard? 	•		 Develop a written hazard communication plan. Establish a leadership team consisting of qualified and experienced individuals to oversee chemical management activities. Establish a chemical management policy and chemical hygiene plan. (See EPA's Chemical Management Guide for School Administrators <u>http://go.usa.gov/8Wy</u> <u>http://www.epa.gov/opptintr/pubs/chemmgmt/resourceguide.pd</u> <u>f</u>)

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
2.	Is there an up-to-date chemical inventory?			 Establish an inventory policy and set of procedures. Conduct an initial comprehensive chemical inventory. Once complete, schools should establish a chemical inventory database that is updated when chemicals are purchased, used, or disposed of. See http://epa.gov/sc3/chemicals.html for templates and resources.
3.	A) Are chemicals used in the classroom?B) How are they stored?C) Are they labeled and stored safely?	•		 All chemicals should be labeled and stored properly in a central and secure location where they are not accessible by students. Implement pollution prevention and green chemistry (safer alternatives) principles whenever possible. See <u>http://epa.gov/sc3/chemicals.html</u> for resources.
4.	Has the school conducted a chemical cleanout , identifying and removing unnecessary hazardous materials through appropriate recycling and/or disposal methods?			 Chemical inventories should be conducted prior to cleaning out chemicals from schools. Conduct periodic cleanouts by identifying and removing unnecessary hazardous materials and expired chemicals through appropriate recycling and/or disposal methods. Contact your local state agency, college or university, industry partner, or chemical supplier, or someone with technical qualifications to identify potentially dangerous situations (i.e., school staff should not move very old chemicals because of the extreme hazard they may present) and properly handle the chemicals during a chemical cleanout.
5.	Are Material Safety Data Sheets (MSDS) available for chemicals and paints (solvents-brake cleaner, parts washer, etc.)?			• All chemicals and paints should have up-to-date MSDS's and they should be kept together in an accessible location.
6.	Has the school conducted a mercury inventory?			 Common sources of mercury in schools include laboratories, thermostats, and thermometers. Schools should discontinue use of and remove all mercury compounds and mercury-containing equipment. Contact your local or state environmental or health agency for disposal. Access more information at http://www.epa.gov/hg/schools.htm.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
7.	 A) Has an inspection been conducted to determine if asbestos is present in the school or any of the school's buildings? B) Was asbestos containing material found and is it labeled and/or otherwise identified in the building? C) Are re-inspections and periodic surveillance occurring? 		 a. Date of most recent inspection: b. Name of inspector/company: c. If asbestos-containing material was found, what actions were taken in response? 	 School should have an up-to-date asbestos management plan on file. Inspections are required every 3 years and periodic surveillance for asbestos-containing materials is required every 6 months. (http://epa.gov/asbestos/pubs/asbestos_in_schools.html)
8.	 A) Does the school have an Asbestos Management Plan? B) Is the plan filed with school office/school district? C) Who is designated person for maintaining the plan? D) How is the plan made available to staff, employees and parents? 	⇒		 Have an Asbestos Management Plan available. If recently constructed buildings have no asbestos, then you need to have a certificate/document from the builder that certifies no asbestos containing materials were used in the construction of the buildings.
9.	 A) Are there any outstanding construction/demolition or repair issues related to asbestos containing materials? B) Is any action or repair currently planned or outstanding? C) Has facilities staff taken asbestos awareness training? 			 Provide at least two hours of asbestos awareness training to all custodial and maintenance staff, and maintain the training records. Training information can be accessed at http://www.epa.gov/asbestos/pubs/location.html.

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
 10. A) Has a lead paint and lead soil inspection/risk assessment been conducted? Has it ever been updated? B) Was lead-based paint or lead in soil found during the inspection and what, if any, actions were recommended? C) Has a lead abatement been performed? 		 a. Date of inspection/assessment: b. Name of Inspector/company: c. Date of lead abatement: d. Name of individual certified for lead abatement work: ➡ 	 Make sure that, if there are renovation, repair, or painting (RRP) activities generating dust and debris, the personnel performing this work are trained Renovators and the contractor is a certified RRP firm. See the EPA lead website (<u>http://epa.gov/lead/</u>) for more information
11. A) Are renovation, repair, or painting activities occurring inside generating dust and debris?B) If yes, please describe.	•		 EPA requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in pre-1978 schools be certified by EPA and that they use certified renovators who are trained by EPA-approved training providers to follow lead-safe work practices. Individuals can become certified renovators by taking an eight-hour training course from an EPA-approved training provider. Contact the National Lead Information Center at 1-800-424-LEAD (5323) to find out more information on training opportunities and to obtain lists of certified providers.
 12. A) Is there a policy for identification, management and disposal of PCBs? B) Are there reports identifying PCB-containing equipment, such as fluorescent light ballasts (capacitors) or old transformers containing PCBs? 			 If school administrators and building owners are concerned about exposure to PCBs, EPA recommends testing to determine if PCB levels in the air exceed EPA's suggested public health levels. If testing reveals PCB levels above public health levels, schools should attempt to identify potential sources of PCBs, including testing samples of caulk and looking for other potential PCB sources (e.g. old transformers, capacitors, or fluorescent light ballasts that might still be present at the school). (Call EPA's PCBs in Caulk Hotline at 888-835-5372 to find a PCB testing lab.)

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
Items Requiring Follow-up Investigation or Action:			

- EPA Schools Chemical Cleanout Campaign: <u>http://www.epa.gov/schools/chemicals.html</u>
- EPA Lead Information Site: <u>http://epa.gov/lead/</u>

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PESTICIDE USE AND PEST MANAGEMENT				
	Quick Overview			
 Some pests are common in schools and can harm children and adults. Flies and cockroaches may spread disease. Cockroaches can cause allergies and asthma attacks. Mice may contaminate food, trigger asthma attacks, and cause structural damage. Termites cause structural damage. Low risk esthetic problems can be caused by weeds invading playgrounds, ants swarming, and fruit flies in the kitchen. Pesticides are chemicals that are designed to kill or reduce pests, including herbicides, rodenticides, insecticides, sanitizers, disinfectants, and any other surface spray labeled as an antibacterial or anti-microbial product. Pesticides need to be used carefully especially when applied in areas where children are present. Children are more susceptible to harm from pesticides than adults. 	 Young children may be more exposed to pesticides from crawling, exploring, or other hand-to-mouth activities. To ensure safe use, the Federal Insecticide Fungicide Rodenticide Act requires all users of pesticide products to only use pesticide products for purposes specifically stated on the product label. All pesticide products must be registered by the Environmental Protection Agency (EPA)s and include an EPA registration number. Integrated Pest Management (IPM) is a safer and usually less costly method for effective pest management in a school community. A school IPM program reduces sources of food, water, and shelter for pests and 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, IPM programs provide an opportunity to create a safer learning environment through reducing children's exposure to pesticides and safely reducing and eliminating pests. 			

The following questions will help you to identify and address possible pest and pesticide

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
 A) Does your school have pest problems? B) What are your schools' major pest problems? 	•		 The first step is identifying pest issues at the school. Typical pests in indoor areas include mice, rats, cockroaches, ants, flies, wasps, hornets, yellow jackets, spiders, microorganisms, termites, carpenter ants, and other wood-destroying insects. Common places to assess indoors include doorways, windows, holes in exterior walls, openings around pipes, electrical fixtures, and ducts, in dining areas, kitchens, and teachers' lounges. Common outdoor pests include mice and rats, turf pests (broad-leaf and grassy weeds, insects such as beetle grubs or sod webworms, diseases such as brown patch, and vertebrates such as moles), and ornamental plant pests, plant diseases, and insects such as thrips, aphids, Japanese beetles, and bag worms.

Assessment Questio	on Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
B – (Continued) What are y major pest problems?	our schools'		• Look for pests outside in turf lawns, athletic fields, playgrounds, parking lots, loading docks, and dumpsters and on ornamental plants.
2. What is being done to add pest issues?	ress existing		 Keep areas clean and free of food and other organic matter, make structural repairs (e.g. closing entryways for pests, such as sealing holes in walls or window screens), and put in physical and mechanical controls like traps, weeders, and air doors. Keep a record of the issues, methods that worked, and what did not. A sample checklist is at the end of this document; record any chemicals used, the date and location, and make sure to continually update the list.
 A) Does the school district written pest management B) If your school does have pest management policy policy require Integrated Management (IPM)? (See column for details.) 	policy? a written , does this d Pest		 If the district does not have a pest management policy, consider creating one with input from administration and facilities staff. Sample plans and information can be found online at <u>http://www.epa.gov/pesticides/ipm/</u>. In the plan, specifically designate the individual or position responsible for addressing each issue and make sure s/he is aware of this responsibility. List allowed and prohibited pest management practices. Keep the plan in an easily accessible location, near monitoring logs and other relevant materials.
 4. A) Is pest control a contract house" function (or both)? B) If in-house, who is the approximate the control of the state of t	oplicator?		 By Alaska regulation, anyone who applies pesticides (except for antibacterial type products) anywhere on school grounds must be a certified, licensed pesticide applicator. This includes both indoor and outdoor products such as insect control, weed killer (including "weed and feed" type products), and rodent control. To become certified, applicators must successfully complete a required training course and pass an examination. Read more about certification and training at http://www.epa.gov/oppfead1/safety/applicators/ctprogs.htm.

I	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
5.	 a) Does your school regularly monitor for pests, and keep records of monitoring results? b) How often does the school inspect for pests? 	•		 Routine inspection and accurate identification of pests are vital steps to ensure that control methods will be effective. Once the pest has been identified and the source of its activity pinpointed, use habitat modifications - primarily exclusion, repair, and sanitation efforts - to greatly reduce the prevalence of the pest. Monitoring includes inspecting areas for pest evidence, entry points, food, water, and harborage sites, and estimating pest population levels (assessing how many pests there are and changes over time). Evaluate the information gained through monitoring to determine whether the action is needed and what can be done to prevent new pests.
6.	Does the school have a Pest Sighting Log for teachers and staff?			 Create a simple tracking device for teachers or other staff to note when they see pests. This is an easy, low-cost step for tracking changes over time and ensuring that the proper individuals know about pest issues in different areas of the building or grounds. Place this log or tracking system in a common space where staff can easily find it.
7.	 a) Other than antimicrobial products or cleaners, has the school had pesticides applied for any reason in the last two years? Indoors? Outdoors? b) If yes, does your school have documentation of the work? c) Who makes the decision about whether to use pesticides? 	•		 School administrators must keep detailed records about each pesticide application for a minimum of two years. Notification, posting, and recordkeeping are not required for use of antimicrobials and under some other specific circumstances. Ensure that all pesticide use is tracked in an easily accessible log. Ensure that the log is up to date and, if it is not, take a quick survey of teachers, facilities staff, and other workers at the school to determine what kinds of chemicals are typically used and where they are stored. Designate a knowledgeable contact person in the district as the decision maker for pesticides. Let all staff know who this person is and how and when s/he should be contacted.
8.	a) Are pesticide applications done on a schedule or only when a pest problem is present?			• Document the pesticide application schedule and determine if, through use of IPM strategies, chemical use can be reduced or eliminated.
	b) What time of day and week?	•		

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
9.	Are parents notified prior to pesticide applications?			 Any time pesticides will be applied anywhere on school grounds, parents must be notified at least 24 hours in advance with a description of the area and a date and time of the application. Create a plan and work with colleagues to ensure parents are notified. This can be done through emails, posted signs, notes sent home with students, phone calls, or other methods that are deemed successful in reaching parents.
10	Are treated areas posted with notification signs?			 The physical area does not need to have a sign until immediately before starting the application of a pesticide. However, if pesticides are used outside of the school term and the school is open to or accessible by the public, the notification required must be prominently posted in a conspicuous location on the school premises at least 24 hours before the pesticide treatment is scheduled to begin. http://touchngo.com/lglcntr/akstats/AAC/title18/chapter090/section62 <u>5.htm</u>
11	Are warning signs posted after application? For how long?	+		• Warning signs about the pesticide application must be posted in the application area for at least 24 hours after application.
12	Does the school have a designated pesticide storage area ? Is it locked?			 Assess the school building and grounds and document all pesticides (including anti-microbial products) and record the information on the table on the next page. Pesticides are any product with an EPA registration number on the label. This includes sanitizers, disinfectants, cleaners, and any surface spray labeled anti-bacterial or anti-microbial. Common places you can find anti-microbial products include janitors' closets, sheds, and kitchen cabinets. Ensure this storage area is locked and/or inaccessible to children. Ensure all products are stored properly (e.g. not leaching, covered properly, and not placed in inappropriate temperatures or near potentially reactive substances).

sticide Checklist					
lame of Pesticide	Labeled	EPA Registered	Certified applicator (if applicable)	Stored Properly	Disposed of Properly

Items Requiring Follow-up Investigation or Action:

Resources:

• EPA Pesticides Site: <u>http://www.epa.gov/pesticides/ipm/</u>.

- Mark an X in the second column if the answer to the question posed is 'Yes' and/or if follow-up is required.
- > For open-ended questions(marked with ⇒), write notes and observations in the "Notes, Expanded Answer" column.
- Write down the items requiring follow-up in the box at the end of this section. For any problems identified, seek additional information from experts at the school, the school district, the public or environmental health department, or EPA. Consult online resources listed below checklist.

ABOVE GROUND AND UNDERGROUND STORAGE TANKS & SPILL PREVENTION

Quick Overview

- Storage tanks may be found either above ground or underground on school grounds.
- An underground storage tank (UST) system is a tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground.
- Tanks that contain fuels and other hazardous liquids must be inspected and properly maintained to protect the environment and human health.
- The greatest potential threat from a leaking UST is contamination of groundwater.
- Frequent inspection and maintenance of storage tank systems will help ensure limited impact on the environment and human health by preventing spills.

- There are some low-cost, simple steps you can take to keep your storage tank in safe, working order:
 - 1. Paint your above ground tank a light color to help reduce condensation and bottom corrosion.
 - 2. Keep your tank filled during the off season months to reduce condensation and corrosion.
 - 3. Regularly inspect the tanks for signs of rust, wet spots, or excessive dents (pitting) on the tank's surface.
 - 4. Check for signs of drips or leakage around fuel lines, filters, drain plugs and valves.

Assessment Question	X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
 A) Are there above ground or underground storage tanks present on school grounds? 			 Your school may be required to develop and implement a Spill Prevention, Control, and Countermeasure (SPCC) plan and have a secondary containment system if <u>all</u> of the following conditions are
B) How many? C) Where are they located? D) What is in them? E) How many gallons do the tanks hold?	 		 met: Your school has above ground storage tanks that have a capacity of 55 gallons or more, Collectively, the tanks hold 1,320 gallons or more, and The school is near a location where a spill from a tank could enter a navigable waterway. A secondary containment system will prevent spills from reaching a nearby water body. Consult the following website for information on developing an SPCC plan: <u>http://www.epa.gov/osweroe1/content/spcc/</u>.

The following questions will help you to identify and address possible storage tank and spill concerns.

	Assessment Question	X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
2.	A) Has the school experienced any fuel or chemical spills from tanks or piping over the past 3 years?B) How were the spills addressed?C) Were they reported, and to whom?	⇒ ⇒		 If you suspect or discover that your tank system is leaking or if you have a spill, you must notify the authorities as soon as possible. To report a spill, call the National Response Center (NRC) 24-hour National Spill Reporting Line at 1-800-424-8802. You may also call the EPA Region 10 24-hour spill reporting number, 206-553-1263.
3.	 A) Does the school have a procedure in place to respond to any suspected leaks or spills? B) Is staff trained on a regular basis on how to respond safely? C) Does the school have materials to respond to a spill if the school is in a remote location and a service provider is not available to investigate? 			 If your school has underground storage tanks, notify the State of the spill and contact your service provider to stop the leak and clean up the spill as soon as possible. If the school has above ground tanks, your school should maintain a list of state and federal contacts to notify in case of a spill and determine how your school will respond to a spill should it occur.
4.	A) Are fuel lines protected from potential damage from weather, vehicles, and people?B) Do you inspect them regularly?C) Are any tanks in need of repair?			 Fuel lines or pipes from storage tanks leading into or around the school should be protected to prevent damage from the weather, vehicles, or personnel. Identify unprotected lines and what action could be taken to better protect them. Physical damage to tanks or pipes from snow or ice falling from overhead roofs can result in damage to the tank system. Make sure that your school takes action to prevent damage to your school's fuel system and inspects fuel lines frequently to identify potential causes of damage. As mentioned above, simple steps to maintaining your tank include: Painting above ground tanks a light color Keeping tanks filled during the off season months Regularly inspecting the tanks for signs of rust, wet spots, or excessive dents on the tank's surface Checking for signs of drips or leakage around fuel lines, filters, drain plugs and valves

Items Requiring Follow-up Investigation or Action:

- <u>http://yosemite.epa.gov/R10/WATER.NSF/UST/UST+O&M</u>
- http://yosemite.epa.gov/R10/WATER.NSF/UST/UST+Contacts/
- http://www.dec.state.ak.us/spar/perp/heat/hotguide.pdf
- <u>http://www.epa.gov/osweroe1/content/spcc/</u>
- <u>http://www.epa.gov/emergencies/content/spcc/spcc_guidance.htm</u>

- Mark an X in the second column if the answer to the question posed is 'Yes' and/or if follow-up is required. \geq
- \triangleright For open-ended questions (marked with ➡), write notes and observations in the "Notes, Expanded Answer" column.
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	WASTE MANAGEMENT					
				Quick Overviev	V	
•	 Many dangerous types of waste can be found in schools. If not stored on and disposed of properly, these materials can be harmful to the environment and to the health of children and staff in the school. Examples of dangerous materials and their health implications include 				in schools is found primarily in mercury-containing devices (such as stats and fever thermometers) and scientific laboratories (both apparatuses mical reagents). Mercury causes poisoning at a relatively low exposure level. poisoning in children causes nervous system, digestive system, and kidney.	
	 Paint and solvents found in school a can be toxic to children and cause fi 		sewhere •		nanagement plan is important for preventing pollution and reducing ren and staff to potentially hazardous wastes.	
	 Batteries are a health risk for children are often toxic and corrosive. Aerosol cans are hazardous waste, a children and pose a fire risk. Used oil is insoluble, persistent, and chemicals and heavy metals. It is slow major source of oil contamination or result in the pollution of drinking watche following the fo	as they may be to d can contain toxi ow to degrade an of waterways whi- ater.	oxic to ic d is a • ch can	These plans shou	Id include goals for: eduction and recycling ste separation and disposal ling/construction waste og properly of regulated hazardous waste pe consistent with the solid waste and hazardous waste regulations of the	
	Assessment Question	X if Follow-Up Needed	Notes, Expa	anded Answer	Possible Action(s)	
	1. A) Does the school have a waste management plan?				 Create a policy and set of procedures consistent with hazardous waste regulations to manage risk. Include the following in the plan 	

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• Goals for waste reduction and recycling

and http://www.gwu.edu/~riskmgnt/pdf/hwmp.pdf.

• Disposing properly of regulated hazardous waste

http://www.jjay.cuny.edu/HazardousWasteManagementPlan2009.pdf

• Solid waste separation and disposal

• Remodeling/construction waste

Sample plans are found at

chemicals?

B) Is there a policy for regulated

hazardous waste including used oil,

aerosol cans, fluorescent light bulbs,

mercury, laboratory and photographic

solvents, waste paint, batteries,

Assessment Question	X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
 2. A) Is used oil generated? B Is it collected in containers or tanks that are labeled "Used Oil"? C) If the used oil is being burned on site, is the burner labeled with the words "Used Oil"? 			 Reduce the risk of contaminating water sources by containing and treating or reusing oil. Use containers designed to hold oil and keep them in storage facilities that protect containers from damage and exposure to weather. Used oil should be shipped offsite to a used oil recycler or burned onsite for energy recovery. To learn more about what to consider when burning used oil, see: http://www.ecarcenter.org/ak/ak-usedoil.htm. If burned onsite, the burner should be labeled with the words "Used Oil".
3. Are waste paint and solvents stored in closed containers that are in good condition and labeled?			 Ensure that containers have tight closing caps or lids that will prevent spillage. Label containers with the date contents were first accumulated and the type of waste paint or solvent product contained within.
4. Are waste batteries (AAA, AA, C, D, ni- cads, NiMH, Laptop, cell phone, and others up to large, sealed 12 volt batteries in emergency lights and vehicle batteries) sent for recycling/reclamation?			 Store batteries indoors in a closed, non-reactive (plastic or sealed wood), impermeable and curbed container that will prevent any leaks or spills from escaping. Clearly label the battery storage container. <u>http://www.epa.gov/epawaste/conserve/materials/battery.htm</u> There are many battery recycling resources in the State of Alaska. The following website provides more information: <u>http://www.aerho.org/projects/recycle_batteries.html</u>.
5. Is there a management plan for aerosol can waste?			 Create a plan for managing aerosol can waste that minimizes the risk of fire or explosion and is consistent with state and EPA hazardous waste regulations. Store empty aerosol cans upright in a secure location in which the cans are safe from puncture or damage until they can be shipped to a recycling facility. Clearly label the aerosol can storage container.
 A) Is there mercury in thermostats, switches, lab equipment, thermometers or barometers? 			 Keep all mercury-containing devices in a secure location to prevent breakage.

Assessment Question	X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
6 B) If so, is there a plan for managing spilled or released mercury?			 If a mercury thermometer or other item breaks, clear people from the area, open exterior windows and close the classroom door. See this website for cleanup instructions: http://www.epa.gov/mercury/spills/index.htm For information on how to reduce the risk of mercury exposure in schools, see: http://pprc.org/hubs/toc.cfm?hub=501&subsec=7&nav=7
 7. A) Are all chemical wastes shipped off- site to a recycler or permitted waste management facility for recycling, treatment and/or disposal? B) Are manifests or other shipping records available? 			 Conduct a waste assessment to determine the type and amount of waste your school or school district produces so that you can develop an appropriate waste reduction program. Send hazardous chemicals to the appropriate party for safe disposal. Determine which materials your school or school district should recycle. Track the results of your waste assessments so that you can determine the best ways to reduce waste. Place signs on your recycling containers to avoid contaminating your bins with non-recyclable waste. Consult 'Tools to Reduce Waste in Schools' for checklists and other information at http://www.epa.gov/waste/education/toolkit.htm.
	lte	ems Requiring Follow-up Investigat	ion or Action:

- <u>http://www.epa.gov/waste/education/index.htm</u>
- <u>http://www.jjay.cuny.edu/HazardousWasteManagementPlan2009.pdf</u>
- http://www.gwu.edu/~riskmgnt/pdf/hwmp.pdf
- http://www.epa.gov/waste/conserve/materials/usedoil/pubs.htm
- <u>http://www.epa.gov/epawaste/conserve/materials/battery.htm</u>

- <u>http://www.aerho.org/projects/recycle_batteries.html</u>
- <u>http://www.epa.gov/mercury/spills/index.htm</u>
- <u>http://www.epa.gov/mercury/spills/index.htm</u>
- http://pprc.org/hubs/toc.cfm?hub=501&subsec=7&nav=7
- <u>http://www.epa.gov/waste/education/toolkit.htm</u>

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EMERGENCY PLANNING							
Quick Overview							
 A variety of emergency situations can develop in a school setting, potentially resulting in a loss of life and property. Identifying and preparing for these emergencies is imperative. A written, well understood and practiced plan is a core aspect of a safety emergency response and gives all parties a chance to review and understand what is expected to occur. 	 A community may or may not have trained emergency response personnel, but knowing if they exist and at what capacity they are trained can allow for better coordination and utilization of resources in an emergency situation. Emergency drills are a necessary tool toward identifying changes in conditions, risks, personnel, and gaps in preparedness. Chemical storage and use in a building can present a unique cause for concern during an emergency response. 						
The following questions will help you to identify and	d address possible emergency planning concerns.						

The following questions will help you to lucitary and duaress possible entergency planning concerns.					
Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)		
 A) Does the school have a current Emergency Action Plan identifying how children and staff should respond to an emergency? 			 If the school does not have an Emergency Action Plan, guidelines for developing one can be found at <u>http://www.cdc.gov/niosh/docs/2004- 101/emrgact/emrgact1.html</u>. 		
B) When was the last time it was reviewed?C) Does it need updating?	•				
2. Does the community have any emergency response personnel and has the school coordinated response efforts with them?			 If the community has trained emergency response personnel, make certain that all teachers, staff, and parents know who they are and how to contact them. Post contact information in each room. Find out the personnel's level of training in order to know what they can do in an emergency situation. 		

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
3.	A) How often does the school hold emergency drills?	 → → 		 Schedule routine emergency drills to build effective response habits and skills. Emergency drills should be hald at least once every school year.
	B) What types?	_		• Emergency drills should be held at least once every school year.
4.	C) What is the date of the last drill? Are first aid kits readily accessible, in the school buildings?			 First aid kits are required in school buildings per the applicable Federal, state and local health and safety requirements. Information about these requirements can be found from contacting the local emergency management agency or fire department.
5.	Are emergency lights tested and maintained?			 Conduct routine tests to confirm that lights initially function and can operate a certain expected amount of time. Keep a log of when tests are performed and when maintenance work is done.
6.	Are aisles and hallways kept clear, in good repair, and properly illuminated?			 Ensure that aisles and hallways are in good condition and free and clear of debris/materials to allow for safe travel in the event of an emergency. Frequent and routine inspection is important because conditions can change unknowingly.
7.	Are fire extinguishers placed appropriately and maintained throughout the facility?			 Fire extinguishers require inspection and maintenance to ensure they are functional and not out of service. Inspection and maintenance periods include monthly and annual checks as well as other service requirements as needed.
8.	Have the local fire department, volunteers, or law enforcement been made aware of chemicals stored and used at the school?			• Keep a record of where chemicals are stored and how they are used in the school buildings to enable responding personnel to ensure the safety and well-being of the responders and occupants.
9.	Are there any plans made by the community to respond to a chemical spill ?			 A community response plan should include potential emergency situations at schools. Maintain regular contact with local emergency planning officials and fire department personnel to ensure they are aware of the needs of your school.

Items Requiring Follow-up Investigation or Action:

Resources:

• Alaska Emergency Response Guide: <u>http://www.ak-prepared.com/documents/AK_Emergency_Response_Guide%20signed.pdf</u>

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	WASTEWATER DISPOSAL							
	Quick Overview							
 The Clean Water Act regulates both direct and indirect discharges of wastewater into navigable waters, by issuing discharge permits under the National Pollutant Discharge Elimination System (NPDES) Program. NPDES permits contain technology-based and water quality-based limits, and establish pollutant monitoring, record keeping, and reporting requirements. Washing vehicles and shop floors, including spraying water and detergent on vehicles and floors and discharging the washwater through a drain to a septic tank is prohibited. Some facilities dump used washwater on the ground outside of the facility, a generally improper practice. 				Washing vehicles and shop floors may be regulated under the Pretreatment Program or the NPDES Program of the Clean Water Act. These sections may require the facility to obtain permits, install oil and water separators, or comply with other provisions designed to prevent contaminated wastewater from reaching the environment. Wastewater lagoons located on school property can be prone to overflow due to limited site selection options. Wastewater lagoons should be protected to prevent children from injury and exposure to disease pathogens. Tess possible wastewater concerns.				
		<u> </u>	is will help you to identify and add					
	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)				
1.	To what type of wastewater disposal system does the school discharge sewage? (Piped sewer system, on-site septic system, or sewage lagoon?)	•		 Determine where the school's wastewater is discharged. Contact the State or EPA to see if a permit is needed. 				
2.	Who operates the wastewater disposal system: the community, the school, or the school district?	•		 There should be documentation that the State of Alaska or a Federal regulatory agency has granted authority to operate the wastewater disposal system. This could come in the form of a permit, letter from the State, or demonstration of routine reporting to the State. 				
3.	If a wastewater lagoon is used:			 The lagoon should be protected from overflow by proper design to 				
	A) Have there been any reports of the lagoon overflowing ?			handle the amount of wastewater discharged.Signs should be posted that warn of the potential dangers.				
	B) Is the lagoon fenced and gated and is							

the gate locked? Are the fence and

gate in good repair?

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
4.	 A) If there is a bus washing facility associated with the school or school district, where is the washwater disposed? B) If there is washwater runoff that enters a water body, has a 			 Inspect facilities to make certain that wastewater is discharged properly: NOT through a drain to a septic tank. NOT dumped on the ground outside of the facility. Contact the Alaska Department of Environmental Conservation Division of Water (http://www.dec.state.ak.us/water/wwdp/) to see if a permit
	wastewater discharge permit been issued?			has been issued or if one is necessary.
5.	Does the school prohibit the dumping of gasoline, oil, chemicals, and lawn and garden pesticides down the drain, into surface water, onto the ground, or in the trash?			 Check to see if the school or school district has policies regarding the proper disposal of these chemicals. If not, consider developing and implementing them.
		It	ems Requiring Follow-up Investiga	tion or Action:

- <u>http://water.epa.gov/polwaste/wastewater/</u>
- http://dec.alaska.gov/water/wwdp/dmww/dmww.htm

- Mark an X in the second column if the answer to the question posed is 'Yes' and/or if follow-up is required.
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SAFE DRINKING WATER								
Quick Overview								
 Public Water Systems (PWS) are responsible for complying with Safe Drinking Water Act (SDWA) requirements. This entails sampling and analyzing water for specific chemicals and microbiological organisms to ensure that applicable treatment techniques are followed and the Maximum Contaminant Levels (MCL) are not exceeded. Contact your local water supplier or state drinking water program to learn if your school is in a drinking water protection area. Release of toxic or hazardous materials onto soil, into septic systems, or to the ground through spills into floor drains could cause contamination of a nearby drinking water supply. Lead and Copper in Drinking Water: Schools and child care facilities that have their own water supply are subject to the Lead and Copper Rule (LCR) requirements. The most common source of lead and copper in drinking water is corrosion of plumbing materials (i.e. pipes, solder, fixtures, and faucets made with lead and copper). 	 Children are especially susceptible to lead and copper exposure because their bodies absorb these metals at higher rates than the average adult. Exposure to high levels of lead can cause damage to the brain, red blood cells, and kidneys. Exposure to even low levels of lead can cause low IQ, hearing impairment, reduced attention span, and poor classroom performance. Exposure to high levels of copper can cause stomach and intestinal distress, liver or kidney damage, and complication of Wilson's disease in genetically predisposed people. Facilities with intermittent water use patterns, such as schools and child care centers, may have elevated lead concentrations because the potential for lead to leach into water increases the longer the water remains in contact with lead plumbing. Testing water from drinking water outlets for lead is therefore extremely important. Drinking water outlets are locations where water may be accessed for consumption such as a drinking fountain, a water faucet, or a tap. 							

Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
 Does the community or school district provide water to the school? 			 If the system is operated by the community or school district, then additional inquiry is needed to the water providers to ensure that safe drinking water is being provided. Ask the provider about what tests are/have been taken and the results. Ensure that appropriate steps are taken to address unsafe drinking water quality.

The following questions will help you to identify and address possible drinking water concerns.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
2.	If the school operates its own water system: A) Where does the drinking water come from?	•		 Ask the operator of the water system to provide answers to these questions.
	B) Does the school have an on-site surface water treatment plant, an on- site well, or is water hauled to the school by large or small vehicle?			
3.	Have there been complaints about the quality or availability of water?			• Complaints about water quality can be addressed by reviewing the latest lab report results of samples analyzed and/or collecting new water samples and sending them to a lab for a water quality analysis.
4.	Are there unresolved regulatory violations?			• In the case of serious regulatory violations, the water system owner would have received a letter of notification from the Alaska Department of Environmental Conservation.
5.	Are staff properly handling hazardous materials and chemicals to prevent them from contaminating drinking water?			 Check sinks and floor drains in: facility maintenance areas, cleaning supply areas, science laboratories, vocational shops, and art classrooms. Post signs over sinks indicating chemicals cannot be disposed of down the drain. See Hazardous Materials Checklist for more information.
6.	Has lead and copper testing been performed within the school?			 The community water system does not typically perform lead and copper testing inside schools, so additional testing may be needed. Conduct a plumbing survey to locate areas of high risk for lead sources. Check drinking fountains against EPA's list of known lead-containing models. If listed fountains are found, take them out of service or remove. Initiate a school policy of flushing out all drinking and cooking water outlets with high lead levels at the start of each school day when other remediation actions (i.e. replacing or disconnecting outlet) have not been taken.

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
7.	Has the school ever exceeded the lead or copper action level? If so, has corrosion control treatment been installed?		Date: Action taken:	 Check with the Alaska Department of Environmental Conservation Division of Water for tips to lower lead levels at the school.
8.	Are there cross connections between the drinking water system and another liquid or substance that could result in cross contamination?			 Potential sources of cross connection include heating system boilers, water coolers, lawn sprinklers, fire sprinkler systems, and soft drink machines. If the community or school district supplies water, contact them to learn if they have a cross connection program. Eliminate any direct cross connections or install appropriate backflow preventative device(s).
			Items Requiring Follow-up Investiga	tion or Action:

FURTHER STEPS

- Contact your state drinking water program to receive an assessment of threats to your school's drinking water supply.
- State drinking water programs are required to complete a drinking water source assessment for all public drinking water systems. Each assessment includes information about the location of each drinking water system's protection area, and about activities that could potentially contaminate the drinking water source. Many assessments also include recommendations for preventing drinking water contamination.

- <u>http://water.epa.gov/drink/</u>
- www.water.epa.gov/infrastructure/drinkingwater/schools/index.cfm
- <u>http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic/Basic-Information.cfm</u>

- Mark an X in the second column if the answer to the question posed is 'Yes' and/or if follow-up is required.
- **For open-ended questions (marked with +), write notes and observations** in the "Notes, Expanded Answer" column.
- Write down the items requiring follow-up in the box at the end of this section. For any problems identified, seek additional information from experts at the school, the school district, the public or environmental health department, or EPA. Consult online resources listed below checklist.

FOOD SAFETY					
Quick Overview					
 School food safety is important because children are at a higher risk for foodborne illness. Children are also more vulnerable to the effects of chemical and environmental contaminants in food. A comprehensive food safety and sanitation survey would address sanitation, preparation, service and storage of food, employee training requirements, and other policies and procedures intended to protect children from foodborne illness. 			shou proce foods The c invol illnes	operator of the food service should establish and follow procedures that lye ensuring that donated food will not cause health hazards or human ss.	
Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answe	er	Possible Action(s)	
 A) Is the food service permitted by the appropriate state agency? B) If required, do employees have a Food Worker Card (FWC)? 				 If a permit has not been issued, obtain a copy of the state's food code and permitting requirements to determine what action is necessary. If the FWC has not been obtained, work with staff or management to take the online training through ADEC's Food Safety & Sanitation program. 	
 2. A) Are food safety and sanitation policies and procedures available? B) If donated foods are accepted, what is the procedure to ensure the safety of the food? C) Are prohibited foods present? 				 Determine who is responsible for policy development and implementation (Principal, the Borough, the Kitchen Manager) and work with them to develop appropriate policies. Work with management to develop a policy outlining the requirements for donated foods and the handling and processing of these foods after receipt, to include labeling and storage. Find out the type of prohibited foods that are present and provide education to staff and management about why these foods are prohibited and what type of threat these foods present. 	

	Assessment Question	Mark X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
3.	Are waste containers available?			 Place containers in easily accessible locations and empty them regularly to ensure that they are not overflowing with waste. Educate staff about the potential for overflowing waste to attract or harbor pests and create nuisance odors.
4.	Is food stored in accordance with the State's guidelines to minimize cross- contamination from other foods or chemicals?			 Work with staff to examine all food storage areas. Refer to Alaska Administrative Code, Chapter 31 for all guidelines.
5.	A) Are handwashing sinks located close by?B) Are soap and hand towels adequately stocked?			 Assess locations of current handwashing sinks. If needed, work with administrators to move or add handwashing stations in appropriate areas (e.g. so they are easily accessible before, during, and after food preparation, etc.). Work with staff to stock soap and hand towels at or near handwashing sinks for quick access when supplies get low.
6.	 A) Are there signs of pests? B) Are windows provided with screens to keep insects out? C) Are doors left open to allow insects and other pests in? D) Are cardboard boxes or other wastes stacked in any area to allow for a part. 			 Conduct pest inspections, covering food shipments, supply shipments, all storage areas, and waste storage areas. If pests are discovered, work with school administrators to choose a means of pest control that is appropriate and allowed under 18 AAC 90 and the 18 AAC 31.
	stacked in any area to allow for a pest harborage?		Items Requiring Follow-up Investigation	or Action:

- EPA Food service checklist: <u>http://www.epa.gov/iaq/schools/pdfs/kit/checklists/foodsvcchklst.pdf</u>
- Creating Food-Safe Schools guide: <u>http://www.foodsafeschools.org/PDFsPPT/Summary%20Book%20final%205-5-05.pdf</u>

- Mark an X in the second column if the answer to the question posed is 'Yes' and/or if follow-up is required.
- **For open-ended questions (marked with +), write notes and observations** in the "Notes, Expanded Answer" column.
- Write down the items requiring follow-up in the box at the end of this section. For any problems identified, seek additional information from experts at the school, the school district, the public or environmental health department, or EPA.

OUTDOOR ENVIRONMENT				
 The outdoor environment is not often thought of as a source of health concerns; however, it can be one area subject to the most frequent change in conditions. For this reason, it is prudent to establish a safe environment and monitor the conditions regularly. Common areas of concern include adequate lighting, presence of contaminants in soil and dust, accessibility of the school by emergency vehicles, and safety of playground equipment and walkways. Adequate snow and ice removal are particularly important for safety in cold climates. The following questions will help you to identify and address possible outdoor environment concerns. 				
Assessment Question X if Follow-Up Needed Notes, Expanded Answer		Possible Action(s)		
 A) Are there areas that need to be addressed to reduce/limit the risk of injury to children? B) Where are they located? C) What are the potential risks? 	+		 Outdoor areas of the school should be well maintained and contain minimal sources of potential injury to children. These sources include: abandoned vehicles, containers, construction materials, tripping hazards, miscellaneous debris, etc. Conduct routine grounds inspections to determine where potential risks are. Work with administrators to address identification and removal of potential risks. 	
2. Does there appear to be reasonable access to the school in the event of an emergency requiring multiple vehicles and personnel?			 Keep roadways and pathways clear for access by emergency vehicles and personnel. Work with administrators to develop policies to keep paths for emergency access open and easily identifiable. 	
 3. A) Does outdoor lighting exist and does it appear capable of illuminating the school property? B) Are there any outdoor lights that need repair, relocation, or realignment? C) Where are they located? 	•		 If lighting is not adequately illuminating the area surrounding the school building and its walkways, install lighting at appropriate locations (all entrances, all walkways) and repair any damaged lights. Work with school administrators to obtain funding for new lighting, if needed. 	

	Assessment Question	X if Follow-Up Needed	Notes, Expanded Answer	Possible Action(s)
4.	 A) Is the playground equipment manufactured for public use? B) Who is the manufacturer of the equipment? C) Is shade provided in the play area to protect children from sun exposure? D) Do teachers/staff/tribal providers conduct regular play area inspections? 			 Public school playground equipment must be manufactured to meet ASTM F1487 (Standard Consumer Safety Performance Specification for Playground Equipment for Public Use). Consider having teachers or school staff complete a daily play area checklist (Sample available at: http://www.cpsc.gov/cpscpub/pubs/327.html) Invite a safety professional or Environmental Health Officer (EHO) conduct a comprehensive survey.
5.	 A) If exterior play areas are bare soil, has the soil ever been tested to determine if lead or other contaminants are present? B) Have steps been taken to minimize dust generation during play time such as covering with wood chips, crushed rock, or wetting down the soil? 			 Work with public health staff, environmental health staff, state agencies, or the EPA to test soil at the school. Minimize dust by covering the soil with non-toxic materials or spraying the surface lightly with water.
6.	Are walkways regularly de-iced, shoveled and plowed? Is snow removed regularly from roofs and above doorways?			 Develop a schedule to regularly assess snow and ice accumulation and identify the responsible person for snow removal to ensure prompt removal and safe conditions. Maintain snow removal equipment, such as snow blowers and plows. Apply de-icers to walkways as needed. To prevent snow from overly accumulating dangerously on roofs and over doorways and exterior walls, include regular checks of these locations in the snow removal schedule.
		lte	ems Requiring Follow-up Invest	igation or Action: