





#### 9. Frequent Questions

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#### 9.1. How do the guidelines address community involvement in the school siting process?

The guidelines emphasize the importance of meaningful public involvement (see Section 3) throughout the school siting process. The guidelines recommend that at the beginning of the school siting process, the local education agency (LEA) (see Section 10) should create a public involvement plan and formalize the role of the public, including reviewing potential locations, environmental reports, cleanup plans and long-term stewardship plans. EPA recommends forming a school siting committee (SSC) (see Section 3.3) that includes representatives from the community to make recommendations to the LEA throughout the siting process.

### 9.2. Do the guidelines apply retroactively to previous siting decisions?

No. The School Siting Guidelines are not designed for retroactive application to existing school locations or previous school siting decisions, but rather to inform and improve future school siting decision-making processes. However, irrespective of these guidelines, EPA recommends that districts periodically inspect existing schools for potential environmental health and safety risks. These inspections should use tools designed for that purpose, such as EPA's Healthy School Environments Assessment Tool (HealthySEAT; www.epa.gov/schools/healthyseat/) or the NIOSH Safety Checklist Program for Schools. (www.cdc.gov/niosh/docs/2004-101/) Where deficiencies are found, EPA recommends steps to reduce student and staff exposure to potential hazards be identified and implemented, to the maximum extent practical (see Section 9.5).

## 9.3. Do the guidelines address the retention and renovation of existing schools?

Yes. The siting decision often starts with evaluating existing schools and their suitability to be updated to meet the future needs of the LEA. The guidelines recommend that communities consider renovation, repair and/or expansion options (see Section 4.2.2) before deciding to build a new school. Many existing schools can be

retrofitted with new technologies to expand their useful life, possibly at a lower cost and with fewer environmental impacts (e.g., energy savings, less impact on open space) than new construction. Renovating existing neighborhood school facilities can provide an impetus for community revitalization, have an impact on neighboring property values, encourage investment in schools by community members and preserve irreplaceable community assets.

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## 9.4. Will EPA's School Siting Guidelines prevent pollution generating facilities from being built near existing schools?

Land use decisions are generally made at the local level, subject to the local jurisdiction's zoning and other land use policies. While many types of industries, commercial operations and transportation infrastructure projects are subject to state, tribal and/or federal environmental or other regulations, the requirements vary. However, the recommendations in these guidelines can be used by planning and environmental agencies in land use and permitting issues to the extent applicable.

EPA recommends that states, tribes and communities evaluate siting and permitting processes that influence where potential sources of environmental pollution (see source categories identified in Exhibit 6) may be allowed to locate

with respect to schools. While these land use decisions are highly complex and beyond the scope of these guidelines, states, tribes and communities should seek to avoid situations in which new nearby sources of potentially harmful pollutants are sited in such close proximity to schools that they may pose a potential hazard to the school occupants.

#### 9.5. What can I do to protect my child right now from environmental hazards at their current school?

There are many steps that parents can take to help promote healthy school environments. EPA has resources (see below) for parents in a number of programs that are designed to help schools and communities take action to protect children's health in one of the most important places where children learn. EPA also encourages parents to partner with schools and local community planners to make school walking and biking routes safer for children. This encourages more active transportation choices which results in fewer vehicles on the road.

EPA Schools Web Portal—The Web portal provides links to EPA and other programs addressing environmental health issues in schools, from air pollution and asbestos to chemical management, pesticides, water conservation and more. Visit: www.epa.gov/schools.

Healthy School Environments Assessment Tool (HealthvSEAT)—HealthvSEAT is a free software tool to help school districts assess and manage all of their environmental health and safety risks. Visit: www.epa.gov/schools/healthyseat.

Reduce engine idling around schools, clean up old school buses and reduce other diesel *emission sources in the community*—School buses are a safe way for children to get to school. However, pollution from older diesel vehicles has health implications for everyone, especially children. The goals of the Clean School Bus USA

Campaign are to reduce children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses. Schools can also encourage the reduction of personal vehicle idling and overall use on campus.

For tips on how to reduce engine idling and diesel emissions around schools and in the community, visit: www.epa.gov/cleanschoolbus/ whatyoucando.

**Protect indoor air quality at schools**—Improving and protecting indoor air quality at schools is important to children's health. Indoor levels of air pollutants can be two to five times higher than outdoor levels. Sources of poor indoor air quality in schools range from inadequate ventilation systems to fumes from pesticides and cleaning agents. Many of the nation's schools are implementing indoor air quality management programs, most of which are based on EPA's voluntary Indoor Air Quality Tools for Schools Program, which helps schools identify, resolve and prevent indoor air quality problems using mostly low- and no-cost measures.

For EPA's guidance on preventing and resolving indoor air quality problems in schools, visit www.epa.gov/iaq/schools.

Use integrated pest management (IPM)—IPM provides safe and usually less costly options for effective pest management. Visit: www.epa.gov/ pesticides/ipm/.

**Ensure drinking water quality**—Consuming enough fluids on a daily basis is important for children's health and water is a healthy choice. Ensuring that children receive safe drinking water at their schools and child care centers is important because that's where children spend part of their day, and they are likely to drink water while they are there. Schools and child care centers can find on EPA's website information about lead in drinking water, source water protection, water conservation, cross-contamination, and other best management practices to assist schools and child care centers in providing safe drinking water to

students and staff. Visit: www.epa.gov/safewater/schools/.

Manage chemicals safely—From elementary school maintenance closets to high school chemistry labs, schools use a variety of chemicals. When they are mismanaged, these chemicals can put students and school personnel at risk from spills, fires and other accidental exposures. EPA's school chemical cleanout campaign website gives K-12 schools information and tools to responsibly manage chemicals. Visit www.epa.gov/schools/programs (click on Schools Chemical Cleanout Campaign).

Protect students and staff from the sun—Too much sun can lead to heat stress and unhealthy exposure to UV radiation. EPA's SunWise program provides information and materials to schools, educators and parents to help them prevent cancer and blindness caused by UV exposure. Visit: www.epa.gov/sunwise/.

Check the Air Quality Index—Children are one of the sensitive groups at risk for health effects from air pollution, in part because their lungs are still developing. The Air Quality Index (AQI) (www.airnow.gov) lets you know when air quality in your area is unhealthy and how you, your family and your community can protect your health. The AQI uses a color-coded scale and maps to provide daily air quality information. The AQI is available at www.airnow.gov and it is reported in many local newspapers and on television and radio stations.

For tips on how you can reduce air pollution in and around your community, visit: www.airnow.gov/index.cfm?action=jump.jump\_youcando.

To teach students about air quality, use EPA's toolkit: www.airnow.gov/index.cfm? action=learning.workshop\_for\_teachers.

Create Safe Routes to Schools—The U.S.

Department of Transportation's Safe Routes to School program encourages schools and communities to improve infrastructures and

educational programs to encourage more children to safely bike or walk to and from school. Visit: http://safety.fhwa.dot.gov/saferoutes/.

#### Examples of EPA-funded projects in communities:

Community Action for a Renewed Environment (CARE) grant program—EPA's CARE is a competitive grant program that offers an innovative way for a community to organize and take action to reduce toxic pollution in its local environment. Through CARE, a community creates a partnership that implements solutions to reduce releases of toxic pollutants and minimize people's exposure to them. To learn more about community efforts that are being supported by EPA's CARE program, visit: www.epa.gov/care/communitybyregion.

Community-Based Air Toxics Projects—EPA supports air toxics projects in about 30 communities across the nation to help inform and empower citizens to make local decisions concerning the health of their communities. (http://yosemite.epa.gov/oar/CommunityAssess ment.nsf/Welcome?OpenForm)

Make simple choices on the road—Doing your part to improve air quality and reduce traffic congestion around schools and in your community is easy. Incorporating even a few of the simple steps offered here can help clean the air and reduce traffic congestion. For easy tips, visit: www.italladdsup.gov/resources/what\_can\_i\_do.asp.

## 9.6. Shouldn't schools be built as far away from major pollution generating sources as possible?

When acceptable alternative sites exist within the neighborhood(s) being served by the new school, the guidelines recommend that the LEA and SSC seek to avoid sites that are either on or in close proximity to land uses that may not be compatible with schools during the initial screen of candidate sites. These include locations that have onsite contamination that has not been addressed, major

pollution sources, clusters of industrial facilities or other potential hazards (see Siting Criteria, Exhibit 6: Screening Potential Environmental, Public Health and Safety Hazards). If no acceptable alternative sites exist, it is critically important for the LEA and SSC to fully explain the absence of alternatives in a transparent manner and fully engage the public in identifying and implementing both site-specific and communitywide exposure and risk reduction strategies.

High traffic roads can be a major pollution source that require careful consideration and evaluation by the LEA and SSC because these sources are common and there is typically a direct relationship between the transportation system and the accessibility of the school for staff and students. The guidelines recommend that when practicable, a chosen school site should be as far from high traffic roads as feasible. High traffic roads may include highways, local roads experiencing heavy congestion, local roads with significant stop and go activities, and roads with large numbers of trucks. Since high traffic roads are very common, especially in urban areas, it may be difficult to find locations away from these roads yet still be located within the community being served by the new school. Under these circumstances, the LEA and the SSC should consider a number of factors in making the best choice for student health, safety and accessibility. These factors can include: 1) if the school site and design provide an opportunity to place classrooms, playgrounds, athletic fields and air intakes as far from the road as possible; 2) whether barriers (e.g., noise barriers, nonsensitive buildings) or natural features (e.g., vegetation, berms) are or can be located between the school and road to reduce air quality impacts; and 3) whether certain sites allow students to walk/bike to school compared with alternatives that require bus and personal vehicle travel. Because of all of these factors and the difficulty in comprehensively assessing the advantages and disadvantages of particular sites under these conditions, an environmental professional should be consulted to provide assistance. More information is

provided in the Quick Guide for Environmental Issues (see Section 8).

#### 9.7. Isn't an uncontaminated site always the best location for a new school?

The best school location will be one that provides a healthy and safe learning environment for children, while also meeting a diverse array of other community goals. For example, integrating community centered schools into existing residential neighborhoods often allows for better environmental, community, economic, educational and public health outcomes. The voluntary School Siting Guidelines are intended to help communities appropriately consider environmental health and safety in the context of this complex decision-making process.

Of course, if uncontaminated structures or sites are readily available in the community the school is intended to serve, and meet the community's other important educational, economic and community criteria, selecting an uncontaminated location would be the ideal choice. However, such locations are rare in many urban communities. and often the LEA is faced with choosing among locations that have some level of contamination from prior uses or are close to potential sources of contamination. Building schools on the undeveloped outer edges of communities—often called greenfields—creates other problems such as increased transportation risks, longer transportation times and increased traffic-related air pollution, while reducing opportunities for students, parents and staff to walk or bike to school in their community.

## 9.8. Can schools be safely built on sites with residual soil or ground water contamination?

Schools can be safely located on sites where all waste and contaminated media have been removed, as well as those with residual contamination, provided that the location is carefully managed over time to ensure that no exposure to the contamination can occur. In cases where complete removal of contamination is not feasible, exposures can be prevented through the use of engineering controls and/or institutional controls (see Section 8.15). For example, vapor intrusion from soil or ground water contaminated with certain chemicals can pose a risk to the people who use buildings that are located above the contamination. Engineering controls can be used to alter the flow of contaminated air or restrict land use in a specific area so that contaminated air does not enter the building's indoor air. The use of engineering and institutional controls can prevent exposures, but only if effective systems are in place to maintain and enforce them, such as periodic monitoring to ensure their continued protectiveness and safe operation. Nationwide, brownfields and other formerly contaminated lands, including those with residual contamination, now safely support housing, schools, clinics, hospitals and other reuses that meet community needs.

Criteria for establishing the degree of cleanup needed should be based on state or tribal cleanup rules or guidance, where they exist. The environmental standards used for determining the appropriate level of cleanup should be based on either 1) standards developed for schools or residential use, or 2) risk-based levels set for residential use. If the site will have residual contamination at concentrations above these levels after the cleanup has been completed, engineering and/or institutional controls will be needed to ensure no exposure occurs (see Section 8.15). As part of their review of the cleanup plan, state, tribal and local regulatory agencies should consider the ability of the LEA and other

governmental bodies to effectively maintain those controls. In the event that there is concern that these controls cannot be effectively and reliably managed, then the LEA may need to clean the site to residential levels, or select another location.

# 9.9. In cases where the best available location for a school relies on engineering and/or institutional controls to prevent potential exposures, how can the community work with the LEA and other responsible entities to ensure that those controls are effective for the life of the school?

Communities have an important role to play in ensuring that engineering and institutional controls remain in place and are effective in preventing potential exposures (see Section 8.15). Through the community involvement and planning process, the community can become familiar with the nature of residual contamination, engineering and institutional controls and any restrictions on how the land can be used. They can assist LEAs and help them meet their obligations by reporting actions in conflict with those land use restrictions to LEA management and state environmental regulatory authorities. The LEA and the SSC can also continue to play a role in updating the community about inspection, monitoring and maintenance over time, with the assistance of state technical oversight, as appropriate.

# 9.10. What cleanup or remediation of contamination at a school site should be completed before the school is occupied?

Before a school or portion of a school is occupied, all contamination that could pose a risk of harmful exposure to students and staff should be removed or controlled. In cases where there is residual contamination, any necessary engineering and institutional controls should be in place and the site certified by the state or tribal regulatory agency as suitable for occupancy (see Section 8.15). For example, occupation of a school above a ground water plume that is undergoing remediation to clean the ground water should not pose a threat to students, faculty, staff or others unless there is a threat of vapor intrusion from the ground water. If the contaminated ground water poses a threat of vapor intrusion, any institutional or engineering controls should be in place at least for any portion of the school where there is a potential for exposure.

#### 9.11. To what cleanup standard should school sites be remediated?

Criteria for establishing the degree of cleanup needed should be based on state or tribal cleanup rules or guidance, where they exist. The environmental standards used for determining the appropriate level of cleanup should be based on either 1) standards developed for schools or residential use, or 2) risk-based levels set for residential use. If the site will have residual contamination at concentrations above these levels after the cleanup has been completed, engineering and/or institutional controls will be needed to ensure no exposure occurs (see Section 8.15). As part of their review of the cleanup plan, state, tribal and local regulatory agencies should consider the ability of the LEA and other governmental bodies to effectively maintain those controls. In the event that there is concern that these controls cannot be effectively and reliably managed, then the LEA may need to clean the site to residential levels, or select another location.

#### 9.12. Does EPA recommend buffer or exclusion zones (also sometimes called distance criteria or separation distances) to make sure schools aren't built close to major sources of pollution?

No, the guidelines do not include distance-based buffer or exclusion zones for potential school locations. EPA's approach to the School Siting Guidelines is to encourage and promote an integrated and holistic evaluation of a wide range of community and location-specific criteria in selecting the best location for a new school. The distance between a school location and a major source of pollution is only one of many complex factors that influence whether that source poses risks of concern to students and staff (see Exhibit 5). These factors can only be effectively evaluated on a case- and location-specific basis and require consideration of the extent to which a specific source raises a concern for a potential school location, as well as the degree to which any risk can be reduced or eliminated. Some states and local governments have developed distance-based requirements or guidance for schools and other locations that may have sensitive receptors, and while EPA does not believe that establishment of buffer or exclusion zones at a national level is appropriate, this should not be construed as a criticism of those jurisdictions that have adopted or are applying buffer or exclusion zones as a useful tool. 70

<sup>&</sup>lt;sup>70</sup> Examples include:

<sup>&</sup>quot;Air Quality and Land Use Handbook: A Community Health Perspective," California Environmental Protection Agency, California Air Resources Board (April 2005). Available at:

http://www.arb.ca.gov/ch/handbook.pdf; Rhode Island Department of Elementary and Secondary Education School Construction Regulations. (May 24, 2007). Available at:

www.ride.ri.gov/regents/Docs/RegentsRegulations/Regents%20Schoo l%20Constructions%20Regulations.pdf.

California Department of Education, "School Site Selection and Approval Guide," Prepared by School Facilities Planning Division. Last modified March 10, 2011. Available at:

www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp;

Links to additional state and local regulations and guidance are available in the Resource section of the guidelines website. (www.epa.gov/schools/siting/resources)

EPA believes that establishing national distance criteria is likely to result in a variety of negative unintended consequences. For example, use of national distance criteria as the basis for selecting locations that are farther away from the children they serve, without careful consideration of location-specific factors, could create less healthy environments for students and staff through increased transportation risks, reduced opportunities for walking and biking and increased traffic-related air pollution.

EPA recommends that sound technical assessments of both onsite and nearby potential hazards be undertaken to determine whether such potential hazards might pose a threat to students or school staff (see Exhibit 6). Locations should be excluded from further consideration if nearby or onsite hazards pose unacceptable risks that cannot be eliminated or reduced to an acceptable level.

# 9.13. What is the difference between "screening perimeters," which are included in the guidelines, and "buffer" or "exclusion" zones?

EPA has included some distance-based screening recommendations in the Environmental Siting Criteria Considerations section of these guidelines under Exhibit 6: Screening Potential **Environmental and Safety Hazards (see Section** 4). The screening perimeter distances are approximate distances for use in the initial screening process. During this initial screening process, an environmental professional (see Section 10), the LEA (see Section 10) and the SSC should identify all potential hazards that are within this distance of a prospective school location and determine those that need further evaluation. The screening distances included in the guidelines are based primarily on existing state or local rules, laws, ordinances, policies or guidance and are intended as general rules of thumb. Potentially important sources that may be outside the recommended screening

perimeters may also be appropriate for further evaluation.

Screening distances, alone, may not be predictive of the actual potential for elevated exposures and risks from that source. Exposure to contaminants from a source could be nonexistent, or could be significant. To determine the potential for exposure, an assessment should be performed as part of the school siting screening and evaluation process. In contrast, buffer or exclusion zones are based on a presumption that there is a high potential for significant exposures from a source located within that zone. LEAs should work with the appropriate state response or tribal regulatory program in assessing school locations within the screening perimeter to determine if facilities pose a risk sufficient to influence siting location decisions or require alternative site selection. In the event that a facility poses a potential risk to students, staff, parents or others, the resolution of any unacceptable risk associated with that facility should be addressed before the decision to site a school.

9.14. The School Siting Guidelines place a lot of emphasis on state and tribal involvement in evaluating and approving siting decisions where environmental contamination is present. At a time of shrinking state and tribal budgets, how are states and tribes to meet the anticipated demand for more involvement?

EPA recognizes that elements of the recommended environmental review process may be beyond the current capacity of some LEAs and other participants in the process to fully implement with existing authorities, expertise and resources (see Section 5). All state and most tribal environmental regulatory agencies have programs

in place to evaluate and approve cleanup plans for specific types of sites or projects (see Section 7). EPA encourages LEAs, states, tribes, communities and other interested organizations to work collaboratively and with EPA to identify opportunities to leverage these and other existing resources as well as to identify and work toward fulfilling needs for improving local and state capacity to conduct as rigorous a process of site evaluation as possible. EPA recommends that LEAs work directly with the state and tribal environmental response program regarding the needed evaluation and approval of cleanup plans. EPA also recommends that LEAs seek advice from state and tribal environmental response programs to ensure that long-term stewardship responsibilities are effectively met. The Resources page of the guidelines website contains potentially helpful funding and capacity building resources. (www.epa.gov/schools/siting/resources.html#LI NKS\_Technical\_Assistance)

#### 9.15. Do the guidelines apply to child care centers or other facilities where children spend time?

While the guidelines are primarily intended to be used by LEAs in evaluating and selecting locations for K-12 schools, EPA believes that the recommendations in the guidelines represent a set of best practices that may inform and improve the evaluation and selection of locations for a wide range of settings where children spend time. However, EPA recognizes that there are many differences across the types of child-occupied facilities. For example most K-12 schools generally have a clearly identifiable central authority and significant (though not necessarily plentiful) resources, while many child care centers are small businesses with extremely limited resources and subject primarily to state licensing authorities. Nevertheless, the siting criteria considerations (see Section 4), environmental review process (see Section 5) and public involvement (see Section 3) practices recommended within the School Siting Guidelines may be applied, with appropriate adaptation, to a wide range of schoolrelated institutions.

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