

# School Siting: Voluntary Guidelines



**MaryBeth Smuts, Ph.D.**  
**US EPA: New England**  
[Smuts.marybeth@epa.gov](mailto:Smuts.marybeth@epa.gov)  
**617/918-1512**



# Status of American Schools

- 1 in 5 work in a School; over 135,000 schools in Nation
- National EPA's Tools for Schools Indoor Air Quality Action Kit for operation and maintenance in as-built schools-over 20yrs
- Individual state regulations and guidelines on school siting
- Congressional mandate to combine school siting, energy and walkability



# Energy Independence and Security Act of 2007

## Sec. 502. Model Guidelines for Siting of School Facilities.

Not later than 18 months after the date of enactment of this section, the Administrator, in consultation with the Secretary of Education and the Secretary of Health and Human Services, shall issue voluntary school site selection guidelines that account for—

- (1) the special vulnerability of children to hazardous substances or pollution exposures in any case in which the potential for contamination at a potential school site exists;
- (2) modes of transportation available to students and staff;
- (3) the efficient use of energy; and
- (4) the potential use of a school at the site as an emergency shelter.



# EPA School Siting Workgroup

- EPA Offices and Regions
- Department of Education
- CDC

Division of Adolescent and School Health  
National Center for Environmental Health  
Agency for Toxic Substances and Disease  
Registry



# Stakeholder Process & Timeline

- December 2008 thru June 2009, EPA developed draft guidelines
- July 2009 -- Outside stakeholder group convened under Children's Health Protection Advisory Committee (CHPAC)
- April 7, 2010 – CHPAC letter to the Administrator transmitting SSTG report
- November 17, 2010 – Revised Draft Guidelines-90 day public comment period
- Final Guidelines by end of 2011



# Goal of Guidelines: Assist Local School Decision Makers

- Increase community understanding and considering environmental health and EJ factors in school site selection
- Encourage broad community involvement
- Encourage comprehensive evaluation of sites
- Identify and serve multiple community purposes
- Encourage considering short and long term construction, transportation, operation and maintenance costs



# Principles Behind the Guidelines

1. Safe and healthy schools –integral to education process
2. School siting decisions –increase the livability and sustainability of communities
3. Siting process –consider environmental health and safety of all
4. Environmental review process-rigorous, thorough and well-documented with substantive public involvement



# Limitations of Guidelines

- No federal control of school siting-up to state and local authorities
- Some federal environmental laws in site evaluation , such as site assessment and cleanup
- Not designed to retroactively apply to existing schools
- No buffer or exclusion zones are listed since source risk is one of many decisions



# What's in the Guidelines

1. Tips for Public Involvement
2. Siting Criteria and Considerations
3. Environmental Review Process
4. Recommendations for States and Tribes
5. Quick Guide to Environmental Issues
6. Quick Guide to Remediation Response



# Tips on Public Engagement and Strategies

- Develop a Long-range Facilities Plan
- Recommends establishing a School Siting Committee to: select sites for building/leasing, renovation and expanding and hiring environmental site professionals
- Opportunities for Public Input; such as: during project scoping, initial environmental review including ongoing maintenance



# Siting Criteria Considerations

- Is new school needed
- Will new school be Green/High Performance
- Smart Growth Principles
  - near population and infrastructure
  - transportation implications
  - safe routes to schools
  - uses of schools
- Potential hazards on/near site
- Screening perimeters



# Environmental Review Process

1. Project Scoping
2. Preliminary Environmental Assessment
3. Comprehensive Environmental Review
4. Development of Site specific Remediation
5. Implementation of Remediation/Mitigation
6. Longterm Stewardship Plan



# Stage 1-Project Scoping/Initial Screen of Site

- SSC identifies candidate sites using siting criteria
- SSC screens out sites with significant environmental challenges or based upon other LEA criteria
- Go To Table 3: Screening Potential Environmental and Safety Hazards
- SSC recommends preferred site to LEA for further environmental review
- LEA designates preferred site.
- LEA defines scope of project
- Environmental due diligence begins.
- (Go to Stage 2: *Preliminary Environmental*



*Review)*

## Table 3

### *Gas stations and other fuel dispensing facilities*

*Large gas station dispense > 3.6 million gallons per year*

- Air pollution*
- Soil contamination*
- Ground water contamination*
- Vapor intrusion into structures*

### **Screening**

*Identify and evaluate gas stations and other fuel dispensing facilities within ~1,000 feet of prospective school sites.*

*Applies to both on-site as well as adjacent or nearby sites.*

*Evaluate on a case- and site-specific basis. See Table 2 for potential Variables and Mitigation Options.*

*Consult with state, tribal and local authorities for applicable requirements.*

*Evaluate for spills, leaking underground storage tanks, potential air emissions.*

### *Air Pollution*

### *Risk Assessment*

### *Maps and Mapping*

### *Underground Storage Tanks*

### *Vapor intrusion (VOCs)*



## Table 2 Example

Type of hazard

### Potential Variables

### Potential Mitigation Options

N=New schools

E= Existing schools

Air Pollution

- Type of contaminant
- Distance from the source
- Nearby traffic type, fuel, volume and speed (mobile sources)
- Stack height, facility practices, and type of pollution control employed (stationary/point sources)
- Timing of operations (stationary/point sources)
- Meteorological conditions (e.g., prevailing wind direction and wind speed)
- Atmospheric stability and mixing
- Regulatory compliance
- Intensity of use
- Types and volumes of chemicals present
- Presence of natural or man-made buffers (e.g., trees, hills, buildings)
- Planning and zoning

- Maximize distance from transportation or other pollution sources (**N**)
- Vegetation buffers (**N/E**)
- Anti-idling policies (**N/E**)
- Limiting bus or personal car use on and near campus (**N/E**)
- Enhanced indoor filtration/air cleaning (**N/E**)
- Locating sensitive activities and outside air intakes away from sources (e.g., locate playgrounds and classrooms away from source; place parking lots, utilities closer) (**N/E**)
- Timing of HVAC system operations (**N/E**) or industry operating periods (**N/E**)
- Limiting outdoor activities during high exposure periods (**N/E**)



# Recommendations to States and Tribes

- Establish institutional coordination
- Provide access to state information
- Determine policy review and/or development



# Quick Guide to Environmental Issues and Engineering Controls

- Websites links for environmental topics, such as: Air Pollution, near highways, VOC from soil gas, PCBs in caulk, lead, radon, asbestos
- EPA links and others, such as LA's setbacks from agricultural spraying or Calif. South Coast Air Quality Issues in School Site Selection from near ports and highway exposures...



# Draft School Siting Guidelines

[www.epa.gov/schools/siting](http://www.epa.gov/schools/siting)

Responding to 300+ comments

Final Guidelines-Expected 2011

