

**Draft**

**Supplemental Environmental Assessment**

# **Monroe County School District Smithville Temporary School Facilities**

**Smithville, Monroe County, Mississippi**

**FEMA-1972-DR-MS**



**FEMA**

**FEMA Region IV**

**3003 Chamblee Tucker Road**

**Atlanta, GA 30341-4112**

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## List of Acronyms

CEQ	President’s Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
MEMA	Mississippi Emergency Management Agency
MCSD	Monroe County School District
MDEQ	Mississippi Department of Environmental Quality
NEPA	National Environmental Policy Act
OSHA	Occupational Safety and Health Administration
PPM	Part Per Million
SEA	Draft Supplemental EA
TRG	Mississippi chemical specific target remediation goals for Tier 1 Evaluation
USGS	U.S Geological Survey

## 1. Introduction

As a result of severe storms, tornadoes, straight-line winds and associated flooding in Mississippi between April 15 and April 28, 2011, a major disaster was declared under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §5121-5206 (the Stafford Act). The disaster was designated as FEMA-1972-DR. On April 27, 2011, an EF5 tornado struck the town of Smithville in Monroe County, Mississippi (MS), damaging most buildings in Smithville, including the Smithville K-12 school facility located on a 47-acre complex.

Due to the damages incurred during FEMA-1972-DR, the Monroe County School District (MCSD) located in Amory, Mississippi, applied through the Mississippi Emergency Management Agency (MEMA) to the Federal Emergency Management Agency (FEMA) for funding assistance. FEMA approved funding is for the temporary relocation of the Smithville K-12 School facilities to a proposed 19.1-acre location in Smithville. In accordance with 44 Code of Federal Regulations (CFR) for FEMA, Subpart B, Agency Implementing Procedures, Part 10.9, a Final Environmental Assessment (EA) was prepared for the 19.1-acre location pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ); 40 CFR Parts 1500-1508.

The EA evaluated the expected environmental impacts related to the Proposed Action of temporary relocating the Smithville K-12 school facility to the 19.1-acre location and for a No Action Alternative. FEMA issued and posted a Draft EA on July 12, 2011 followed by a 72-hour expedited public notice and agency comment period ending on July 15, 2011. Following the public and agency comment period, FEMA issued the Final EA and Finding of No Significant Impact (FONSI) on July 16, 2011.

The EA resulted in a FONSI for the Proposed Action. Following the issuance of the FONSI and consequent project approval for funding by FEMA, it was determined that the Proposed Action would include construction and installation of forty-nine safe shelters throughout the temporary school facility central campus. FEMA has prepared this Supplemental EA to describe and evaluate the expected environmental impacts of construction and installation of the forty-nine safe shelters.

This document presents a re-evaluation as a supplement to the original EA prepared for Monroe County School District Smithville Temporary School Facilities. This supplemental EA describes the expected effects the construction and installation of safe shelters would have on the environment, that differ from those effects previously described in the Final EA and July 16, 2011 FONSI. Environmental factors for which the effects are considered to be the same as described in the Final EA include:

- **Geology and Soils**
- **Wetlands**
- **Fish**
- **Air Quality**
- **Floodplains**
- **Wildlife**
- **Water Resources**
- **Vegetation**
- **Threatened and Endangered Species**
- **Noise**
- **Historic Properties and Archaeological Resources**
- **Environmental Justice**
- **Hazardous Materials**
- **Transportation**
- **Public Service and Utilities**
- **Cumulative Impacts**

## 2. Purpose and Need

The objective of the FEMA Public Assistance grant program is to provide funding to state, tribal and local governments, and certain types of private non-profit organizations, in order for communities to quickly respond to and recover from major disasters or emergencies. The purpose of this proposed action is to provide funding to the MCSD for assistance with temporary school facilities for the Smithville K-12 school that was damaged by a catastrophic tornado and deemed unusable. A temporary school facility is needed to provide a short-term solution while the damaged school complex is repaired and ready to provide a permanent, safe and secure environment for its students and school staff. The tornado damaged the permanent Smithville K-12 facility with about two weeks left in the 2010-11 school year. With the 2011-12 school year rapidly approaching, temporary school facilities are needed to provide a safe and secure environment for about 600 students and 75 school staff members from Smithville and surrounding communities.

Temporary school facilities are modular units which may not provide sufficient safe space for students and staff members in the event of subsequent tornadoes. Tornadoes and severe storms typically occur with little to no warning, resulting in a limited response time to reach adequate safety protection. School officials estimated that response time to transport students and staff to safe areas in the existing portions of undamaged school is one to two hours. The tornado that struck Smithville on April 27, 2011 occurred at 3:44 pm, 43 minutes after the first tornado warning issued by the National Weather Service in Memphis, TN and 23 minutes after the second tornado warning. Safe shelters at the temporary school facilities will provide students and staff members protection against tornado and severe wind events in a timely manner.

## 3. Alternatives

### 3.1 No Action Alternative

Under the No Action Alternative, FEMA would not provide funding to assist the MCSD in establishing safe shelters for students and school staff. Neither students nor staff would have a safe and secure location nearby to shelter during a tornado or severe wind storm. Students, parents and staff would make arrangements to shelter or avoid the effects of a tornado or severe wind storm. Students and school staff members would still be required to attend some alternative MCSD facilities resulting in

critical issues related to safety, security, logistics of student drop-off and pick-up, bus transportation, food services, restroom capabilities, and space needs. These would most likely be in or near Smithville, by practical necessity. The aforementioned critical issues make this an unworkable situation for the school district.

### **3.2 Proposed Action**

#### **Construct portable safe shelters within developed boundaries of Monroe County Temporary School campus in Town of Smithville**

The temporary school facilities are located on approximately 19.1-acre site south of MS Highway 25 North and west of Industrial Street in Smithville. The site is currently leased and developed as temporary school facilities until the permanent school can be rebuilt in Smithville. The temporary school consists of modular classroom units, support facilities, parking lots and a school bus drop-off/pick-up, turnaround and parking locations. The modular units will consist of 42 classrooms and 12 support facilities that will house about 600 students and 75 staff. Seven school buses will provide transportation to 350 students, 100 students are expected to drive to school and the remaining 150 students will be driven to school by parents/guardians. MCSD expects to need the proposed site for temporary school facilities for 18 to 24 months.

MCSD plans to construct and install a pre-constructed stand along freestanding structure that is not connected to or attached to an existing modular unit. New safe shelters will be sited on developed land previously disturbed by construction activities and used for temporary school facilities. Sheltering usually occurs about five to ten times per school year. The at-risk population on school campus is estimated to be 680 K-12 grade students and staff members. Minimum period of tornado and severe wind storm protection is planned for two hours. Individual space requirement is 5sf per individual. Forty-nine shelters are planned and will be located strategically throughout the school campus. Each safe shelter is about 7ft wide by 13ft long by 7ft high on the outside, and has 72sf inside and will hold 14 people in a safe area for up to two hours. Each safe shelter will be secured to the ground with thirty inch helix augers which are attached to the concrete shelters with steel strapping and screws. This assemble is designed to withstand 250-mph force winds. See Appendix A-3 for drawing details. Forty-nine units will be located south of the large parking area and located in an area where it is easy to assemble and account for students and staff entering and leaving safety shelters. For shelter site location, see Appendix A-2.

### **3.3 Other Action Alternatives**

No other action alternatives were considered in detail.

### **3.4 Alternatives Considered and Dismissed**

MCSD considered sheltering students and staff in the intact interior hallways of brick buildings in the existing damaged school facilities. The existing school facilities use interior hallways as shelter areas during severe storm events. MCSD provides such sheltering for students and staff about five to ten times per school year. Temporary campus on industrial park loop road is about 1.5 miles away from

permanent school facilities. MCSD estimates that it would take about one to two hours to alert, activate, assemble, load and transport students and staff to buildings 2 and 11 on existing damaged school facility in Smithville. Tornadoes and severe wind storms typically occur with little to no warning, resulting in limited response time to reach adequate safety protection.

#### **4. Affected Environment and Potential Impacts**

##### ***4.5.5 Safety and Security***

To minimize public health and safety risks, all school staff members will be qualified personnel trained to perform their job functions. Additionally, all activities would be conducted in a safe manner in accordance with standards specified in Occupational Safety and Health Act (OSHA) regulations. EO 13045, Protection of Children, requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. Safety and security of all populations will meet all applicable local, State, and Federal regulations.

***No Action Alternative*** – Under the No Action Alternative, students and staff would be at increased risk without on-site sheltering. Transporting, loading and unloading of students and staff at an off-site location will increase their exposure risk during severe storms and tornadoes.

***Proposed Action Alternative*** – Under the Proposed Action, on-site sheltering will reduce the response time and decrease the exposure risk to students, staff members and visitors during severe storms and tornadoes. Appropriate signage will alert students, staff, and visitors to storm shelters and decrease the response time and thus exposure to severe storms and tornadoes. Following all safety precautions, activities would impose no disproportionate health and safety risks to children.

Long-term beneficial impact reduces risk from severe storms and tornadoes. Construction activities could present moderate safety risk to those performing the activities. In the site assessment soil analysis, all detected compounds were present in quantities less than Mississippi Department of Environmental Quality (MDEQ) Tier 1 TRGs for unrestricted land use except for arsenic. Arsenic quantities in all samples except for one exceeded either Unrestricted or Restrict Land Use TRGs for Mississippi. When samples were screened against U.S. Geological Survey (USGS) published background levels for Monroe county, all arsenic samples were less than the published background level of 8.1 ppm (part per million). Construction activities could present a low risk of exposure to arsenic to those performing the activities. Routine dust control and exposure measures, and personal hygiene measures will be implemented during construction, and during school operation, to reduce worker, student, staff, and other persons' inhalation or ingestion of soil particles.

#### **5. Agency Coordination and Public Involvement**

FEMA is the lead Federal agency for conducting the NEPA compliance process for the proposed MCSD Supplemental EA for the temporary school facilities' safe shelters in Smithville, Monroe County, Mississippi. It is the goal of the lead agency to expedite the preparation and review of NEPA documents, as well as be responsive to community needs and to the purpose and need of the proposed

action, while meeting the intent of NEPA and complying with all NEPA provisions. A copy of the Public Notice is included in Appendix A-1.

MCSD will notify the public of the availability of this Draft Supplemental EA through publication of a Public Notice at the following locations:

1. The MCSD office at 1619 Highway 25 North, Amory, MS and website: <http://www.mcscd.us/>
2. Town of Smithville Mayor's Temp Office (Police trailer) 60001 Franklin Street, Smithville, MS
3. On a power pole located at the proposed site of the temporary school facility
4. Renaissance Bank located at 63471 Highway 25 North in Smithville, MS

FEMA will conduct an expedited public comment period (3 days) starting on the initial date of publication of the Public Notice; August 8, 2011.

If no significant adverse public comments are received during the public comment period, this Draft Supplemental EA (SEA) will be changed with minor revisions to become the Final SEA for this proposed project.

## **6. Government Coordination and Permits**

The following government entities and organizations were contacted and/or consulted, which helped to provide project information and/or review in support of preparation for this SEA. Relevant documentation was provided in the Appendix C of Final EA. Coordination with MCSD was done throughout preparation of this Draft SEA.

In accordance with applicable local, State, and Federal regulations, the applicant is responsible for acquiring any necessary permits before starting construction at the proposed project site.

## **7. List of Preparers**

Preparation and review of the Draft and Final SEA by:

- Ryan Lawless, Fluor Government Group
- Bert Bowen, Environmental Historic Preservation Specialist, FEMA Region 10
- Deryl L Miles, Planning Section Chief, FEMA Region 10
- William R. Straw, Ph.D. Regional Environmental Officer, FEMA Region 4

## **8. References**

The following references were used as guidance and/or consulted, which helped to provide project information and/or perspective to prepare this Draft SEA. Other references used to support project-specific details for the Proposed Action are in the MCSD office.

FEMA. Accessed 2011. National Environmental Policy Act, FEMA Desk Reference.  
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Baseline Environmental Conditions Report, Smithville, Mississippi. Prepared for USACE. May 2011.

Soil Analysis for Temporary Smithville Elementary School Facilities Smithville, Monroe County, Mississippi, Prepared for USACE by Quaternary Resource Investigations, L.L.C.

United States Department of Agriculture (USDA) Web Soil Survey  
<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>  
National Weather Service Memphis, TN “Smithville Tornado Warning Timing”  
Personal communication on 8/2/2011,

**Appendix A**  
**Public Notice and Site Layout**

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