

---

## CAVE SPRING ELEMENTARY SCHOOL

**ADDRESS:** 5404 Springlawn Avenue, Roanoke, Virginia 24018

**INSPECTION DATE:** August 15, 2017

**INSPECTOR:** Alexandra Moon

### **BACKGROUND:**

Cave Spring Elementary School is located at 5404 Springlawn Avenue in Roanoke, Virginia. The facility encompasses approximately 63,886 square feet and was reportedly built in 1961. The school consists of one floor level and appears to have had various renovations around 2008.

ECS was retained by Roanoke County Public Schools (RCPS) to develop an Asbestos Operations and Maintenance Plan (O&M Plan) for this school facility to manage the identified asbestos-containing materials (ACMs) in place until such time as building renovation, demolition or other disturbances necessitate their removal. The newly prepared plan includes information and data collected at the facility by ECS or others. This Management Plan was prepared by a Commonwealth of Virginia licensed Asbestos Management Planners (Nos. 3304000318; 3304001654).

### **Findings**

In accordance with Title II, Asbestos Hazard Emergency Response Act (AHERA) of the Toxic Substance Control Act (TSCA), this school was reinspected by an EPA and State of Virginia Accredited Asbestos Inspector and Management Planner. Under this law the local education agency (LEA) for each school system found to contain asbestos-containing materials (ACMs) must have those school buildings reinspected once every three years. ECS's inspection was performed based upon materials identified in the School's O&M Plan prepared by Hall Kimbrall (HK) in September 1988, and subsequent re-inspection reports, dated April 8, 2008 by Barratta and Associates (BA).

Known ACMs found within the building were visually inspected to determine their present physical condition (i.e., friable/non-friable), and to determine if any changes have occurred in their physical condition since the original assessment in 1988 and subsequent re-inspection in 2008 by HK and BA respectively.

Based upon review of the initial Management Plan and subsequent re-inspection report, the only suspect/known ACMs identified in the building were various pipe and tank insulation and mudded fittings on various insulated pipes, surface materials, and white 12" floor tile. **ECS was able to walk the school; however, did not observe the suspect TSI or floor tile. These materials appeared to have been removed during the renovations completed in 2008;** however, an approximately 2 to 3 foot long piece of air-cell pipe insulation was observed on the ground of the boiler room. The original location of this material is unknown.

ECS was unable to observe the surfacing materials located above the ceiling tiles on the gypsum wall board system.



Additionally, although not listed in the 2008 re-inspection plan, fiberboard ceiling panels and associated mastic were observed within the boiler room which were labeled as asbestos.

### Previously Identified ACBM

Below are tables of previously identified ACBM within the building and the current assessment of the condition of the materials.

<b>Material</b>	<b>Description</b>	<b>Location</b>	<b>HA</b>	<b>Past Assessment</b>	<b>Reassessment Haz</b>
TSI	Heating water pipe TSI		2	6	Removed / Not Observed
TSI - Fitting	Heating Water Fitting TSI		3	6	Removed / Not Observed
TSI	Domestic Hot Water Pipe TSI		4	6	Removed / Not Observed
TSI - Fitting	Domestic Hot Water Fitting TSI		5	6	Removed / Not Observed
TSI	Domestic Cold Water Pipe TSI		6	6	Removed / Not Observed
TSI	Domestic Cold Water Fitting TSI		7	6	Removed / Not Observed
TSI	Drain Pipe TSI		8	6	Removed / Not Observed
TSI Fitting	Drain Fitting TSI		9	6	Removed / Not Observed
TSI - Fitting	Drain Fitting TSI		13	6	Removed / Not Observed
TSI	Drain Pipe TSI		15	6	Removed / Not Observed
Surface material	Material over drop ceiling	all floors	16	2	Removed / Not Observed



<b>Material</b>	<b>Description</b>	<b>Location</b>	<b>HA</b>	<b>Past Assessment</b>	<b>Reassessment Haz</b>
Surface material	Material over gypsumboard system	all floors	17	2	Removed / Not Observed
Floor Tile	12"X12" FT - White	Gymnasium Office	18	5	Removed / Not Observed
TSI	Boiler TSI		19	1	Removed / Not Observed
TSI	Breeching TSI		20	1	Removed / Not Observed
TSI - Fitting	Ftting TSI	Boiler Room	21	1	Removed / Not Observed
TSI	Pipe TSI	Boiler Room	22	1	Removed / Not Observed
TSI	Tank TSI	Boiler Room	23	1	Removed / Not Observed
TSI - Fitting	Fitting TSI	Mechanical Room	24	6	Removed / Not Observed
Ceiling Tile & Mastic	Ceiling Tile & Associated Mastic	Boiler Room	NA	NA	4

### **Additional Suspect ACMs**

During the survey ECS also observed the following other suspect ACMs;

Material and Location

1. Block filler paint on CMU walls – throughout school
2. Vermiculite insulation within CMU walls – throughout school
3. Blackboards and mastic in most of the classrooms
4. Sink mastic in some of the classrooms
5. Pipe insulation - janitor's closet.
6. Exterior materials (roofing, soffits, glazing, caulking) – Note: These materials are not covered by AHERA but are covered in general by US EPA;



- 
7. General – Renovations have occurred at the school however no documentation exists on new materials installed including ceiling tiles, floor tile and mastic, and pipe insulation in the boiler room.

### **Assessment and Recommended Response Actions**

In general, the suspect ACMs observed within the building were observed to be presently non-friable or in relatively good condition, and do not pose an immediate health hazard unless they become damaged or are disturbed. ECS recommends that the materials continue to be managed within the O&M Plan.

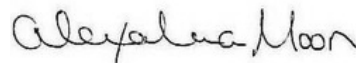
### **Identification, Notification, and Management**

1. Based upon the observed condition and use of the known and suspect ACMs identified in the building, there is no requirements for warning labels for these materials at this time.
2. Notification of the existence and availability of the O & M Plan, which includes information on known and suspect ACMs should be made available to the school staff, contracted workers, and general public (if appropriate). This is being done.
3. Any contractors (electrical, mechanical, etc.) who are to perform a service at the building shall be notified of all known and suspect ACMs at the building as identified in the O&M Plan, and be instructed not to disturb these materials in any way.
4. If any suspect ACMs become damaged and/or friable, or is anticipated to become friable (i.e., through renovation or demolition activities), Roanoke County Public Schools should contract with a Licensed Virginia Asbestos Inspector to sample these materials.

### **Inspector / Management Planner Certification**



Alexandra Moon  
Asbestos Inspector  
VA Accreditation Number 3303 003364



Alexandra Moon  
Management Planner  
VA Accreditation Number 3304 001654

