CHAPTER 9

ENVIRONMENTAL HAZARDS

9.0 GENERAL
All conditions and circumstances affecting our surroundings are considered a part of our environment; therefore, any hazard could be considered an environmental hazard. As used in this chapter environmental hazards are those hazards, which will pollute the air, water, or soil, when not properly controlled. Known conditions of this category, which are present in the District, include asbestos, hazardous chemicals, lead based paint, radon, storage tanks, and bio-hazardous, non-hazardous and hazardous waste. Federal State and local laws regulating these issues are extensive and specific, due to the high risk of public exposure.

9.1 ASBESTOS
(1) General, Asbestos is a term used to describe a group of naturally occurring fibrous minerals, which are mined from the ground. Asbestos includes chrysotile, amosite, crocidolite, and other minerals that have been chemically treated and/or altered. Any material containing more than 1% of asbestos is considered asbestos containing material (ACM). Asbestos has the unique physical properties of excellent electrical and thermal resistance, high thermal stability, and resistance to chemical attack, which makes it useful in the manufacturing of various types of building materials. Asbestos containing materials that easily crumble or can be reduced to powder by hand pressure is referred to as friable asbestos. Minute fibers from friable material may be released into the air as a result of vibrations, physical contact, or deterioration. Once released into the air, inhaling or ingesting these fibers may result in cancer and numerous other respiratory diseases. These conditions will normally appear 10 to 25 years after exposure. Most buildings constructed between 1950- and 1980 contained some asbestos. It was used very extensively in schools because of the fire protective quality. As the asbestos hazard became more widely known and accepted as a carcinogen, calls for regulatory action resulted in the “Asbestos Hazard Emergency Response Act” (AHERA). Signed into law on October 22, 1986, it charged the Environmental Protection Agency (EPA) to promulgate rules governing the control of asbestos-containing materials in schools. AHERA mandated the following specific actions:

a. The inspection of all public and private school buildings for Asbestos Containing Materials (ACM)
b. Circumstances requiring response action
c. Description of appropriate response an action
d. Implementation of response action
e. Re-inspection and periodic surveillance program for ACM
f. Establish an operation and maintenance program for all friable ACM
g. Establish asbestos management plans by Local Education Agencies (LEA)
h. Disposal of ACM
The primary concerns of the EPA and AHERA are the fiber release into the environment and the protection of occupants from the fibers. The final EPA Rule requires the LEA to:

a. Designate an individual to carry out certain duties  
b. Ensure that inspections, re-inspections, periodic surveillance, and response actions are carried out in accordance with the final Rule  
c. Ensure Custodial and Maintenance personnel are properly trained  
d. Ensure workers and building occupants are informed annually about inspection, response actions, and periodic surveillance  
e. Ensure short-term workers and contractors who may come into contact with asbestos are provided information about locations of ACM  
f. Ensure warning labels are posted as required

The EPA included in its Final Rule, worker and occupant protection per Subpart G if 40 CFR 763 to ensure protection in states and/or school districts which were not covered by 29 CFR 1926.1101. The Occupational Safety and Health Agency (OSHA) published Rule 29 CFR 1910.1001 for general industry and 29 CFR 1926.1101 for all construction and building maintenance workers. Both Rules are applicable in the District.

(2) Employee Training.

The General Manager of Maintenance and Technology Departments shall ensure that all members of Maintenance and Custodial personnel who may work in buildings which contain ACM receive a minimum of two (2) hours of asbestos training. The District Safety Office shall provide the training.

New maintenance and custodial personnel shall be trained within sixty (60) days after commencement of employment. Maintenance and Custodial Supervisors shall not assign new employees to work in unsupervised areas containing ACM until they have received the appropriate training. Training shall be documented on the Employee Safety Training Record and signed by the instructor: As a minimum, training shall include:

a. The various use and forms of asbestos  
b. The health effects of asbestos exposure as profiled in 29 CFR 1926.1101  
c. How to determine the condition of asbestos in its various uses and forms  
d. How to determine the locations of identified ACM, using the material from the Asbestos Maintenance Program  
e. Name and telephone number of District Safety Manager

(3) Asbestos becomes a hazard when conditions are such that fibers are released into the environment. When the release is contained to a room or building, it effects only the occupants; when not contained it effects the general environment and public at large. The disturbance of asbestos may be planned or un-planned.

a. Planned disturbance occurs when buildings are renovated/remodeled or demolished, and/or when maintenance actions require removal to gain access
1. The Maintenance and Technology Departments, Managers, and Supervisors are responsible for determining when maintenance/repairs will disturb asbestos. When a task involves asbestos, Unit Managers will notify the District Safety Office prior to start of repair action. The Area Safety Specialist will assess the task and coordinate abatement as established in work procedures.

2. Demolition: The District Safety Office must be notified prior to starting the demolition process for any District Building. The District Safety Office will administer the demolition process to ensure the demolition and disposal of materials are in compliance and EPA regulations.

b. Un-planned disturbance occurs when asbestos is accidentally damaged or deteriorated by age to the point where small vibrations or air currents cause fiber release. These conditions are identified by the numerous EPA required inspections and periodic surveillance of all asbestos, or by the person who accidentally causes damage. When a maintenance or staff member causes the disturbance, he/she shall notify the Site Safety Monitor, call the District Safety Office and immediately follow the Emergency Plan Guide Checklist for the hazardous material. The steps are outlined here to familiarize personnel with the procedures.

1. Evacuate: Classroom- Remove all students, teachers and other people close door(s) and prevent any access. Hallway – evacuate all occupied areas connected to that hallway. Avoid the contaminated area to prevent the spread of the spill. Outdoor Spill – If spill is outdoors, prevent access to the contaminated area blocking with physical barriers and place an adult upwind to prevent unauthorized access.

2. Provide First Aid as Needed: If the spill or release affects any person: Remove from danger and provide First Aid. Activate Emergency Medical Services. Call 911. Give the following information: Name of school/site, complete address nature of the problem, hazardous material involved (reference the appropriate (SDS) Safety Data Sheet.

3. Isolate The Spill Area and All Affected Personnel: Do not spread the material/chemical during this process, walk around the spill, and leave any contaminated items in area. Take all belonging (keys, book bags, coats etc.)

4. Turn of Air Handler to Contaminate Area: This will help prevent the spread any airborne contaminated.

5. REVIEW SITE EMERGENCY PLAN

6. Notify Area Leadership Director

7. Call District Safety Office (872-5263): Assistance will be provided in the management of the incident and arrangement for appropriate response and clean up. Do not attempt to clean up any material/chemical unless you have proper training.
8. Do Not Re-enter Contaminated Area: The contaminated area should not be re-entered. Hazardous conditions may be present that is not detectable by sense of smell. Emphasize personnel to take belongings during evacuation.

9. Gather Information: Get as much information as possible. Complete an incident report form with at least the following information. The names of all persons involved—Quality & Type of material spilled – Location(s) that are affected, etc.

The District Area Safety Specialist will coordinate appropriate response action; provide follow up to ensure compliance of abatement procedures and required records of incident.

(1) When damage is discovered during inspections or surveillance by other than Safety Office personnel, notify the District Safety Office and follow the steps outlined above and in the emergency guide.

(2) Exposure: Any employee or student who has reason to believe he/she has been accidentally exposed to asbestos must call the District Safety Office immediately after exposure, remain at the location, and follow instructions provided by the District Safety Office. The extent of exposure must be determined within the first two hours after a minor fiber release.

a. Managers and Supervisors of employees or students who perform tasks with materials, which may be asbestos containing, shall ensure the following activities are prohibited:
   1. Not drill holes in asbestos-containing materials
   2. Not to hang plants or pictures on structures covered with asbestos-containing materials
   3. Not to sand asbestos-containing floor tile
   4. Not to damage asbestos-containing materials while moving furniture or other objects
   5. Not to install curtains, drapes, or dividers in such a way that they damage asbestos-containing materials.
   6. Not to dust floors, ceiling, moldings, or other surfaces in asbestos-contained environments with a dry brush or sweep with a dry broom
   7. Not to use an ordinary vacuum to clean up asbestos-containing materials without wearing the proper respiratory protection, clearing the area of other people, and observing asbestos removal waste disposal procedures
   8. Not to remove ventilation system filters when dry
   9. Not to shake ventilation system filters

**NOTE:** When in doubt about location of asbestos refer to the latest building inspection report; copies are located at each site or building office, Maintenance Units and at the District Safety Office. When the Inspection Report indicates it is assumed asbestos containing, call the District Safety Office for testing prior to working on the material.
(3) Asbestos Management Plans.
The District is required to establish an Asbestos Management Plan for each site, which contains asbestos. The Asbestos Management Plan contains a description of the buildings located at the site, the location of all ACM, the type of concentration of the ACM as determined by inspection and testing, the current status and condition, and a running history of abatement activities. A current copy of the plan must be maintained at the site and a master copy maintained by the District Safety Office.

(4) Asbestos Maintenance Program.
A site-specific written Asbestos Maintenance Program must be initiated in all facilities where friable ACM is present and maintained with the Asbestos Management Plan. The written procedures shall include, in addition to the items outlined in 29 CFR 1926.1101, the following items:

a. Precautions an employee must observe when entering areas where ACM is located
b. The actions an employee must take before entering areas where the asbestos situation cannot be determined
c. List the prohibited activities outlined 29 CFR 1926.1101
d. Warning Labels: 40 CFR 763.95 requires that an asbestos warning label be attached immediately adjacent to any friable and non-friable Asbestos Containing Material (ACM) located in routine maintenance areas at each school building. Routine maintenance areas in schools include boiler rooms, vaults, mechanical and electrical rooms, and all attic areas. These areas are accessed on a daily basis by custodians, air conditioning mechanics, electricians and the communication electronic personnel. The District Safety Manager shall be responsible for compliance with 40 CFR 763.95 (a) through (c) in all identified routine maintenance areas

The District Safety Office will be responsible for updating the Asbestos Maintenance Program to include the location and condition of the asbestos. When new friable asbestos is identified safety bulletins or memos will be forwarded to all Maintenance Units and appropriate sites within three (3) working days. The safety bulletins will be filed with the site Asbestos Maintenance Program and included on the six (6) month inspection form.

(5) Periodic Surveillance.
An Asbestos Surveillance Inspection shall be performed each six (6) months. The Site Safety Monitor or Head Custodian shall be responsible for conducting the surveillance inspection using the standard form provided by the District Safety Office. The completed inspection form shall be reviewed by the Site Administrator/Principal. Where no damage or change in condition has occurred, a copy shall be filed at the site in the Asbestos Maintenance Program and a copy forwarded to the District Safety Office to file in the Master Asbestos Management Plan. Where pipe or boiler thermal insulation has been damaged to a degree that a fiber release is occurring, it shall be reported by phone to the District Safety Office for immediate repair or removal. It is essential that the six (6) months surveillance inspection be complete in a timely manner and that changes in the condition of asbestos disseminated to employees so proper precaution, can be observed.
The Site Administrator/Principal shall notify all employees and the parents at the beginning of each school year of the presence of asbestos as instructed in Chapter 11 of the Asbestos Management Plan.

**9.2 HAZARDOUS WASTE CONTROL**

The effects of improper disposal of hazardous materials were first brought to the attention of the public by the Love Canal episodes in New York State in the early 1970’s. As a result of the heightened awareness brought about from the Love Canal, improper hazardous material disposal was found to be wide spread. Passage of the Clean Air and Clean Water Acts and the Superfund Act brought about dramatic improvements in the nation’s air and water quality. Over the last 15 years, federal and state governments have promulgated an array of hazardous waste regulations that now involve many state and federal agencies.

Essentially, any material/chemical that poses a threat to human health, living organisms, or the general environment is considered a hazardous material. When a hazardous material is no longer of value or is not usable by the owning institution, it is declared a “waste”. This action automatically creates a hazardous waste. Under federal law, hazardous waste is fully regulated from the time of creation; to the time it is properly discarded (cradle to grave).

1. Procedures for the purchasing, use and storage of hazardous materials/chemicals are outlined in Chapter 10 of this manual. Section 10.6(2) of Chapter 10 requires a running inventory of all hazardous materials/chemicals on hand with a physical inventory and purging check at least once each year. Materials classified as flammable liquids, toxic, corrosive materials, carcinogens, and poisons are substances, which must be disposed of as hazardous waste when:
   a. Chemicals are aged and/or useless
   b. Contents or mixture is unknown
   c. Container is damaged or deteriorated
   d. Excessive quantities of highly hazardous materials cannot be used.

2. Inventories may be maintained by the using Department; however, the Site Safety Monitor shall coordinate the annual purging to include all departments. A consolidated list of declared hazardous waste shall be transcribed to the Hazardous Waste Removal Requests from illustrated in Fig. 9.2-A. The completed form shall be forwarded to the District Safety Manager.

3. The hazardous waste containers shall be checked to ensure contents cannot be released while in storage or awaiting pick-up. Where containers are damaged, place contents and damaged container in a larger and secure container. When this cannot be accomplished safely, call the District Safety Office for assistance.

4. Identify contents on container label and the date the material became waste. Containers must be marked “Hazardous.”
(5) The mixing of hazardous waste by District personnel is strictly forbidden. Mixing waste materials is not only unsafe; it greatly increases the disposal cost and in most cases is illegal.

(6) Hazardous waste shall be stored in a secure location until the Site Safety Monitor is notified of the pick-up date.

(7) The information poster shall be posted with required information.

(8) Hazardous wasted areas shall be inspected at least once each week (7 days) by the Site Safety Monitor. Containers shall be checked for legible labels and damage/rust; which might result in a release. Inspections shall be documented with name of inspector and date accomplished, per checklist in Figure 9.2-B.

(9) All hazardous waste materials are packaged and removed from the site by contracted professional hazardous waste transporters, supervised by the District Safety Office.

(10) The Contractor and the Site Safety Monitor shall complete the uniform hazardous waste manifest.

(11) After disposal is complete, a completed copy of the original waste manifest and certificate of disposal will be received by the District Safety Office.

(12) The District Safety Office will forward a copy of the manifest to the generating site and file master copy.

(13) Contingency plans for copying with hazardous materials/waste spills are located in Appendix "A" Site Emergency Plans and the District Emergency Check-List.

9.3 NON-HAZARDOUS WASTE

Many products used in schools, although not listed as a hazardous material/waste, contain small amounts of hazardous material or material which may be recycled. Materials of this type are regulated to some degree in the disposal process. Local regulations on waste disposal are relative to the local disposal capabilities.

It is the responsibility of all employees to ensure that waste and residue remaining from projects is properly discarded. Proper disposal of industrial cleaning and processing chemicals may be obtained from the Safety Data Sheet or labels. Most consumer products will contain disposal instruction on the product label.

The products listed in the following table are used and discarded by District Personnel. When new products in the category are discovered, the District Safety Office will be noticed. The Safety Office will provide disposal instructions and assist as necessary in establishing a means for proper disposal.
### MATERIAL

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>DISPOSAL INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rechargeable Batteries (non-vehicle)</td>
<td>Turn in at Central Warehouse</td>
</tr>
<tr>
<td>Tires</td>
<td>Turn in at Bus Garage</td>
</tr>
<tr>
<td>Vehicle Battery</td>
<td>Turn in at Bus Garage</td>
</tr>
<tr>
<td>Fluorescent Bulbs</td>
<td>Turn in at Central Warehouse</td>
</tr>
<tr>
<td>Fluorescent Ballasts</td>
<td>Turn in at Central Warehouse</td>
</tr>
<tr>
<td>Waste oil</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Electric Equipment</td>
<td>Turn in at Central Warehouse</td>
</tr>
<tr>
<td>Paint</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Pesticides</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Photo Chemicals</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Consumer Cleaning Chemicals</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Auto Parts Wash</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Air Conditioning Oil</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Refrigerant</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Transformers</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Silk Screen Chemicals</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Cosmetology Chemicals</td>
<td>Hazardous Waste Removal Request</td>
</tr>
<tr>
<td>Suspect Materials</td>
<td>Hazardous Waste Removal Request</td>
</tr>
</tbody>
</table>

### 9.3 LEAD EXPOSURE CONTROL

The Occupational Safety and Health Administration’s Lead Standard requires every employer that has workplace where there is a potential for exposure to airborne lead at any level to prove employees with substance identification, basic health hazard data, and a summary of the Standard’s key provisions.

The District must set up a training program and require the participation of all employees subjected to lead exposure at or above the action level or where the possibility of skin or eye irritation exists. “Action level” means employee exposure, without regard to the use of respirators, airborne concentration of lead of 30 micrograms per cubic meter (ug/m3) of air averaged over an eight-hour period.

This training must be provided prior to an employee’s initial job assignment where there is a potential for lead exposure. Employees so identified, must go through the training program at least annually.

In addition to the training requirement, the lead Standard requires that the employee exposure to lead be recorded and maintained. Control standards are established in 29 CFR 1926.62 for use in work involving construction, alteration, repairing, or decorating buildings and structures. Exposure in general industry is governed by 29 CFR 1910.1025. The lead hazard in the District consists primarily of lead based paint used to paint schools prior to 1988. Buildings, which are more than 10 years old with multiple layers of paint, should be tested before removing the old paint.
(1) Responsibilities. General Managers of Maintenance, Technology, and Supervisor of Educational Building Trades Training shall ensure that employee, students, and contractors subject to scrape, sand, chip or otherwise remove older school building paint are aware of the potential presence of lead in paint. Supervisors should contact the District Safety Office prior to any paint project where the paint will be removed. Lead based paint shall not be utilized within the District for any purpose, without the express approval of the District Safety Office.

The District Safety Office will provide investigation and compliance assistance for all incidents of employee or occupant exposure and assist in the identification and control of lead exposure hazards, within the District.

Maintenance Unit Managers and custodial supervisors who have personnel subject to duties of repair and abrasive cleaning in areas where lead may be present shall ensure training is provided as outlined below.

(2) Employee Information and Training. OSHA’s Hazard Communication Standard requires that the District provide training to all employees exposed to lead. In addition, the construction lead Standard requires an information and training program for all employees exposed to lead on any day at or above the action level. The program must teach the employee the specific hazards associated with the work environment, protective measures that can be taken, and the employee’s rights under the Standard. The training must be provided prior to the initial job assignment and repeated annually for covered employees.

(3) Text of Regulation. 29 CFR 1926.62. This standard applies to all construction work in which lead is present in any amount. The standard sets forth an action level, which is employee exposure, without regard to the use of respirators, to an airborne concentration lead of 30 ug/m3, calculated as an eight-hour Time Weighted Average (TWA). When employees are exposed above the action level for more than 30 days per year, the District must provide a periodic medical surveillance program.

The District must ensure that no employee is exposed to concentrations of lead in excess of the Permissible Exposure Limit (PEL) of 50 ug/m3 as an eight-hour TWA. The Standard allows for the use of respiratory protection to supplement feasible engineering controls where necessary to comply with this limit.

(4) Exposure Assessment. The District Safety Office is required to determine if any employee is exposed to lead at or above the action level of 30ug/m3 as an eight-hour TWA.

This initial determination need not be based exclusively on exposure monitoring but may be based on objective data demonstrating that a particular product or material containing lead or a specific process, operation or activity cannot result in employee exposure to lead at or above the action level during expected conditions of use or handling.

Historical measurements of airborne lead may be used to satisfy the initial exposure assessment requirement if they have been taken within the previous 12 months during work operations conducted under workplace conditions closely resembling the process, type of material, control methods, work practices, and environmental conditions used and prevailing in current operations.
If the initial determination or subsequent determination reveals employee exposure to be at or below the Permissible Exposure Level (PEL), monitoring must be performed at least every six months. If the initial determination reveals that employee exposure is above the PEL, monitoring must be performed quarterly.

In addition, certain tasks or operations involving lead are presumed to expose employees to levels greater than the PEL unless otherwise demonstrated by the exposure assessment. When that is the case, interim protective measures must be implemented until the exposure levels are indicated lower than PEL. Employees must be given written notification of the results of their exposure assessments within five working days.

(5) Methods of Compliance. To the extent feasible, the District must institute engineering and work practice controls, including administrative controls, to reduce exposures to or below the Permissible Exposure Level (PEL). Where such feasible controls are not sufficient, the Supervisor is required to provide appropriate respiratory protection as a supplement.

If administrative controls are used as a means of reducing employee’s Time Weighted Average (TWA) exposure to lead, the District must establish and implement a job rotation schedule and endure that employees follow appropriate work practices.

The District Safety Office must develop and implement a written compliance plan prior to commencement of a job where employee exposure to lead without respect to respiratory protection, will be in excess of the PEL. The plan must be reviewed and updated at least every six months.

The compliance program must provide for frequent and regular inspections of job sites, materials, and equipment made by a Competent Person. Competent Person is defined in the Standard as one who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

The Standard requires that appropriate respirators be used whenever the concentration of lead is at or above the PEL, in the work situation in which engineering and work practice control are not sufficient to reduce exposures below the PEL, and whenever the employee requests a respirator. Respirators must be provided at no cost to employees and must be properly selected, used, maintained, cleaned, and fit-tested.

(6) Protective Clothing and Equipment. The District must provide, at no cost to the employee, PPE, that is appropriate for the hazard. In addition, the District is required to provide for the cleaning, laundering, or disposal of protective clothing and equipment and must repair or replace it as needed to maintain effectiveness.
(7) Housekeeping. All surfaces must be maintained as free as possible from the accumulation of lead dust. This is to be accomplished by HEPA vacuuming floors, rafters, and other surfaces or by using other methods equal effective in preventing the dispersal of lead into the workplace the use of compressed air to remove lead is prohibited unless it is used in conjunction with a ventilation system designed to capture the airborne dust created by the compressed air.

(8) Medical Surveillance. The medical surveillance program is designed to facilitate early detections of health effects associated with exposure to lead. The Standard requires that the District make available initial medical surveillance to employees occupationally exposed to lead at or above the action level on any workday. Initial medical surveillance consists of biological monitoring in the form of blood sampling and analysis for leads and zinc protoporphyrin levels.

The District Safety Office must institute a medical surveillance program for all employees who are or may be occupationally exposed to lead at or above the action level for more than 30 days in a 12 consecutive months.

(9) Signs. Warning signs must be posted in each work area where employees’ exposure to lead exceeds the Permissible Exposure Limit (PEL).

(10) Record keeping. Records of exposure monitoring and other data used in exposure assessment must be maintained. Also, records of medical surveillance and temporary medical removals are required to be kept. The records must be made available, if requested, to employees and their designated representatives.

(11) Compliance Guidance CPL 2-2.58. To clarify the final standard, OSHA has issued a compliance directive, CPL 2-58. Essentially, the directive explains that construction-related maintenance work is covered under the standard, but routine cleaning of structures that have “insignificant” corrosion of lead pain is not. In other words, the standard covers construction work that includes painting and decoration and any repair or renovation activities that disturb in-place lead-containing materials, such as steel structure renovation and repair. The standard does not cover routine cleaning and repainting such as minor surface preparation and repainting.

To meet the standard’s exposure assessment requirement, air samples must be taken outside a respirator as near as practical to the employee’s nose and mouth. Air samples collected inside a respirator do not meet the requirements and employees cannot use such samples as indicators of whether they are complying with the Permissible Exposure Limit (PEL).

The District is not obligated under the standard to provide general work clothes to workers but must provide protective work clothing that prevents lead from contacting worker’s work clothes, street clothes, undergarments or skin.
9.4 RADON
Radon is a gas that is constantly being formed from small amounts of uranium in rocks and soils. Radon gas is colorless, odorless, and tasteless, but it’s radioactive. Decaying radon releases energy in the form of alpha particles (radiation) which when airborne are inhaled into the lung and may with long-term heavy exposure cause significant damage to delicate lung tissue. Such damage increases the risk for lung cancer, which is the primarily health related issues of radon gas.

Certain geographical areas of Florida are richer in radioactive elements than in others. Usually, the gas rises through the soil and escapes into the open atmosphere where it has little or no effect on people. When the rising gas enters an enclosed house/room through cracks in a concrete floor or wall, drains in the floor or holes around pipes the concentrations quickly increases to point which is considered to be a health issue.

The State of Florida became the first state in the nation to pass a rule regulating exposure of its citizens to naturally occurring radioactive materials in the environment. The state rule was at least, in part, a response to the EPA issued warnings regarding radon over exposure in schools. The District Safety Office is responsible for testing, tracing, retesting, and mitigation of radon in schools where elevated concentrations are found. Testing protocol for radon as established by the RPS consists of a walkthrough of buildings to determine what areas of rooms contain openings where radon might be at strategic location in non-occupied, enclosed rooms, for a period of 48 hours. When the completed testing results in radon concentration of 4 Pico curies per liter (pci/L) or greater, action is recommended to reduce the concentration. Persons who perform for radon testing, evaluation tracing, and mitigation of radon gas must be licensed by the Florida Health Department.

9.5 STORAGE TANKS
Storage tanks containing hazardous or regulated material are located at various schools and support sites throughout the District. Storage tanks are located underground, as well as above ground. For the past 50 or 60 years prior to 1989 the preferred storage method was by underground tanks because it was the most convenient way to ensure safety against fire or explosion, and was more esthetically pleasing than above ground tanks. Installation and maintenance was not regulated beyond the fire hazard. The products caused serious environmental damage and resulted in increased public concern. Emphasis shifted from tank regulations for reason of fire safety to that of protecting the environment and public health. Regulatory programs for storage tanks have since 1980, been progressive on federal, state, and local levels.

The Florida legislature initiated regulation of underground and above ground storage with the 1983 Water Quality Assurance Act. Since that time, numerous mandates, both federal and state, have been implemented for tighter control and expanding coverage.

Present statues are extensive and regulate all storage tanks relative to construction, installation, maintenance and retrofit testing, monitoring and closure. Specific requirements are based on the age of the tank, the volume and the type of hazardous or regulated substance stored.
(1) Procedures

These procedures are applicable to all tanks used to store hazardous or regulated substances and located on property owned or leased by the School District.

a. The District Safety Office shall ensure that existing storage tanks are in compliance with state and local mandates
b. The Director responsible for storage tanks shall ensure that only certified storage tank contractors’ perform. Retrofits or removal of existing storage tanks and must be conducted through the District Safety Office
c. The Director of Construction shall ensure that only certified contractors are used for new storage tank installation
d. The District Safety Manager shall review and approve construction plans for new tanks
e. Site Administrators/Principals and Site Safety Monitors located at sites containing storage tanks shall be provided the following information for site records:
   1. Specific location of each tank
   2. Date installed if known, and/or date retrofitted
   3. Type, size, by volume and substance stored
   4. Indicated if tank system is in full compliance. If not incompliance, what actions are to bring into full compliance?

(2) Records

a. The District Safety Office shall main records for each tank in the District, Information shall include:
   1. Specific location of each tank
   2. Date installed if known, and/or date retrofitted
   3. Type, size by volume and substance stored
   4. Indicate if tank system is in full compliance. If not in compliance what actions are necessary to bring in to full compliance?

b. Records shall include storage tanks, which are in-service, out-of-service, closed and/or removed
HILLSBOROUGH COUNTY PUBLIC SCHOOLS
District Safety Office
4224 W. Crest Avenue
HCPS Route 1
Tampa, FL 33614

Telephone: 872-5263 FAX: 872-5266

Hazardous Materials Program
PICK-UP / TRANSFER REQUEST FORM

Complete all requested information, check with other Departments for additional disposal needs, mail or fax to the District Safety Office and forward a copy to the appropriate program supervisor as listed below.

<table>
<thead>
<tr>
<th>Line #</th>
<th>SUBSTANCE</th>
<th>CONTAINER DESCRIPTION</th>
<th>LOCATION OF CONTAINERS ON SITE</th>
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</tbody>
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Prepared by Site Contact Person Phone

Program
* Educational Media & Technology
* Family & Consumer Sciences
* Health, public Service & Cosmetology Occupations
* Maintenance
* Grounds
* Sites & utilities
* Secondary Art & Humanities
* Secondary Science
* Technology & Industrial Education
* Other:

Location
ISC
Erwin Center
Erwin Center
56th Street
4805 E. Dr. M.L. King Blvd.
ROSSAC
ROSSAC
Learey Technical Center

PICK-UP / REMOVAL APPROVED BY: ___________________________ Date: ___________________________

Manager of Risk Management & Safety

Fig. 9.2-A
**HILLSBOROUGH COUNTY SCHOOLS HAZARDOUS WASTE WEEKLY INSPECTION SMALL QUANTITY GENERATORS**

<table>
<thead>
<tr>
<th>School/Facility Name</th>
<th>Inspection Date</th>
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<table>
<thead>
<tr>
<th>Address</th>
<th>Inspection Time</th>
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<tr>
<th>Telephone Number</th>
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<th>EPA ID Number</th>
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**Inspector must complete one form per hazardous waste storage area.**

Waste Storage Location: Bldg. No. ____________________________ Rm. No. ____________

Number of Container(s): ____________

Size of Container(s): ☐ 5 gal. ☐ 10 gal. ☐ 15 gal. ☐ 20 gal. ☐ 30 gal. ☐ 55 gal.

Others (describe) ____________________________________________

Types of Container(s): ☐ Plastic ☐ Steel ☐ Fiber ☐ Glass

Others (describe) ____________________________________________

Condition of Container(s): ☐ Good ☐ Corroded ☐ Rusty ☐ Leaky ☐ Bulging

Observations:
- Are container(s) labeled properly ☐ yes ☐ no
- Do labels have accumulation start date ☐ yes ☐ no
- Are lids properly ☐ yes ☐ no

Any unsafe conditions ________________________________________

Any corrective actions needed. ☐ yes ☐ no

If yes, what date were corrective actions taken? ________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Inspector Name (printed) ____________________________________________

Supervisor's Name (printed) _________________________________________

Inspector Signature ____________________________________________

Supervisor's Signature ____________________________________________

Fig. 9.2-B