



# How to Provide Safe, Well Maintained Schools

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# Our Brains are wired different...



# The Increased Scope of Education Facility Management

*Education Facility Managers are so over programmed that a complete program is rarely delivered*

## 70's,80's,90's,00's & Now

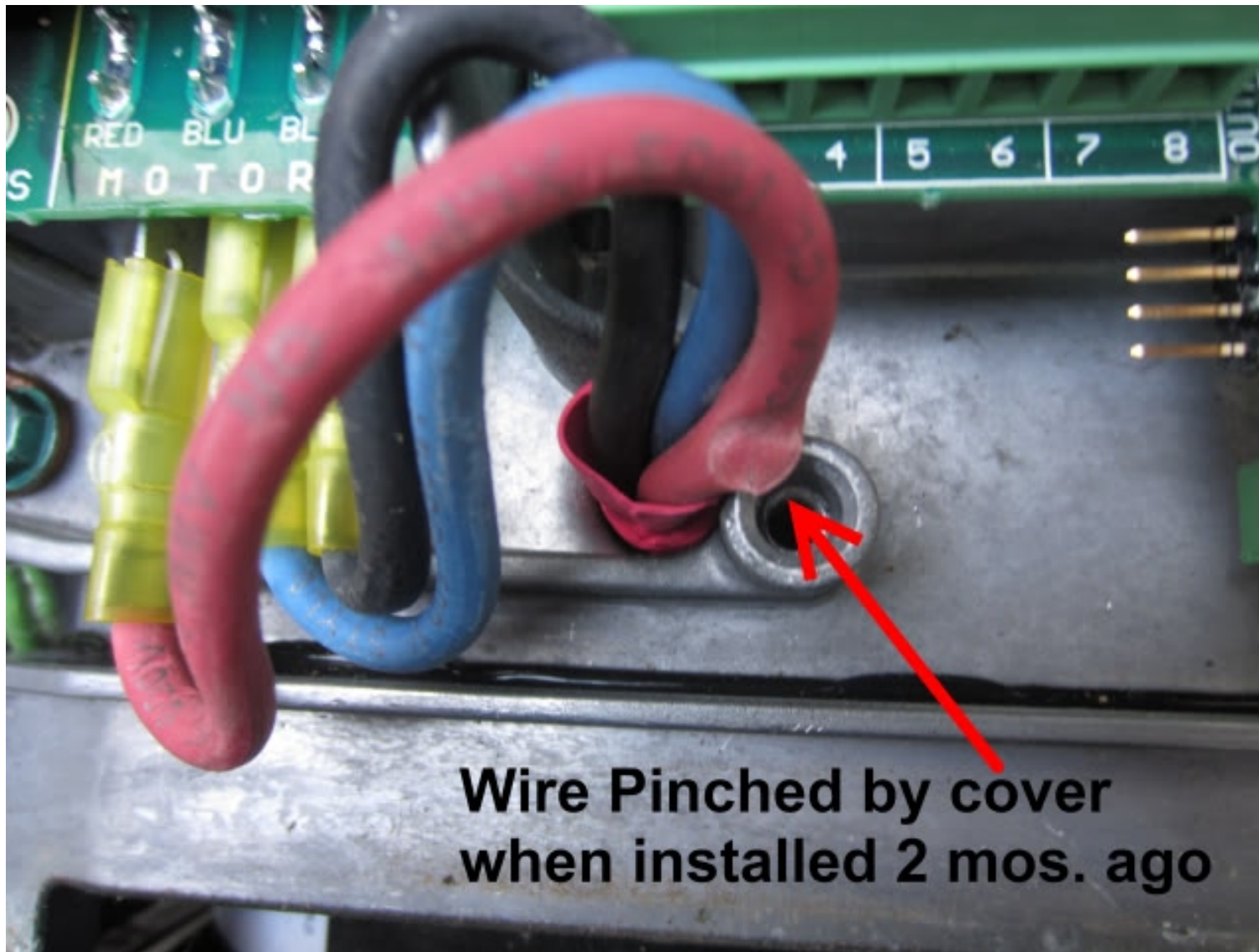
### 40's,50's & 60's

1. Custodial operations
2. Maintenance operations
3. Grounds operations
4. Electrical / gas utility
5. Pest control (in-house)
6. Playground equipment
7. Roofs
8. Safety – general
9. School closings
10. Vandalism

**Facility programs  
have increased  
dramatically but  
many institutions  
have smaller  
leadership teams**

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6. Pest control (in-house)
7. Roofs
8. Safety – general
9. School closings
10. Vandalism
11. Mold management
12. Asbestos (AHERA)
13. Carbon Dioxide testing
14. Lead in water
15. Natural gas volume purchasing
16. Electrical volume purchasing
17. CAD
18. CMMS with preventive maintenance
19. Electromagnetic emissions
20. Emergency / disaster plans
21. Energy management systems
22. Energy education
23. Data based custodial schedules
24. Rentals, community usage
25. ADA
26. Owners Construction Rep.
27. Indoor Air Quality
28. Lead in paint
29. Integrated Pest Management
30. Privatized custodial
31. Purchased services management
32. Protective equipment & clothing
33. Radon Management
34. Recycle waste program
35. Re-locatable classrooms
36. Right to Know Act
37. Underground storage tanks
38. Computerization – technology support
39. Blood borne pathogens
40. Budget planning
41. Labor law issues
42. OSHA Logging & training
43. Custodial equipment management
44. Quality Assurance program
45. Hazardous Waste Removal
46. Emergency Backpacks
47. Building Backpack Supply
48. Defibrillator maintenance
49. Defibrillator training
50. Security systems
51. Green chemical management
52. Carbon footprint issues
53. Sustainability program
54. Life/Safety Planning
55. Playground management
56. Expanded athletic programs
57. Swimming pool maintenance
58. Indoor track & field
59. Fertilization & weed control
60. Artificial athletic fields





**Wire Pinched by cover  
when installed 2 mos. ago**

# Codes.....

IBC- International Building Code w/ 780 CMR-MA Amendments

IEBC- International Existing Building Code

IECC- International Energy Conservation Code (Stretch Code Bldgs.)

IMC-International Mechanical Code

IFC- International Fire Code



# Relationships/Partners

- Local officials: Inspectors, Fire, Police, Health Dept., Grounds
- State: DPS, DOS, DEP, EPA
- Other: Insurance Carrier (MIIA)

# State Fire Code: CMR 527 1.00:50.00 (Electrical Code CMR 527 12)

- Detection
- Suppression
- Extinguishers
- Decorations
- CO detectors

527 CMR 31.04 section (3) Day care facilities and School Aged Child Care Program facilities shall install CO detectors.....

# Flame Retardant Sprays

- Paper, Decorations, Curtains, Furniture
  - Know carcinogen
  - Being removed from Fire Codes
  - Check with local Fire Official

# 8<sup>th</sup> Edition Building Code 780 CMR (9<sup>th</sup> Edition coming soon)

- Occupancy permit
- Door closures and pressure to open
- Annual Fire/Building Department Inspections
- Insurance Company (MIIA) Inspections

# Plumbing Code: 248 CMR

- Potable water / fixtures / temperatures
- Eyewash stations (ANSI, Z358.1)
- Backflow Preventers (DEP 310 CMR 22.22 & 248 CMR 10.00: Uniform State Plumbing Code)
  
- HVAC: Refrigeration
  - MGL Chapter 146, Section 88

# H.R.4939 - Lead Contamination Control Act LCCA (1988)

- MaDEP offering assistance to schools.
  - RFI submitted to no later than May 27<sup>th</sup>
  - <http://1.usa.gov/1W3BjBO>
- Ken Pelletier, MaDEP LCCA Coordinator  
[Kenneth.pelletier@massmail.state.ma.us](mailto:Kenneth.pelletier@massmail.state.ma.us)

# 310 CMR 7.15: Asbestos (MA Dept. Labor Standards)

## **AHERA (US EPA) 40CFR 763.80**

(Asbestos Hazard Emergency Response Act)

- Designated Person (certified)
- 3yr AHERA Plan update
- 6 month inspectional updates
- Annual refresher training
- Consultants

# 521 CMR – MA Accessibility Regulations



# 524 CMR-MA Elevators

- Annual inspections for elevators and chair lifts
  - Fines of \$100 per day out of compliance
- Preventative Maintenance schedule not specified
  - Monthly (too much)
  - Quarterly (common)
  - Quarterly + Inspection date (most common)
  - Bi-Annual (Not recommended)

# Integrated Pest Management IPM

MA Department of Agricultural Resources

<http://massnrc.org/ipm/schools-daycare.html>



The screenshot shows a web browser window displaying the 'School IPM Program' website. The page has a green header with the text 'School IPM Program' on the left and 'For Schools/Daycare' in the center, with the MDAR logo on the right. A left sidebar contains a navigation menu with the following items: 'Home', 'Create/Edit IPM Plan Online', 'Locate a Plan', 'What is IPM?', and 'Children's Protection Act'. The main content area features a photograph of a young girl reading a book, with the text 'for Schools and Daycare' to its right. Below the photo, the word 'Introduction' is visible.





# OSHA

Pursuant to Mass. Gen. L Ch. 149, section 6, the Massachusetts Department of Labor Standards (DLS) is charged with enforcing health standards at all county and municipal workplaces and with recommending controls to eliminate occupational health hazards.

*Although public sector workplaces in Massachusetts are not covered by OSHA standards, it is the policy of DLS that public sector employers comply with the same requirements.*



# RTK/BBP

Right to Know (454 CMR Section 21)

- Annual training required by employer
- Training and documentation required

<http://www.mass.gov/lwd/docs/dos/rtk/ma-rtk-employer-manual.pdf>

Bloodborne Pathogen (OSHA Standard 29 CFR 1960)

- Regular employee training required

[https://www.osha.gov/OshDoc/data\\_BloodborneFacts/bbfact01.pdf](https://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact01.pdf)



# DEP Filings

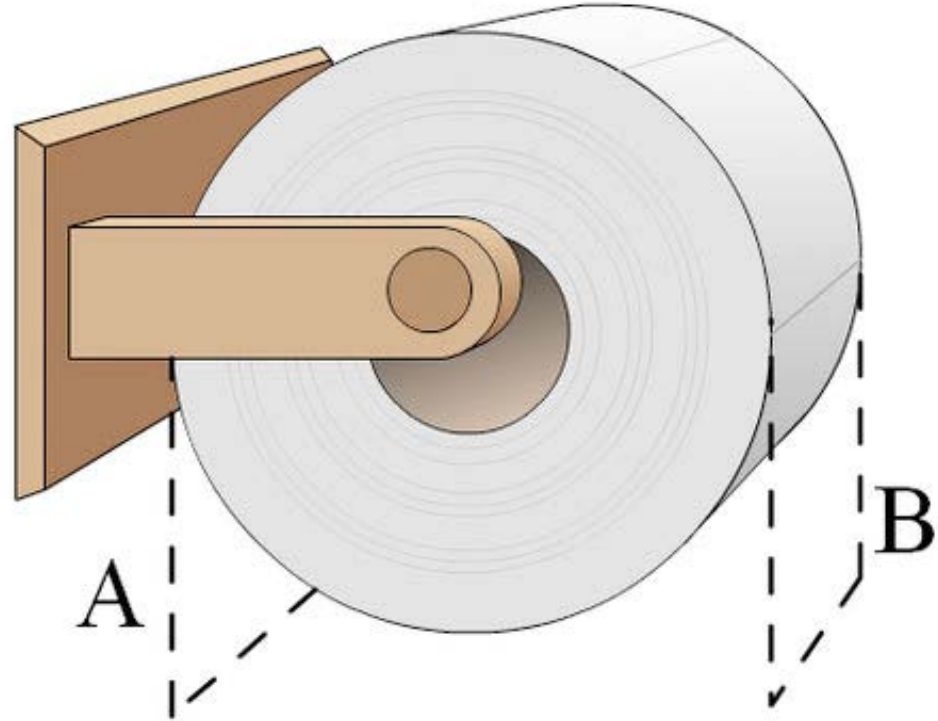
- Water samples (well water)
- Underground Fuel Storage tanks
- Hazardous Materials Inspections
  - 527 CMR Chapter 60
- Source Registration (boilers over 10,000,000 btu)
- Waste Water Treatment Plant reports/permitting renewals



# Indoor Air Quality

- Department of Public Health inspections
- Do you have an IAQ baseline?
- 3-things for Mold: water/temperature/food source
  - Leviticus 13: 47-59

# THE GREAT



# DEBATE

# Chemical Procurement/Storage

- Do you have a Chemical plan?
  - Science Dept.
  - M & O Dept.
  - Who signs for deliveries?
- Do you have a current inventory?
  - Does the Fire Dept. have a copy?

# Boilers and Pressure Vessels

- 310 CMR 7.00 Air Pollution (DEP filings)
- MGL Chapter 146 Section 46-51 Boilers Pressure/Vessels
- Insurance Companies (Annual Inspections)
  
- Fume Hoods
  - 527 CMR 1.00:50.2 and 1.00:50.5 (Annual Inspections)

Technology Transfer Network – Air Toxics Web Site

Contact Us Share

- TTN Home
- ATW Home
- Rules & Implementation
- National-Scale Air Toxics Assessment
- Risk Studies
- Education & Outreach
- About Air Toxics
- Pollutants & Sources
- State, Local, Tribal Resources
- Publications
- Contacts
- Technical Resources

You are here: EPA Home » Air & Radiation » TTN Web – Technology Transfer Network » Air Toxics Web site » Rule and Implementation Information for Stationary Internal Combustion Engines

## Stationary Internal Combustion Engines

- Basic Info
- FR Notices
- Technical Info
- Implementation Info
- How to Comply

### Announcements

- **Guidance on Vacatur of RICE NESHAP and NSPS Provisions for Emergency Engines**
  - Guidance regarding the D.C. Circuit Court decision vacating the provisions in the RICE NESHAP and NSPS that specified that emergency engines may operate for emergency demand response and deviations in voltage or frequency is available on the [Technical Info](#) page. The D.C. Circuit Court issued the [mandate](#) for the vacatur on May 4, 2016.
- **Reminder – Emergency Engine Electronic Reports Due March 31, 2016**
  - Owners of emergency engines > 100 HP operated or contractually obligated to be available >15 hours/year for emergency demand response or voltage or frequency deviations, or operated for local reliability (as specified in 63.6640(f), 60.4211(f), and 60.4243(d)) must submit an annual report electronically through the Compliance and Emissions Data Reporting Interface (CEDRI) accessed through EPA’s Central Data Exchange at <https://www.epa.gov/cdx>. The annual report must cover 2015 operations and include the information specified in 63.6650(h), 60.4214(d), or 60.4245(e).
- **Proposed Amendments to NSPS for Stationary Compression Ignition Internal Combustion Engines**
  - On October 30, 2015, EPA proposed amendments that would allow operators to temporarily override features that shutdown the engine when NOx emission control equipment is not operating during an emergency situation where there is a risk to human life. The amendments would align requirements for stationary compression ignition engines with requirements for the same engines used in nonroad vehicles. This action also would revise the criteria for defining remote areas of Alaska to align with those in the air toxics standards for stationary reciprocating internal combustion engines. See [proposed amendments](#) and [summary fact sheet](#).
- **Motion for Voluntary Remand**
  - On June 30, 2015, the EPA filed a motion for voluntary remand without vacatur of EPA’s final decision on the reconsideration of the conditions in 40 CFR 60.4211(f)(3)(i), 60.4243(d)(3)(i) and 63.6640(f)(4)(ii) for operation for up to 50 hours per calendar year in non-emergency situations as part of a financial arrangement with another entity (79 FR 48072, August 15, 2014). On September 23, 2015, the court granted EPA’s motion for a voluntary remand without vacatur. See the [Technical Info](#) page.



# Licenses

- Plumbing
- Electrical
- HVAC refrigeration
- Hoisting
- Waste Treatment Plant Operator
- Driver's .....don't laugh.....

# Multi-hazard Evacuation Plans

(Section 363 of Chapter 159 of the Acts of 2000)

## Responsibility of the Superintendent of Schools.

.... shall encompass, but not be limited to, evacuation for fires, hurricanes and other hazardous storms or disaster in which bodily injury might occur, shootings and other terrorist activities, and bomb threats.

# Safety / Security

- NIMS ICS-100 (FEMA)?
- Do you have a safety team?
- Do you perform risk assessments?
- Do you check your systems?
- Do you partner with your insurance carrier?

# Budgets

- Currently funded to be **Reactive**
- Operational
  - Annual compliancy
  - Multi-year compliancy
- Capital planning
- Construction budgeting
- Consultant costs

# Work Orders

- What is your process?
- Are you using CMMS?
- What are your goals and expectations?
- Do you use data to make decisions?

Please remember to go easy on  
your Facilities Directors....



**Our phones only ring when something is broken or things have gone really...really bad.**

MA Fire Code/Electrical: <http://www.mass.gov/eopss/agencies/dfs/dfs2/osfm/fire-prev/527-cmr-index.html>

Fire Code FAQs: <http://www.mass.gov/eopss/docs/dfs/osfm/cmr/527cmr1-00frequentlyaskedquestions.pdf>

MA Building Code: <http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/csl/building-codebbrs.html>

Accessibility Regulations: <http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations-pdf.html>

MA Plumbing Code: <http://www.mass.gov/ocabr/licensee/dpl-boards/pl/regulations/rules-and-regs/248-cmr-1000.html>

LCCA (Lead Copper): Grant: <http://1.usa.gov/1W3BjBO> DEP Contact: Ken Pelletier: [Kenneth.pelletier@massmail.state.ma.us](mailto:Kenneth.pelletier@massmail.state.ma.us)

LCCA recourses: <http://www.mass.gov/eea/agencies/massdep/water/drinking/lead-and-other-contaminants-in-drinking-water.html#8>

Asbestos AHERA: <http://www.mass.gov/eea/agencies/massdep/air/regulations/310-cmr-7-00-air-pollution-control-regulation.html>

Dept. Labor Standards Asbestos Contact: Janet McKenna: [janet.mckenna@state.ma.us](mailto:janet.mckenna@state.ma.us) or <http://www.mass.gov/dols>

Elevators: <http://www.mass.gov/courts/case-legal-res/law-lib/laws-by-source/cmr/500-599cmr/524cmr.html>

IPM: <http://massnrc.org/ipm/>

OSHA BBP: [http://www.masslocalinstitute.info/workforce\\_protection/Model%20Exposure%20Control%20Plan%20for%20Municipal%20Employees.pdf](http://www.masslocalinstitute.info/workforce_protection/Model%20Exposure%20Control%20Plan%20for%20Municipal%20Employees.pdf)

MEMA Snow load: <http://www.mass.gov/eopss/agencies/mema/emergencies/winter-storms/roof-collapse.html>

DEP filings: <http://www.mass.gov/eea/agencies/massdep/>

IAQ MA DPH: <http://www.mass.gov/eohhs/gov/departments/dph/> DPH Contact: Sharon Lee (IAQ Inspector): [Sharon.lee@state.ma.us](mailto:Sharon.lee@state.ma.us)

Chemical Storage: Federal: <https://www.epa.gov/schools-chemicals/schools-resources-safe-chemical-management>

Chemical Storage: State: <http://www.mass.gov/eea/docs/dep/service/schlchem.pdf>

Boiler Pressure Vessels: <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXX/Chapter146>

Evacuation: <http://www.doe.mass.edu/ssce/emergencyplan/lawsregs.html>

NIMS ICS-100: <https://training.fema.gov/is/courseoverview.aspx?code=IS-100.b>

