

FACILITIES STANDARDS MANUAL OF OPERATION



**Minnesota Educational Facility
Management Professionals**

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(For informational purposes, project still in progress.)

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Executive Summary

To prospective users,

The MASMS Facilities Standards was developed through a development process, which brings together educational and vendor volunteers representing varied viewpoints and interests to achieve a facility standard.

The MASMS Facilities Standards is a document that has been created to aid educational facility managers in the day-to-day operations of educational institutions and is a work in progress. As more information is made available in the future by the various committees working on this project this booklet will be updated.

You will find a wide range of topics from cleaning and maintenance standards to security and health and safety standards which can be used all schools. We encourage members to use this information to improve their facilities day-to-day operations and create an efficient department.

We have also included a list of resources that can be contacted for additional information on the operations and care of educational facilities. This information is listed in Appendix A.

The MASMS Executive Board

CHAPTER ONE: CUSTODIAL CLEANING STANDARDS

PURPOSE

The purpose of the Custodial Cleaning Chapter is to provide facility managers and/or maintenance supervisors with an appropriate set of tools to effectively maintain their schools to an acceptable cleanliness standard as established by MASMS. This includes providing tools to establish appropriate accountability for resources needed and used to maintain these standards.

INTRODUCTION

This chapter should be used by facility managers and/or maintenance supervisors, to establish how facilities within their district can be maintained at an acceptable cleanliness standard. There are seven sections in the custodial cleaning standards chapter.

Section One: “Best Practices”

Provides specific information on how best to maintain an acceptable cleanliness standard within your schools. Included in this section is technical information, including what level of cleaning is considered acceptable by MASMS, specific examples of how this can most effectively be accomplished and maintained, as well as an established set of minimal resources needed.

Section Two: “Training”

Discusses what training is needed for your maintenance staff to perform their jobs as effectively and efficient as possible, and to assure their health and safety and the health and safety of all building occupants.

Section Three “Equipment Needs”

Discusses and lists specific equipment needed to assure that schools are being cleaned to the MASMS level of acceptable cleanliness. This section discusses possible equipment needs based on the size and building material make up of a particular building (i.e., carpet, hard flooring, window treatments, moisture issues, etc.). Additional information can be found on-line at www.issa.com www.appa.com or the “Planning Guide for Maintaining Schools”

Section Four: “Custodial Management Tools”

Provides information on different tools available to both facilities managers and maintenance supervisors to assist them in performing their jobs as effectively as possible.

Section Five: “Team Cleaning”

Provides information on custodial team cleaning, reflecting on specific responsibilities and staffing needs.

Section Six: “Cleaning Chemicals”

Provides information and references on cleaning chemicals.

Section Seven: “Cleaning Suggestions for Influenza & Other Diseases”

Provides suggestions and web-links referencing special cleaning for influenza and diseases.

SECTION ONE: Best Practices (Custodial Cleaning Standards)

The level of cleaning and the cleanliness standards established for each school district is determined by many factors. The intent of this section is to give facilities manager's advice on data collection tools to help them communicate to administrators and school board members what level of cleanliness you can support given your current budget and expectations.

The two most critical factors in this process:

- 1.) Budget
- 2.) Cleanliness expectations

The budget allocated for staffing drives the planning process. Staffing levels and the cleanliness expectations help prioritize how schools establishing cleaning standards. Often in schools we find that the staffing levels are not aligned with the school administration expectations. This is why facilities managers need tools to help them explain to administrators the difference between staffing levels and cleanliness expectations.

Quantify Standards, Expectations and Staffing Levels

Facilities managers must be able to quantify needs to show administrators and school board members why some expectations are not reasonable. The ability to quantify standards, expectations, and staffing levels is a critical communication tool for the facilities manager. Facilities managers need data and data collection tools that have established standards based on equipment inventory and the size of the equipment used in cleaning. **One study by the Minnesota Department of Health shows a correlation between cleaning levels/procedures and its affects on persons with allergies or asthma.**

There are many software programs available that allow you to input your equipment inventory, size of equipment, types of space cleaned, and square footage cleaned. A tool like this will give the facilities manager a base to establish level staffing. The software you choice should allow you to assign priorities based on the standards your school district establishes. **There are several very good web-sites that provide staffing calculation work sheets and advice. They are www.appa.com , www.issa.com or www.school dude.com**

Other Factors

There are many other factors that must be considered before facilities managers are ready to present data to establish staffing levels to administrators and school boards members. Activities like community education programs, student activities, after school programs, and food service must be considered.

Another factor is to know how much time the custodial staff is spending on non-cleaning activities. You may not receive support to eliminate these activities.

Staffing Levels Based on Equipment Use & Square Footage

When considering the staffing levels for your facilities based on equipment used and square footage cleaned there are 2 basic standards.

- 1.) Engineered standards are precise measurements taken of all the pieces of equipment used in custodial cleaning (push broom size, buffer plate size, vacuum cleaner size). The Engineered Standards are then linked to the amount of square footage to be cleaned and the equipment used to help determine the staffing level for cleaning that space.

- 2.) Averaged Standards use an average from all pieces of equipment in a given category (push brooms 24, 32, and 46 average is 30.6) and applies this data to the amount of square footage cleaned for a given space.

There are many resources to help establish cleaning schedules; ISSA, APPA, www.hillyard.com www.education.state.mn .

General Guidelines for Square Footage Cleaned

The chart below gives general guidelines that compare square footage cleaned to the expected standard. If your staff is cleaning 18-22K per cleaner and your standards are less than exceptional, you might want to take a look at the level of your training. It is noted that square footage of Kindergarten-First Grade etc. space, for example, is a heavier duty concentration and workload than the same amount of square footage in a secondary school. Community Education activities and other service requests are also factors that need to be weighed into the equation.

Sq. Ft. Per Cleaner	Standard	General Impression
Level 1 Cleaning 18 – 22 K	Exceptional	Orderly Spotlessness
Level 2 Cleaning 22 – 26 K	Exceeds Standards	Ordinary Tidiness
Level 3 Cleaning 26 – 29 K	Meets Standards	Casual Inattention
Level 4 Cleaning 29 – 33 K	Marginal	Moderate Dinginess
Level 5 Cleaning 33 – 37 and Over	Unacceptable	Unkempt Neglect

Several states have legislated cleaning standards, grounds care, and preventative maintenance. Arkansas and Alaska have adopted cleaning standards that can be viewed on their web-sites

SECTION TWO: Training (Custodial Cleaning Standards)

Training is the cornerstone of cleaning efficiency and safety in the workplace. All the tools in the world will be useless without proper training. Taking the time to properly train employees will make your tasks more efficient, safer, and save time.

Department Cleaning Standards

Before planning for training you should sit down with your staff and establish department cleaning standards that are common to all facilities. Examples of standardized tasks would include: restroom cleaning, classroom cleaning, chalk board cleaning, hallway cleaning, carpet cleaning, changing of light bulbs, and changing of ceiling tiles. These standards can then be disseminated to the staff and modified if necessary for each particular site.

Selecting/Training Trainers

Regardless of the type of structure your organization has the first step is to determine who the trainer(s) will be and to train the trainer(s). Choosing a trainer should not be taken lightly. The trainer should have some specific qualifications and personal qualities. The trainer must be experienced, pay attention to detail, be willing to study the subject, and act as a mentor. All employees learn differently and at different levels of understanding and this is why you should carefully choose your trainers, as patience is a critical characteristic for an effective trainer.

Once you have chosen the trainer you need to ensure the trainer is proficient in training the tasks. The trainer must understand your intent and expectations. Just as you give the employee the tools to be successful you must give the trainer the tools to be successful. This can only be done by training the trainer and ensuring the trainer understands your intent.

Training Frequency

Depending on the tasks involved you need to determine the frequency of training. Some tasks require a single training session, others may require several sessions, and others may require remedial training. All employees learn differently and at different levels of understanding.

Training Resources

To sustain effective training you and your staff must have training resources. These resources can be in many different forms and sources of media. Trainers need to have access to training resources. At a minimum, schools need to have a standardized custodial training manual with all tasks listed. The training manual should be supplemented with training aids as needed.

Effective training will make the workplace more efficient, safer, and instill a sense of pride in your employees work. The payoff is employees start to take pride and ownership in the facilities making your job much easier.

SECTION THREE: Equipment Needs (Custodial Cleaning Standards)

When planning for equipment needs and to get the most production out from a custodial department there are many things to consider.

- The size of the equipment for the job and the area. Example: Use a large area vacuum for hallways or large areas instead of a 16" vacuum.
- Time standards are directly affected by the size of the equipment. Both ISSA and APPA can offer assistance with equipment decision making.

Some other factors to consider before purchasing equipment are listed below:

- Air Quality – Use of heppa filters may be needed to maintain good air quality.
- Reparability-Availability of parts and service.
- Weight – (Mop head, backpack vacuum, etc.)
- Cost – (Ex. a riding vacuum may save a lot in labor costs over a walk behind)
- Usability
- Power source – Battery or cord
- Safety
- Availability of attachments
- Noise level – (Consider the environment it will be used in)

SECTION FOUR: Custodial Management Tools (Custodial Cleaning Standards)

The management of a custodial program requires a diverse perspective of facilities. It is impossible for one person to acquire all of the knowledge needed to perform this function. To be successful, you need to surround yourself with competent people, good vendors, and data processing mechanisms.

Your staff is KEY!

Hire the best and train them to be successful. Establish a sub-custodian program if your union/HR allows it. This process will provide you with proven, well trained people when full time positions open up. If you cannot use subs, do your homework, prior to recommending anyone for hire. Remember your staff will make or break your program.

Vendors

Your selection of vendors is the second most important part of your management process. Vendors supply you with more than products. They are good sources for training of your staff, new technologies, cost savings and other things that can help make your program work.

Technology

The age of the “stubby pencil” is gone. We need to collect data and use it to our best advantage. This recall of information is accomplished primarily by computer software/data base programs. We need to be computer savvy and incorporate data entry into our operations every day routine. There are several good proprietary software packages for facility management and operations. You can purchase one of these, make one of your own or use any combination of the two.

Key components needed for your custodial program are:

1. Data base
2. Word Processing
3. Custodial Schedules
4. Facility Management Software
5. Drawings
6. Inventories
7. Budgets
8. Connection to the Internet

Along with computers, photos are invaluable. Today’s digital technology provides an excellent venue for archiving and documenting information. This also enhances your professionalism in presentations to the Board and other interested parties.

SECTION FIVE: Team Cleaning (Custodial Cleaning Standards)

Custodial team cleaning relies on specialists with specific responsibilities -- individuals assigned to restrooms, vacuuming, trash and utility duties, but cross-trained in all the specialties to enable periodic rotating and substituting of duties.

The individuals are assigned to work systematically, moving into an area on the heels of specialists who preceded them. The approach differs from conventional “zone cleaning” in which one person assumes all responsibilities for a particular physical location.

Team cleaning is an enormous change to make, staffing-wise and equipment-wise. It’s a change for your staff to get used to. Like anything new it would be best to do a pilot program first and see how the staff and administration responds to it.

Outsourcing may not require schools to replace all custodial functions. Schools may choose to outsource only certain functions and keep others to maintain a certain level of customer service. The decision to outsource will depend on the level of support you get from your superintendent and school board. Outsourcing is not only a functional change but it is a cultural change that needs to be supported by all.

The discussion for schools surrounding custodial outsourcing involves customer service, security, and funding. It may make financial sense to outsource 2nd or 3rd shift custodial services. Contractors can afford to have better equipment and are capable of providing training for the people who work with them. Finding a company with capabilities that match the current and anticipated needs of the district or school is important in.

SECTION SIX: Cleaning Chemicals (Custodial Cleaning Standards)

Before purchasing any chemicals the facilities manager needs to make sure that the chemical are relatively safe. **Your cleaning chemical supplier should provide Material Safety Data Sheets for all chemicals you purchase and train custodial staff in their proper usage.**

SECTION SEVEN: Cleaning Suggestions for Influenza and Other Diseases (Custodial Cleaning Standards)

Because influenza and other viruses can be very hard to prevent cleaning procedures can provide some protection but the most effective strategy continues to be human behavior. Hand washing, covering coughs and sneezes, avoiding close contact are among the most important procedures schools can encourage staff and students to use when faced with any outbreak.

Listed below are several web-links that can help explain what schools can do to reduce exposure to influenza issues.

CDC's Action Steps

<http://www.flu.gov/professional/school/actionsteps.html>

MDH's Recommended Supply List

<http://www.health.state.mn.us/divs/idepc/diseases/flu/school/ipsupplies.html>

CDC's FAQ's (scroll down to contamination and cleaning)

<http://www.cdc.gov/h1n1flu/qa.htm>

CHAPTER TWO: MAINTENANCE STANDARDS

PURPOSE

The purpose of the Maintenance Standards chapter is to provide facility managers and/or maintenance supervisors with an appropriate set of tools to effectively manage their schools to an acceptable maintenance standard. This includes providing information to establish accountability for needed resources. Vital importance in maintaining facilities is sufficient funding dedicated to both deferred and ongoing maintenance.

INTRODUCTION

Computer Maintenance Management Software (CMMS) is the cornerstone to effective facilities management. It does not matter if the facility is the large or small, because all facilities managers need some level of CMMS. The purpose of any CMMS is to collect data for some management purpose. The data may be used to manage many different areas including but not limited to maintenance, energy, budgets, personnel, equipment, policies, and procedures.

Section One: Evaluations (Maintenance Standards)

Each facilities manager needs to evaluate what his/her maintenance management needs are. The larger the facility or school district the more CMMS will become a vital part of management and data collection. The use of CMMS is also an effective tool in presenting data or “speaking the language”, of business managers and school boards. As part of the planning process good information is extremely valuable. Resources that can help in the planning stages are; “Planning Guide for Maintaining School Facilities”, APPA, Schooldude.com, and American School and University.

In order to establish adequate funding levels school districts need to assess the current condition of their facilities. One theory that is very comprehensive is referred to as the “Facilities Condition Index”. It is based on the formula “Current Replacement Value” which provides a percentage of funding based on the square footage and condition of any facilities. Funding for capital investment of facilities generally ranges from 2% to 4% annually on the high end, with 1% to 2% being average. APPA defines both these terms in detail and provided a simple formula to calculate your funding level.

The nation’s schools are in very serious need of capital investment in order to address the backlog of deferred maintenance. The National Center for Education Statistics estimates that there is over 260 billion dollars of deferred maintenance lacking in our schools.

Every facilities manager needs tools to effectively manage facilities. Computer Maintenance Management Software (CMMS) will provide the facilities manager with tools to help manage their facilities and present the data when requested. The facilities managers need for CMMS will be determined by the size of the school district or site managed, the school boards need for information, staffing levels, and staff experience.

Areas where CMMS will help the facilities manager:

- Preventative Maintenance Management
- Preventative Maintenance Work Order Management (equipment)
- Work Request Management (teachers and staff)
- Budget Management
- Energy Management

- Staffing Management

Each facilities manager will need to determine the level of CMMS he/she needs to manage their facilities. Your school boards and business managers will help you determine the need for CMMS by the type and amount of data required from you. There are many CMMS programs out on the market but all are designed as tools to help you manage your facility(s).

Many CMMS programs are now web based and do not require the purchase of specialized software eliminating the requirement of licensing. Many of these programs all

Implementing CMMS is the responsibility of all facilities managers because it is vital we keep historical records. Keeping historical records is another tool for the facilities manager to review past practices or conditions in order to make better informed decisions about the future. The reason many organizations fail is because they fail to learn from history.

CHAPTER THREE: HEALTH & SAFETY

PURPOSE

Health and safety activities are completed in accordance with the Capital Expenditure packet from the Minnesota Department of Education (MDE). MDE defines these as “Per M.S. 123B.56, ‘Health, Safety and Environmental Management’ means activities necessary for a district’s compliance with state law and rules of the Departments of Health, Labor and Industry [MN OSHA], Public Safety [State Fire Marshal] and Pollution Control Agency [MPCA] as well as any related federal standards.

INTRODUCTION

Health and safety management activities are completed to protect employees of the school district as well as provide for safe learning environments for the students. MDE sends out a Capital Expenditure packet every year to Superintendents which outlines allowable expenditures utilizing the Health and Safety Levy. School districts are allowed to levy for these funds through a local tax which is used to fund these projects. These projects must go through an approval process which involves entering the proposed work onto the MDE Health and Safety website. Once entered, they are reviewed and provided a status as to whether it is allowed or not allowed. If the status comes back as a “Yes”, a school district has then secured funds to complete the proposed work. In addition to the Health and Safety levy, school districts are allowed to secure larger amounts of funds through an Alternative Facilities Bonding process.

SECTION ONE: Best Practices (Health & Safety)

The following is a partial list of programs and related activities that may be completed under Health and Safety. Some of the programs are mandatory and others may not apply to your particular situation.

Automated External Defibrillators (AEDs)

- ◆ Develop and implement a specific written management plan for AEDs.
- ◆ Conduct an assessment to determine how many are needed and recommend locations for installation.
- ◆ Assist with funding issues related to purchasing AEDS (fund raisers, grant applications, etc.)
- ◆ Coordinate training and assist with determination of who should be trained.

A Workplace Accident and Injury Reduction Program (AWAIR)

- ◆ Develop and implement a written management plan for workplace accident and injury reduction.
- ◆ Develop and implement a written plan for OSHA-mandated Safety Committees.
- ◆ Conduct Safety Committee meetings at least quarterly to identify and eliminate workplace safety hazards. Develop and document methods used to identify, analyze, and control new or existing hazards.
- ◆ Identify and document methods of how the plan will be communicated to all affected employees so that they are informed of work-related hazards and controls.
- ◆ Develop and document procedures for investigation of workplace accidents and corrective actions.

Air Permitting

- ◆ Conduct assessment and perform calculations to identify equipment and processes that require an air discharge permit.
- ◆ Develop and implement a written management plan for air permitting if applicable.
- ◆ Complete monthly and annual reports and submit to the Minnesota Pollution Control Agency.

- ◆ Maintain all air permitting records.

Americans with Disabilities Act (ADA)

- ◆ Conduct an assessment of facilities to determine compliance with ADA.
- ◆ Recommend and coordinate projects to address identified ADA issues.

Asbestos

- ◆ Coordinate abatement projects.
- ◆ Conduct required periodic and Third-year asbestos inspections.
- ◆ Conduct asbestos awareness training as needed.
- ◆ Maintain all records.
- ◆ Maintain/implement written management plan.

Bleacher Safety

- ◆ Develop and implement a written bleacher safety plan.
- ◆ Coordinate inspection of bleacher units and abatement of hazards.

Bloodborne Pathogens Standard-Exposure Control Plan

- ◆ Develop and implement a written Bloodborne Pathogens-Exposure Control Plan encompassing OSHA Standard 29 CFR 1910.1030.
- ◆ Survey the facility to identify job categories in which employees may be at risk for exposure (Exposure Control Plan exposure determination). **Document this process.**
- ◆ Train affected employees on proper specific and universal precaution methods and techniques.
- ◆ Coordinate and keep records of Hepatitis B vaccinations and declination/consent forms.
- ◆ Develop post exposure procedures.
- ◆ Evaluate engineering controls and document on an annual basis.

Community Right to Know

- ◆ Develop and implement a written Community Right to Know plan.
- ◆ Compile an inventory of products and develop product file.
- ◆ Complete annual Tier Two report and submit to Minnesota Emergency Response Commission and local fire department(s).

Compressed Gas

- ◆ Develop and implement a written management plan for compressed gases.
- ◆ Conduct inventory and evaluation of compressed gases.
- ◆ Conduct annual audit of inventory, postings/warning labels, and documentation.
- ◆ Conduct annual training as needed for applicable employees in compressed gas handling and use, respiratory protection, and emergency response procedures.

Confined Space

- ◆ Develop and implement a written management plan for confined space procedures.
- ◆ Conduct a workplace inventory and determine whether confined spaces are permit-required or non-permit required. Develop, distribute and post entry/exit permit requirements.
- ◆ Conduct annual review of program compliance, audit entry/exit procedural compliance, review permit use history and documentation, and provide initial and annual refresher training.
- ◆ Designate emergency rescue team and coordinate annual drills.

- ◆ Assist with purchase of specialized confined space equipment.

Electrical Safety

- ◆ Develop and implement a written management plan for electrical safety.
- ◆ Conduct annual training for affected employees.

Emergency Action Plan

- ◆ Develop and implement a comprehensive written crisis management plan with procedures for potential crises.
- ◆ Survey the facility and create severe weather and emergency exit route maps using CAD drawings.
- ◆ Conduct training for staff on crisis management, troubled persons/staff recognition, and violence prevention.
- ◆ Coordinate response action with local agencies.
- ◆ Develop quick reference emergency procedures flip chart for employees.

Employee Right to Know (ERK)

- ◆ Develop and implement a written management plan.
- ◆ Compile an inventory of chemicals and gather material safety data sheets for each product.
- ◆ Provide annual training for applicable employees.
- ◆ Maintain training records.

Ergonomics

- ◆ Develop and implement a written management plan for ergonomics.
- ◆ Conduct an assessment of employees (office, custodial, etc.).
- ◆ Coordinate abatement of identified ergonomic issues.

Fall Protection

- ◆ Develop and implement written management plan.
- ◆ Conduct an assessment of facilities.

Fire Protection / Fire Prevention

- ◆ Develop and implement a written management plan for fire protection/prevention.
- ◆ Conduct an assessment of facilities.
- ◆ Conduct annual review/update of written plan.

First Aid/CPR

- ◆ Develop and implement a written management plan for first aid/CPR.
- ◆ Survey the facility for first aid/CPR needs.

Forklift Safety

- ◆ Develop a written plan if applicable.
- ◆ Provide required training
- ◆ Assist with inventory, inspection, and carbon monoxide monitoring.

Hazardous Waste

- ◆ Develop and implement a written management plan for hazardous waste. These are defined as wastes that are toxic, combustible, corrosive, or reactive.

- ◆ Identify facility hazardous waste streams by functional areas and by waste stream types.
- ◆ Examine the potential for generating hazardous waste products each facility.
- ◆ Implement proper waste disposal procedures. Complete waste disposal manifests.
- ◆ Acquire an EPA generator number and MPCA annual permit for each building that generates hazardous waste.
- ◆ Provide training to affected employees. Conduct annual training if applicable according to VSQG or SQG criteria.
- ◆ Complete annual hazardous waste report for MPCA or local County government

Hearing Conservation

- ◆ Develop and implement a written management plan for hearing conservation.
- ◆ Assess all facilities and employees for occupational noise exposure.
- ◆ Coordinate annual hearing tests for affected employees.
- ◆ Recommend noise abatement or administrative controls to reduce or eliminate employee exposure, and coordinate the distribution of hearing protection devices.
- ◆ Conduct noise dosimeter testing.
- ◆ Conduct employee training and annual review/update of training records.

Hoist / Lift / Crane Safety

- ◆ Develop a written plan if applicable.
- ◆ Inventory of hoists and backhoes
- ◆ Assist with inspection and supporting documentation
- ◆ Provide training
- ◆ Assist with required recordkeeping

Indoor Air Quality (IAQ)

- ◆ Develop, implement and maintain an IAQ management plan and building walk through.
- ◆ Provide training to employees in indoor air quality.
- ◆ Maintain appropriate IAQ records.
- ◆ Coordinate IAQ investigations.
- ◆ Assist with any mold abatement.
- ◆ Coordinate any HVAC redesign, and or upgrades.

Infectious Waste

- ◆ Develop and implement a written management plan for infectious waste, if any. Blood or other potentially infectious materials are covered under the Bloodborne Pathogens Standard.
- ◆ Identify sources of infectious waste in each facility.
- ◆ Review current infectious waste handling procedures.
- ◆ Evaluate current infectious waste recordkeeping forms and procedures (including archiving).
- ◆ Provide annual training to affected employees.

Integrated Pest Management (IPM)

- ◆ Develop and implement a written management plan for integrated pest management.
- ◆ Prepare required notifications to the community.
- ◆ Coordinate with pest control companies to ensure proper pest management.
- ◆ Provide training to employees in IPM techniques, if applicable.

Lead Contamination Control Act

- ◆ Develop and implement a written management plan for lead contamination control.
- ◆ Report testing results and provide recommendations for areas with excess lead levels present.
- ◆ Assist with any lead abatement projects.

Lockout/Tagout

- ◆ Develop and implement a written management plan for lockout/tagout.
- ◆ Compile an inventory of applicable machinery and equipment.
- ◆ Develop lockout/tagout procedures for applicable equipment.
- ◆ Assist with purchasing of appropriate locks and tags.
- ◆ Provide training for affected personnel.
- ◆ Conduct annual audit of compliance with lockout/tagout plan procedures.

OSHA Inspections

- ◆ Conduct mock OSHA and other regulatory agency inspections.
- ◆ Participate in OSHA review of facility and provide management activity for programs.

OSHA Recordkeeping

- ◆ Develop and implement a written management plan for OSHA recordkeeping.
- ◆ Complete OSHA 300 Log.
- ◆ Review and investigate accidents, develop trend information, and recommend procedures and policies to reduce occurrences.
- ◆ Assist with the management of the Workers' Compensation Program.

Personal Protective Equipment (PPE)

- ◆ Develop and implement a written management plan.
- ◆ Conduct assessment of facilities to determine equipment needs.
- ◆ Provide training to employees on the proper care and usage of personal protective equipment.

Phase I Environmental Site Assessments

- ◆ Coordinate environmental site assessments of properties being considered for purchase.

Playground Safety

- ◆ Develop and implement a written management plan for each playground.
- ◆ Conduct periodic site reviews and management plan updates.
- ◆ Conduct an audit of outdoor playground facilities for the purpose of identifying equipment and site-related hazards referenced in ASTM 1487 and the Consumer Product Safety Commission's (CPSC) current guidelines.

Process Safety Management

- ◆ Develop and implement a written process safety management plan.
- ◆ Provide employee training as required.
- ◆ Conduct periodic review/update of written plan.

Radon

- ◆ Develop and implement a written management plan for radon.

- ♦ Review prior test data or initiate testing of at- or below-grade classrooms consistent with federal or state requirements.
- ♦ Provide recommendations for abatement for areas with excess radon levels present.

Respiratory Protection Program

- ♦ Develop and implement a written management plan for respiratory protection.
- ♦ Conduct workplace evaluation to determine respiratory protection needs.
- ♦ Provide annual respiratory protection program training to applicable employees.
- ♦ Coordinate annual medical exams, conduct and document annual fit test and records update.

Underground Storage Tanks (USTs) / Aboveground Storage Tanks (ASTs)

- ♦ Develop and implement a written management plan for underground and aboveground storage tanks.
- ♦ Complete an inventory of tanks including age, size, type, contents, spill protection, overfill devices, corrosion protection or leak detection systems.
- ♦ Develop and coordinate tank removal prioritization for under-equipped or leaking tanks.
- ♦ Coordinate removal/installation of tank systems.

Welding, Cutting or Brazing

- ♦ Develop a written plan
- ♦ Provide training and assist with required recordkeeping

SECTION TWO: Training (Health & Safety)

Depending on the structure of the school district, various individuals may become involved in Health and Safety. Training is provided by MDE in the form of “Health and Safety Boot Camp”. These seminars are typically provided once a year in various locations throughout the state. Additional training is provided through a “Town Hall Meeting” format which outlines the changes in the current Capital Expenditure packet.

Training is also necessary for all staff in the school district that may be affected by the previous list of Health and Safety programs. This training can be provided through videos, on-line or through training from a certified trainer.

SECTION THREE: Equipment (Health & Safety)

Various pieces of equipment may be necessary to provide levels of safety in coordination with the aforementioned list of programs. Each program should be assessed to determine if equipment is necessary. Some typical pieces of equipment may include personal protective equipment and lockout/tagout equipment. There are several catalogs and distributors out there that provide safety related equipment.

SECTION FOUR: Management Tools (Health & Safety)

There are several management tools that provide assistance with Health and Safety. The local Educational Service Cooperative offers management assistance through Mock-OSHA inspections, review of Health and Safety programs and budget assistance on projects of \$10,000.00 or less. Numerous software packages also exist which can provide assistance with a combination of Health and Safety and Facility Management. In addition, there are several consulting firms out there which can provide assistance with management and implementation of the Health and Safety programs.

CHAPTER FOUR: FACILITY SECURITY

PURPOSE

Facility security measures are steps taken to provide security for the building and its contents. These procedures do enhance the safety of the individuals in the space but are not to be confused with the emergency plan.

INTRODUCTION

Proper security measures are designed to control access to the building and specific areas within the structure. Other considerations are the monitoring of activities of people that have been granted access.

Security measures inherently breed inconvenience. This is why you need to closely evaluate each new procedure prior to implementation. If it is too inconvenient you will have people either ignoring it all together or finding some way to circumvent the system.

SECTION ONE: Best Practices (Facility Security)

1. Keys

Keys need to be controlled and documented. Outside door keys should only be given out to Custodial and Administrative staff members. If you are lucky enough to have card access, these keys can be eliminated all together.

2. Video Systems

Digital video systems can solve a lot of mysteries and reduce vandalism in your facility. Main entrances should be the first place to start this program. Digital technology with motion only settings make video user friendly and provide excellent support for court cases.

3. Card Access Control Systems

This technology allows for the elimination of outside door keys and provides flexibility of access levels. This program also provides data that can supplement your video system. (In most cases they can be tied together)

4. Key Pads and Combination Devices

These devices provide access to specific individuals for a space and eliminates the need for a key. This is an alternative but does not provide as much flexibility as a card system.

5. Motion Detectors

Motion detectors will alert you to times when people are in areas that are not authorized. These systems can be affective but are a bit prone to false alarms.

6. Sound Detectors

These devices are used primarily for glass breakage in sensitive areas that have significant glass in the outside walls.

7. Lighting

Appropriate lighting interior and exterior can enhance the security of the area. This can be tied into motion detection to provide another level of awareness.

8. Radio/communications equipment

Your security related staff needs to communicate remotely to properly respond to incidents. It pays to be more organized than the entities than you are trying to combat.

SECTION TWO: Training (Facility Security)

Typically administration, custodians and liaison take care of the nuts and bolts of a security program. Awareness is necessary for the rest of the staff to insure proper reporting and compliance with procedures.

The systems that are employed in your security plan vary from the use of a simple key to sophisticated computer and video systems. All employees need to be informed of policies and what systems are being used to implement the security plan. Different levels of training will be required for various groups of staff.

SECTION THREE: Equipment (Facility Security)

Various security devices and equipment:

1. Keys
2. Video Systems
3. Card Access Control Systems
4. Key Pads and Combination Devices
5. Motion Detectors
6. Sound Detectors
7. Lighting
8. Radio/Communication Equipment

SECTION FOUR: Management Tools (Facility Security)

As with anything else we do these days there are very sophisticated software packages available for managing the security task. These tools can be applied to all eight of the above categories.

APPENDIX A - ADDITIONAL REFERENCES

1. MASMS: (Minnesota Educational Facility Management Professionals) an organization whose members represent K12 through higher educational facilities. Excellent source for a wide range of facility, cleaning, maintenance, safety, and energy conservation related questions
2. APPA: Leadership in Educational Facilities provides information and resources for facility questions. Facilities Manager Magazine's article "The Facilities Condition Index" contains valuable information and calculations for assessing facilities.
3. Hillyard Floorcare: Their website offers customers a service called the "C-Cap Program" that estimates labor FTE's, annual cleaning chemical costs, as well total custodial costs.
4. Schooldude: Software provider focusing on educational facilities. Resource for many educational studies regarding maintenance, cleaning, and facility usage.
5. Minnesota Department of Health: An August 2008 study entitled "Cleaning, Indoor Environmental Quality and Health" outlines suggestions for custodial cleaning and its effect on the indoor environment. <http://www.health.state.mn.us/divs/eh/indoorair/schools/index.html>
6. ISSA: Group of companies that provides cleaning standards, cleaning times, and other valuable information involving all types of facilities.
7. School Facilities: A report entitled The Condition of America's Schools, a General Accounting Office article February 1995 was prepared for the U.S. Congress focusing on the problem of deferred maintenance in America's schools.
8. Planning Guide for Maintaining School Facilities: Compiled by ASBO International and the National Forum for Educational Statistics. Cover all aspects of maintenance for schools.
9. American Schools and University Magazine: Publishes their annual report M&O Cost Study, a survey of educational institutions regarding overall budgets for maintenance and operations.
10. RS Means: Provides information on construction costs and various maintenance related subjects.
11. Minnesota Office of the Legislative Auditor: Managing Preventive Maintenance for Local Government Buildings: A Best Practices Review School District Survey. This survey was conducted in 1999 by the Auditors Office and was sent to 347 schools with 308 responding. The survey focused on maintenance issues and how schools dealt with them. This link will take directly to that survey. <http://www.auditor.leg.state.mn.us/ped/pedrep/0006schl.pdf>