

Hazardous Chemicals in Your Operation

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Have you ever conducted an employee education session for all the hazardous materials in your operation? Have you considered any or all the items that may be present from chlorine, oven cleaner, benzene to hydrochloric acid?

The Occupational Health & Safety Administration (OSHA) standard 29 CFR 1910.1200 requires you to inform your employees of all the hazardous materials that they may encounter in the work environment.

Employee Training

You are required to provide this training upon initial assignment or whenever a new chemical is introduced into their work area.

Realistically, it is virtually impossible to do this training with the turnover experienced in the work environment, yet annual training during the off-season or prior to peak season is possible.

The chemicals that may be found in the workplace obviously will vary by department and you don't have to train all employees on all the chemicals present at the facility. What can be done is to have a general training session for all employees and then conduct departmental meetings to inform them of the specific hazards they may encounter.

Material Safety Data Sheets (MSDS) are required to be provided to you by your vendor for all the hazardous products you purchase. The MSDS contain a wealth of information and can appear to be very confusing documents. The commonality of all MSDS is the chemical name, manufacturer, required personal protective equipment, first aid procedures, spill or containment procedures, reactivity with other elements, flammability and exposure limits.

Over the years, I have found the best way to educate employees is to break the various components of a MSDS into 'bite size pieces'. By this, I mean, in order to have employees understand what the chemical is, look at one MSDS and then see what the product is by name, know how they can be exposed and what the first aid and clean-

up procedures are. Of course, you can delve further and look at flammability, explosive and other potential catastrophic characteristics.

Maintaining Your MSDS Book

How many MSDS books should you have in your operation? That depends on how many departments you have. I would recommend one book per department with a master copy in the office. The books have to be accessible to the employees, so keeping it in the locked maintenance office simply is not acceptable. Some operations keep all their MSDS on computer. This practice is acceptable; provided, once again, that all employees can access the information.

To satisfy OSHA requirements, your MSDS book has to have a table of contents with page numbers referencing the specific product. I would encourage you to adopt the practice of highlighting the product name and also highlight the first aid procedures. This approach will assist you in case of an emergency.

I have come across some MSDS books where it seems that everything is highlighted from the chemical name, first aid and spill procedures to the manufacturer's emergency phone number and this is just too confusing! The reason to highlight the first aid procedures is readily evident; if an employee is screaming – you want the first aid information RIGHT NOW! You don't want to have to scan a MSDS where everything is highlighted.

Departmental Concerns

Do you need a MSDS for every product in your facility? The answer is a qualified no. If you use a product in your operation in a similar fashion that you would use it in your home, you do not need a MSDS. A good example would be Raid® Wasp Killer. If you use one can every year or every few years, a MSDS would not be needed. However, if you are going to the local drug store every 2 weeks for another can, then an MSDS would be required.

Continuing with the above example, if the office, grounds, maintenance, pool, snack shack, tennis, Pro shop and kitchen all have cans of Raid®, each of these departments need to have a MSDS for this product.

Are you required to have a MSDS book for every department? The answer is NO, yet it is a practice that I would strongly endorse. A good practice would also be to purchase the same products for interdepartmental use. This way you'll be certain that there is a person to ensure that the MSDS for the item is available. Of course, there is obviously the obstacle of different personnel making purchases for the grounds and clubhouse.

Departmental Recommendations

With all the simulated OSHA site tours I have conducted, I have made the following recommendations:

GROUNDS DEPARTMENT

Use dividers in your MSDS book to separate the insecticides, fungicides, herbicides, petroleum products and also have a miscellaneous tab. Another concern is to ensure that the 4-color regulatory signs are present on the gas tanks and pesticide storage buildings.

PRO SHOP

This is one of the few departments that rarely has a MSDS book. Also it seems that there is rarely a fire extinguisher in any proximity to the flammables present at the re-grip station; the flammables are not stored in a metal flameproof locker and further the spray can for the flammable grip remover is rarely labeled.

OFFICE

This is where the master MSDS book should be kept. Rarely does the office ever have a MSDS book for the products in their area – glass & bathroom cleaning products, toner and believe it or not, there is even an MSDS for white out!

KITCHEN

Nowadays, there are color-coded concentrated chemical stations that are installed in the ‘mop’ closet that dispense portioned amounts of various chemicals. These stations have taken the guesswork out of mixing general cleaning solution, glass cleaner, floor cleaning and other solvents. They dispense pre-portioned amounts into quart bottles or into multi-gallon mop buckets virtually without any employee exposure. It is important that employees recognize the need to write the name of the chemical on the spray bottles. Just because the chemical color in a spray bottle is blue – it doesn’t mean that the solution is window cleaner!

MAINTENANCE / HOUSEKEEPING DEPARTMENTS

Again, the economical concentrated chemical stations are present for this department and the above concerns are applicable. Additionally, there are a host of other products that are available from Pledge® to WD40. Specific MSDS book recommendations vary due to the wide range of skills of the maintenance director. Does your operation have a wood working shop, an arc or MIG welder or do you have a person adept with refrigerants or plumbing skills? If any of these answers are yes, you will have quite a few items that have to be included in your MSDS book.

TENNIS

Rarely is a book available in this area and infrequently are the employees receiving any training. Further it seems that the cleaning and insect elimination products present are purchased at the local grocery store.

POOL

Your MSDS book for the chemicals in this area should be kept in this area. Even though this article is on MSDS, please ensure you have the required Personal Protective Equipment (PPE) that is listed on the MSDS for each of the chemicals. Specifically, chemical splash goggles and gloves. Other PPE may include respirators, aprons, boots, etc.

OTHER CONSIDERATIONS

You may want to conduct a full chemical inventory to ensure that you have MSDS for every chemical at your facility. It may be a time consuming procedure, yet you may find that you have 6 quarts of sulfuric acid tucked in a corner that no one knew was there.

Another practice might be to have a person responsible for all the chemical purchases and then ensure that the MSDS books are up-to-date for all departments.

What do you do with an MSDS for a chemical that is no longer used? Do you file it in the circular file? How long do you keep this discontinued product sheet? The answer is you have to keep discontinued MSDS for 30 years! (Your office staff will love that one!)

WHERE DO YOU GO FROM HERE?

Consider when the best time is for an annual training program. The general employee education session on how to read an MSDS is no longer than an hour in duration. The benefits to you are immeasurable when an employee can pull out an MSDS and react immediately in a time of crisis.

Schedule that complete chemical inventory and compare it to the MSDS you currently have.

Commit the necessary time and resources. Remember my favorite age-old adage: *“The staff doesn’t do what you expect, they do what you inspect!”*

A last thought is: It is too late to do anything when OSHA is at your door!

Additional information:

Standards Cited for SIC 7997; All sizes; Federal
7997 Membership Sports And Recreation Clubs

Listed below are the standards which were cited by **Federal OSHA** for the specified SIC during the period October 1999 through September 2000. Penalties shown reflect current rather than initial amounts. For more information, see [definitions](#).

<i>Standard</i>	<i>#Cited</i>	<i>#Insp</i>	<i>\$Penalty</i>	<i>Description</i>
=Total=	19	5	6575.00	
19101200	7	3	1050.00	Hazard
Communication				
19100147	2	2	2375.00	The Control of Hazardous Energy,
Lockout/Tagout				
19100215	2	1	450.00	Abrasive Wheel
Machinery				
5A0001	1	1	1500.00	General Duty Clause (Section of OSHA
Act)				
19040002	1	1	0.00	Log & Summary of Occupational Injuries &
Illnesses				
19040005	1	1	0.00	Annual Summary, Occupational Injuries &
Illnesses				
19100132	1	1	600.00	Personal Protective
Equipment, General Requirements				
19100133	1	1	0.00	Eye & Face
Protection				
19100134	1	1	0.00	Respiratory
Protection				
19100138	1	1	0.00	Hand
Protection				
19100151	1	1	600.00	Medical Services & First
Aid				