**The Importance of Understanding the REAL Ramifications of Disinfecting and Sanitizing Your Workplace**

With all things COVID-19 impacting our businesses, researching immediate actions to understand their impacts is critical. Some companies may feel the pressure and immediate need to “clean” everything. However, it’s important to know which cleaning compounds work in what situations, the impact to the materials they’ll be cleaning, and their composition and the potential hazards they may cause those workers applying them and working around them.

Most businesses are considering decontamination strategies where it makes sense. In some cases, this might be at the janitorial level, and in other cases, it might be more of an industrial solution involving the production floor, manufacturing processes and even potential products that need to be disinfected/sanitized.

**EPA-Approved Products**

Some definitions to understand:

**Cleaning** is the removal of dirts, soils and impurities from the surface.

**Sanitizing** is meant to reduce, not kill, the occurrence and growth of bacteria, viruses and fungi (typically reduces bacteria on a surface by 99.9%).

**Disinfecting** a surface will “kill” the microscopic organisms as claimed on the label of a particular product. ... The minimum level of effectiveness in a modern-day **disinfectant** is 100 percent kill of 6 log10 of an organism.

Both sanitizers and disinfectants are regulated by EPA. In order to substantiate their claims, testing is required to prove their function, and this would be the EPA certification. There are several pre-defined criteria that pertain to how they perform, at what concentration and conditions, what “bugs” they kill, how fast they work, etc. EPA registrations take time, often years. Companies can subregister under an existing formulation. That means they are using an already certified formula.

**How Will What You Are Cleaning Be Affected?**

All cleaners do not work with all materials. With the desire to decontaminate everything, one important item to consider is what you are actually “cleaning.” There are numerous products that are EPA-certified, and some will be on the acidic side. Others (most commonly) will be on the alkaline side, and even a few will be neutral. Their contents may include: hydrogen peroxide, quaternary amines, surfactants, acids, bases, etc.

Recently iSi evaluated a solution for disinfecting aluminum surfaces. With softer metals such as aluminum and copper, the possibility of corrosion or discoloration is much higher with certain disinfectants.

Most of your harder metals (steel, stainless, alloys) are unlikely to be affected.

These soft metal materials can be found in food processing plants, automotive, aerospace and other industries. Thus, it is important to know ahead of time what the results of using the cleaner will be.

Also, please make sure you’re applying the disinfectant per the product’s label and directions. Do not vary from those directions. Variances in application methods from what the label says may alter the effectiveness of the disinfectant, cause damage to materials, and may make you non-compliant with regulatory guidelines.

**How Will the Person Doing the Cleaning Be Affected?**

Make sure you know exactly what’s in the cleaners to be used. Most importantly, get their Safety Data Sheets (SDSs) and really read them and analyze them.

* How will its usage affect the person who will be applying it?
* What kind of personal protective equipment will be needed?
* Do you have that personal protective equipment on hand? With national shortages, do you even have a way to get ahold of it?
* How will it affect the atmosphere and air quality of the areas it will be used in?
* What does the overall tone of it say about the type of person and qualifications needed to apply it? Is it really something you’d be comfortable having janitorial staff work with, or does it need to be someone with a greater level of hazardous materials training?
* Do you have the staff on hand (right now) to take care of this?
* What is your overall risk?

Unfortunately some SDSs can be vague, confusing, and can even contradict themselves. So please be very careful and make sure you have a firm grasp on what you’re dealing with.

We Can Help Take Care of It

iSi has been pulled into some research gathering for current clients, and also has been providing onsite personnel for others. We have people on-staff to help you with researching and figuring out your requirements. We deal with confusing and contradicting SDSs every day and have the proper staff of safety and chemistry personnel on hand to work through them. We also have an entire team of hazardous materials and safety trained and experienced industrial cleaning technicians ready to support you onsite.

Give us a call, email us, or send us a message through social media and we will get back with you to see how we can help.

**OSHA Shelves Online Injury/Illness Reporting Deadlines for Now**

OSHA has delayed the July 1 filing deadline for injury and illness electronic reporting. No official reason was given for the delay and no additional deadline date has been given. As you may know, OSHA was to provide a means to conduct electronic reporting and had posted a message to check back on their site for further information, but that never came.

The rule is a subject of a number of federal lawsuits. Those who oppose the rule say making this information public would do more to damage a business’s reputation than it would to prevent injuries. The information could be accessed by potential customers, competitors, government agencies in the procurement process, and potential investors.

In addition, with the changes in administration and policies regarding reevaluating unnecessary regulations, there have been questions about the existence of the secure website system and procedures for reporting, which were promised by OSHA but never were disclosed.

**EPA Delays Upcoming Air Quality Regulations**

EPA has announced at least four postponements of upcoming regulations regarding air quality.

**RMP Rule**

In the final days of the Obama administration, EPA issued amendments to the Risk Management Program (RMP) rule. These included additional requirements for process hazard analysis, incident investigation, emergency preparedness, public availability of chemical hazard information, additional regulatory definitions, and audit requirements. In order to give the agency more time to review petitions, hear additional comments, and consider revisions, the new effective date has been moved to February 19, 2019.

**Emissions Standards for New, Reconstructed, and Modified Sources for Oil and Gas; NSPS Subpart OOOOa**

EPA has issued a stay on certain parts of OOOOa until August 31, 2017. It is reconsidering the rule as a whole, including fugitive emissions monitoring requirements for well sites and compressor stations. Initially, companies were to have a monitoring plan in place and perform initial LDAR compliance by June 6, 2016. EPA also wants to take another look at the entire rule. For now, they’ve issued a stay on fugitive emissions requirements, PE certifications, and standards for pneumatic pumps at well sites.

**Ozone Standard**

EPA has delayed the National Ambient Air Quality Standards (NAAQS) for ground level ozone. EPA is giving states another year to develop and refine their air quality plans. Last fall, states were to turn in their recommendations on what to do about those areas which couldn’t reach the 70 ppb standard. Then EPA was to make their final designations and set those recommendations into motion by October of this year. Now those designations have been postponed to October 2018.

**Landfill Methane Emissions From Municipal Solid Waste Landfills**

Over 1,000 municipal solid waste facilities were going to be impacted by two separate standards relating to methane emissions. EPA has issued a stay until August 29 to reconsider items such as design approval, definition of cover penetration, annual liquids reporting, surface emissions reporting, corrective action timelines, and overlapping requirements. EPA estimates that implementation of the changes as written could cost businesses more than $100 million per year to install and operate gas collection and control systems.

Dehydration can be a common cause of heat illness. Maintaining hydration is important, even if you don’t feel thirsty. Drinking water or electrolyte drinks are highly preferred to sugary and heavily caffeinated drinks. OSHA recommends drinking small amounts of cool water often before getting thirsty; 4 cups every hour during heat index values between 103°F – 115°F. Another recommendation is not to exceed 12 quarts of water per day.

An important reminder is that every person and situation is different. Some people require more water than others. These intake amounts depend on several things including the type of work being done, how much you’re sweating, and your personal risk factors. Don’t chug a large amount of water in the morning and call it good for the day; the important thing is *maintaining* hydration. You don’t flood your vegetable garden once at the beginning of the month and neglect it the rest of the month. If you do, you probably don’t have much of a harvest. Drinking throughout the day helps to better regulate core temperature and reduces strain on your cardiovascular system, keeping consistent body temperature.

It’s the supervisor’s duty to have a plan in place during days of extreme heat. If possible, rescheduling a job to a cooler day or even a cooler part of the day could make a difference. Getting a job done on time is important, as is maintaining client satisfaction. However, no part of a job is worth risking the health and safety of your team and clients should understand that.

It’s every person’s duty to watch out for themselves and their teammates. Providing cold water for your team is beneficial during hot days, as is having a first aid kit. If you have a first aid kit, kudos! If you don’t have a first aid kit, now is the time to get one. A few beneficial items to add to your first aid kit would be cold packs, cooling towels, electrolyte/salt tablets, or electrolyte powder drink mix. There are also specific first aid kits that can be purchased that include heat-stress care items.

Some symptoms of dehydration include:

* Extreme thirst
* Less frequent urination or dark colored urine  
  Decreased sweating
* Muscle cramps
* Nausea, dizziness or confusion
* Fatigue

If you’re a supervisor who would like some ideas on a heat safety plan or have questions on where to find quality first aid kits, contact iSi.

If your facility has an accidental release of an extremely hazardous substance and it causes injury, death, or substantial property damage, you now need to add the Chemical Safety Board (CSB) to your notification call tree.

This notification is in addition to other current notifications required to be made to not only 9-1-1, but other agencies such as the National Response Center (NRC), local emergency planning committees, state environmental agencies, OSHA, DOT, MSHA, local tribes, and others, all of which have their own reporting rules, deadlines and criteria for reporting.

The new rule is in effect now and can be found at 40 CFR Part 1604.

**Where Did This Come From?**

The CSB is known for its investigation and videos analyzing the root causes of chemical accidents. Although closely associated with safety, the CSB is actually from EPA’s Clean Air Act. Congress’s intent was for them to be an independent investigative body focused on investigation rather than regulation. However, when CSB was created, there was a statute included that required them to establish a process where accidental releases would be directly reported to them. CSB looked at doing this for a number of years and tried to enact a formal regulation in 2009, but that failed. In the meantime, they have been choosing to satisfy the requirement through a clause in their legislation that allows them to use information forwarded to them by the NRC, even though the majority of CSB’s notifications comes from sources other than the NRC such as the media and the internet.

CSB was sued by air quality activists to force them to officially create that reporting mechanism, and in early 2019, a U.S. District Court ordered CSB to come up with a reporting regulation within one year. CSB worked on the draft rule throughout 2019, held the comment period over the 2019 Thanksgiving/Christmas holiday season, and then finalized it less than 3 weeks later.

**Criteria for Reporting**

1. The owner or operator of a stationary source must report any accidental release of a regulated substance or other extremely hazardous substance from a stationary source into ambient air resulting in a fatality, serious injury, or substantial property damage.
   * Accidental release of regulated or extremely hazardous substances = This is not tied to a list regulated substances like those found in the other EPA rules, it’s more broad, that is, any hazardous substances that end up causing death or hospitalizations.
   * Stationary source = Any building, structure, equipment or installation which belong to the same industrial group, are located on one or more contiguous properties, are under the control of the same person, and from which an accidental release can occur.
   * Ambient air = Different from EPA’s ambient air definition, it’s any portion of the atmosphere inside, adjacent to, or outside the stationary source – not just that which affects the general public, but affects anyone.
   * Serious injury = Like OSHA’s reporting rules, it’s hospitalizations.
   * Substantial property damage = $1,000,000 estimated or actual
2. Notify the CSB within 8 hours at report@csb.gov, or 202-261-7600.

*(Note: As of this writing, there are no links on the CSB website that give reporting instructions, other than a small link to the final rule within a news item, so please keep this information handy until something is created.)*

1. If your incident is already required to be reported to the NRC, you can give CSB your NRC identification number in order to save time and effort. This needs to be completed within 30 minutes of submitting to NRC.
2. You can revise information reported to the NRC or CSB within 30 days. You can also submit a revised report to CSB within 60 additional days if you can justify why the revised report could not have been submitted within that first 30 days.

**What Needs to Be Reported?**

* Name and contact info for the owner/operator and the person making the report;
* Location information and facility identifier;
* Approximate time of the accidental release and brief description;
* Whether fire, explosion, death, serious injury or property damage occurred;
* Name of the material(s) involved, CAS number(s), or other appropriate identifiers;
* The amount of the release, if known;
* Number of fatalities and serious injuries known;
* Estimated property damage at or outside the stationary source; and,
* Whether the release resulted in an evacuation impacting members of the general public and others and:
  + The number of persons evacuated;
  + Approximate radius of the evacuation zone; and,
  + The type of person subject to the evacuation order (i.e., employees, general public, or both).

**Enforcement**

The CSB isn’t an enforcement agency, but they can turn over recommendations for enforcement to EPA. In the preamble of the rule, CSB has said they’ll be giving a grace period of approximately a year for education purposes, unless they find your company knew it was supposed to report and didn’t.

**Ability and Future of CSB in Question**

The ability of the agency to even carry out this new regulation is somewhat in question. Heavy inspector losses to the private sector have reduced the agency’s capacity to less than 10 inspectors, and there are questions about the agency’s ability to take on the amount of reports that will be coming in.

The current administration has been trying to remove CSB from the budget for the past few years, and each time Congress has put them back in. Some of the reasons: the perception CSB is duplicating investigative efforts already conducted by other agencies; reports of problems found by the EPA Inspector General regarding mismanagement; the loss of inspectors; the months/years it can takes for the agency to issue their root cause findings; and, CSB’s more recent tendency to suggest new regulations as a result of its findings.

The agency’s ability to govern itself is also at a critical junction. The Board, which oversees the agency and its policies, is made from Senate-confirmed Presidential appointees. They are supposed to have five board members and are now down to just one because the terms of the others have expired. The remaining board member’s term will expire in August 2020. There is one person nominated for appointment, but that has yet to be voted on by the Senate.

If CSB can survive all of that, then there’s also the possibility the rule will be challenged in court because of its quickness to be enacted, its shortened and inopportunely-timed comment period and the perceived inadequate time it took to consider comments before finalization.

However, it’s a federal law and must be followed until further notice. [Download the entire rule here](https://www.csb.gov/assets/1/6/prepublicationcopy2-3-20.pdf), taken from the CSB website.

**CSB Issues Safety Alert Regarding Emergency Pressure Relief Systems**

The Chemical Safety Board (CSB) has issued a safety alert regarding emergency pressure relief systems as the agency is continuing to see them playing their part in major chemical incidents.

**Who is the CSB?**

The [CSB](https://www.csb.gov/) is an independent federal agency who investigates the root causes of chemical incidents at industrial sites such as chemical plants, refineries, and manufacturing facilities. They are not a regulatory agency, but their teams of investigators make recommendations to OSHA and EPA, industry groups and the facilities they investigate.

In addition to investigation reports and root cause analyses, CSB issues [safety videos on both their website](https://www.csb.gov/videos/) and [YouTube](https://www.youtube.com/@USCSB) that summarize the important findings from their investigations in order to help prevent similar accidents from reoccurring.

**Emergency Pressure Relief System Issues**

In its investigations, CSB is continuing to find issues with the safety of emergency pressure relief systems. In several of their investigations these systems were found to be discharging toxic or flammable materials to areas which were not safe for workers or the public.

Emergency pressure relief systems are devices installed on storage tanks, silos, vessels and processing plant equipment to help relieve the excessive pressure caused by fire, process failure, equipment failure or some other change in condition. The pressure relief device is supposed to prevent the equipment it’s installed on from rupturing or exploding.

One of the most well-known accidents involving an emergency pressure relief system was the Union Carbide disaster in Bhopal, India in the 1980s. A runaway reaction generated high pressure conditions in a storage tank and a methyl isocyanate cloud escaped from the pressure relief system, killing 3,800 people, and injuring or creating long-term illnesses for tens of thousands.

**Three Key CSB Suggestions**

CSB recommends that rather than discharge into the air or back into the plant, emergency relief systems should discharge to a flare or a scrubber system.

CSB offers three key lessons from its findings:

**1. Follow Existing Good Practice Guidance**

Use API 521, *Pressure-relieving and Depressuring Systems* as a standard guidance. CSB says this document “…addresses many concerns about releasing flammable vapors directly into the atmosphere and generally requires using inherently safer alternatives for toxic release scenarios or when the potential exists for a flammable vapor cloud.”

CSB also recommends documents published by the Center for Chemical Process Safety (CCPS) called *Guidelines for Pressure-relief and Effluent Handling Systems* and *Safe Design and Operation of Process Vents and Emission Control Systems* as well as viewing American Institute of Chemical Engineers (AIChE) presentations and courses on Venting and Emergency Relief.

**2. Evaluate Whether the Atmosphere is the Appropriate Discharge Location or if There May Be Safer Alternatives**

CSB typically recommends flaring is safer than atmospheric vent stacks when venting flammable vapor into the atmosphere. Something like flammable hydrocarbons can cause a fire or a vapor cloud explosion when they are vented into the atmosphere. CSB recognizes flaring is safer, but does allow for venting into the atmosphere in special cases, especially when that venting will not put workers or the public at risk.

**3. Ensure Hazardous Chemicals Vented Into the Atmosphere Discharge to a Safe Location**

Where are the discharge points on your emergency pressure relief systems? Are they at areas where they can harm workers within its proximity at ground level or on walkways or platforms? Are they near building intakes? If your company is subject to [Process Safety Management (PSM)](https://isienvironmental.com/psm/) requirements, CSB says the required periodic reviews would be a good time to evaluate these issues as well as other audits or incident investigations.

**Read the Report**

Find CSB’s report, along with four case studies and their resulting recommendations at https://www.csb.gov/assets/1/6/csb\_eprs\_alert.pdf.

Asbestos is contained in thousands of products, from building materials and adhesives, fireproofing materials to consumer products. The use of asbestos has dramatically declined since the 1980s, and more than 50 countries have banned its use. However, one type of asbestos is still being used to make certain products in the U.S., and EPA is working to ban it. It’s called chrysotile, or white asbestos.

Chrysotile is the most common type of asbestos. Its soft, flexible fibers form a serpentine material that’s strong, heat resistant to 3000 degrees and non-conductive. Some chlor-alkali manufacturing plants that make chlorine and sodium hydroxide and some vehicle brake and sheet gasket manufacturers still import and use chrysotile asbestos in their products.

**The EPA Ban on Crysotile**

EPA has issued a proposed rule to ban chrysotile asbestos in the following products:

* Chrysotile asbestos used in bulk or in asbestos diaphragms in the chlor-alkali industry beginning two years after the effective date of the final rule;
* Chrysotile asbestos-containing sheet gaskets in chemical production beginning two years after the effective date of the final rule;
* Chrysotile asbestos-containing brake blocks used in the oil industry;
* Chrysotile asbestos-containing aftermarket automotive brakes/linings and other friction products, including for consumer use; and
* Chrysotile asbestos-containing gaskets, including for consumer use.

Asbestos diaphragms are used by chlor-alkali plants for the water treatment industry, but that use has been declining. EPA estimates only 9 chlor-alkali plants in the U.S. still use asbestos diaphragms as there are other alternatives, accounting for only 33% of all chlor-alkali plants. EPA was not able to quantify the scope of asbestos use in the brake and gasket industries.

EPA’s rule would also include targeted disposal and recordkeeping requirements that would take effect 180 days after the effective date.

**Other Upcoming Asbestos Studies by EPA**

As part of the Toxic Substances Control Act (TSCA), asbestos was one of 10 chemical substances on a list to be studied and put through a risk evaluation. EPA decided to do the evaluation in two parts. The first part was the risk evaluation for chrysotile, leading to this ruling on banning it. In Part 2, EPA will be looking at a number of other issues related to asbestos, including:

* Different types of asbestos (amphibole-type asbestos such as crocidolite, amosite, tremolite)
* Legacy uses of asbestos in commercial, industrial and consumer products
* Disposal phases
* Occupational exposure
* Consumer and bystander exposure
* General population exposure
* Potential exposed or susceptible subpopulations (children, workers, smokers, others)

In addition, EPA will be evaluating asbestos-containing talc and vermiculite. This does not apply to talc used in makeup, but talc that’s imported and used in industrial, commercial and consumer products such as filler/putty, crayons with talc-containing asbestos and toy crime scene kits with talc-containing asbestos. EPA will be looking at the import of this talc, distribution of it in commerce and its disposal. Vermiculite was used in building materials, and 70% of all vermiculite sold in the U.S. was extracted from an open pit mine in Libby, Montana until it closed in 1990.

EPA is accepting public comments on the proposed rule for chrysotile asbestos  at [https://www.regulations.gov/](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.regulations.gov%2F&data=04%7C01%7CGillespie.Taylor%40epa.gov%7C1f6ac08653864974598408da171f2be4%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637847719933714072%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=XhhJqbzIllAHB2D1YWAHH0GUtNty1PiWQtqW8ubNICI%3D&reserved=0).

**Will a Biden Administration Issue an Emergency Standard**

**on COVID-19 through OSHA?**

There have been indications that a Biden Administration may use OSHA’s power to use emergency temporary standards to create a federal OSHA emergency standard on COVID-19.

**Background**

The Trump Administration has not wanted to issue an emergency standard, stating OSHA has the current tools and standards in place to address the current pandemic. However, Biden has urged President Trump previously to immediately release and enforce an emergency temporary standard. The Obama-Biden administration also spent years preparing a permanent infectious disease standard. Some in Congress and in healthcare groups have been calling for a COVID-related standard. Given the significant impact of the current COVID-19 pandemic, a temporary emergency standard might be issued, leading into a permanent standard addressing infectious diseases.

**OSHA’s Emergency Temporary Standards Authority**

Under certain limited conditions, OSHA is authorized to set emergency temporary standards that take effect immediately and are in effect until superseded by a permanent standard. OSHA must determine that workers are in grave danger due to exposure to toxic substances or agents determined to be toxic or physically harmful or to new hazards and that an emergency standard is needed to protect them. Then, OSHA publishes the emergency temporary standard in the Federal Register, where it also serves as a proposed permanent standard. It is then subject to the usual procedure for adopting a permanent standard except that a final ruling should be made within six months. The validity of an emergency temporary standard may be challenged in an appropriate U.S. Court of Appeals.

**A Potential Roadmap to a Federal Standard – State OSHA Standards Already in Place**

In total, 14 states have adopted comprehensive COVID-19 worker protections through executive order and/or their state OSHA programs. Currently, there are 4 states that have issued a state-specific OSHA emergency standards through their state OSHA: Virginia, Michigan, Oregon and California.

Virginia was the first to implement an emergency COVID-19 standard on July 27, 2020. In Michigan, after an initial Executive Order by Governor Gretchen Whitmer was overturned by the Michigan Supreme Court, Michigan OSHA issued COVID-19 Emergency Rules on October 14, 2020. Michigan OSHA was able to use emergency status to bypass formal rulemaking. Oregon’s state OSHA rule took effect November 16, 2020 and is expected to remain in effect through May 4, 2021, and California’s Cal/OSHA adopted its Emergency COVID-19 Prevention Rule effective November 30, 2020.

**These states’ plans may become a guideline for a federal standard.**

**What May Employers Be Required to Develop in a Federal Standard?**

There are common themes between the policies of these 4 states and they have pulled items from each other. These items would likely become a part of a federal emergency standard:

**Conducting a Workplace Assessment**

This would include identifying employee tasks, work environment, presence of the virus, number of employees, facility size, working distances, duration and frequency of exposure, and hazards encountered.

**Develop an Exposure Control Plan**

This would include designating an on-site COVID coordinator, providing free face coverings and requiring their use, signage, social distancing, barriers, remote working, prohibiting sick employees access to facility, enhanced cleanings for positive cases, employee screenings, and notification of positive cases.

**Implement Controls**

This includes maximizing current ventilation systems, installing barriers, partitions, and airborne infection isolation rooms.

**Training Employees**

Training would need to be specific to the place of employment. Included would be reviewing control measures, proper use of PPE, how to report symptoms or positive cases, how to report unsafe working conditions, and an overview of the COVID-19 virus, symptoms, and means of transmission.

**Maintain Records of Training, Screenings, and Notifications**

This would include employee training, employee and visitor screenings, notifications as required to individuals and Health Departments.

**How Often Have Emergency Standards Been Used Before?**

OSHA has used emergency temporary standards 9 times. The last time they were used was in 1983 for asbestos. OSHA’s first emergency standard was also created for asbestos, and others have been created mostly for chemicals, including 12 different carcinogens, benzene and vinyl chloride. Most standards have been challenged in court, and although there have been a few that have been vacated, most have remained in place.

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iSi will be monitoring developments with federal OSHA and will update this article, or provide additional information in our blog as information continues to develop regarding this issue.

**COVID-19: A Potential OSHA Recordable Illness**

Recently published guidance from OSHA clarifies that workplace-contracted COVID-19 can be a recordable illness. That is, if it was contracted as a result of work duties. OSHA has remained somewhat vague on the details and nuances of this statement, but made sure it was included within its COVID-19 documentation.

Illnesses such as the flu and colds have always been, and continue to be, exempt from recordable illnesses recordkeeping. However, COVID-19 is NOT exempt from being a recordable, even though it contains some of the same symptoms as the flu and cold.

**Have a Plan**

At this time, some workplaces and tasks are considered to have a higher risk employee exposure. Most workplaces will have a low exposure risk. Those in healthcare, deathcare, airline, border protection, solid waste management and wastewater treatment are considered to be in the high risk category. Workers who are required to work within 6 feet of each other would fall in the medium exposure level because the virus is spread through person-to-person droplet contact within that 6-foot range.

As a result, OSHA says it is important for workplaces to take measures to prevent the spread of COVID-19 and have a plan for dealing with it. OSHA’s guidance specifically says there is no standard that covers COVID-19, but it would fall under the General Duty Clause that requires employers to provide workers with “…a place of employment which is free from recognized hazards that are causing or likely to cause death or serious physical harm.” They also mention the PPE standards (1910 Subpart I) which covers usage of gloves, eye protection, face protection and respirators and the Bloodborne Pathogens standard (29 CFR 1910.1030) which covers exposures to body fluids and blood.

OSHA has a dedicated [webpage](https://www.osha.gov/SLTC/covid-19/index.html) covering COVID-19 and they have published [a guidance document](https://www.osha.gov/Publications/OSHA3990.pdf) in conjunction with the Department of Health and Human Services. Both of these address measures on how to protect workplaces and workers at low, medium and high exposure risks and those who work in the specifically targeted high risk industries above.

**Respirator Usage**

Depending on work tasks and potential exposures, workers may need to wear masks, goggles, face shields, and/or respirators. In the guidance document, OSHA says that workers, including those who work within 6 feet of **patients known to be, or suspected of being, infected** and **those performing aerosol-generating procedures**, need to use filtering facepiece or better respirators. Remember that if your workers are wearing respirators, you must have a comprehensive respiratory protection program that has its own complete set of requirements. You can find the respirator standards at 1910.134.

**Hierarchy of Controls**

OSHA’s guide contains ideas for identifying and isolating sick people, where appropriate.OSHA also draws on the Hierarchy of Controls, just as it does for all other safety concerns. For example:

**Engineering Controls**

* High-efficiency air filters
* Increased ventilation rates
* Negative pressure ventilation in areas where aerosols are generated

**Administrative Controls**

* Encouraging sick workers to stay home
* Virtual or teleconferenced meetings rather than face-to-face
* Alternating days or extra shifts to reduce the number of employees in the building, increasing work distances
* Discontinuing non-essential travel
* Emergency communication plans
* Worker training

**Safe Work Practices**

* Promote personal hygiene with tissues, no-touch trash cans, hand soap, alcohol rubs and wipes, disinfectants and disposable towels
* Required regular hand washing or alcohol hand rubs, especially after removing PPE
* Post handwashing signs in restrooms

**PPE**

* Select based on hazard to the worker
* Ensure proper fit and refit
* Consistent and proper wear
* Regular inspections
* Regular cleaning, maintenance and repair
* Proper storage and disposal

OSHA says PPE recommendations are likely to change depending on location, current PPE effectiveness and the nature of the job, so check in with OSHA and the CDC website for updates on recommended PPE.

**Links to OSHA’s Documents and Site**

Below are links to resources for COVID-19 planning and information:

[OSHA and DHHS Guidance on Preparing Workplaces for COVID-19](https://www.osha.gov/Publications/OSHA3990.pdf)

[OSHA COVID-19 Website](https://www.osha.gov/SLTC/covid-19/index.html)

[CDC COVID-19 Website](https://www.cdc.gov/coronavirus/2019-ncov/index.html)

[EPA’s List of Registered Antimicrobial Products for Use Against Novel Coronavirus SARS-CoV-2, the Cause of COVID-19](https://www.epa.gov/sites/production/files/2020-03/documents/sars-cov-2-list_03-03-2020.pdf)

**Making Changes to Equipment or Operations? Do You Need a Construction Air Permit?**

***What Are Construction Air Permits and How Do We Determine If We Need One?***

Whenever you plan on making changes to equipment or operations, before you ever get started, your company should always determine whether or not you will need to obtain a construction air permit from your state (or local) environmental agency.

**Air Permit Regulations**

The Clean Air Act sets standards to prevent significant deterioration (PSD) of the air quality for an area. This is a federal regulation and EPA has the regulatory authority to enforce it, but it can also delegate authority to individual states by approving the state’s plans to enforce these regulations.

Air permits are required any time a company will exceed criteria for six different criteria pollutants (sulfur dioxide, carbon monoxide, particulate matter, lead, nitrous oxides, and ozone (volatile organic compounds)) or from a list of 187 hazardous air pollutants. Permits outline the emission sources at a facility and can include emission limitations, equipment maintenance requirements, and reference applicable Maximum Achievable Control Technology (MACT) standards and New Source Performance Standards (NSPS).

**What Kinds of Activities May Need an Air Permit?**

Some examples of equipment or processes that may produce emissions that may require an air permit may include:

* Compressors
* Paint Booths
* Degassing Vessels or Lines
* Engines
* Generators
* Ovens
* Incinerators
* Boilers

Some activities that may produce emissions to require an air permit may include:

* Loading/Unloading Operations
* Material Storage/Transfer
* Painting
* Solid Wastes
* Tank Loading/Unloading
* Truck Loading/Unloading
* Valves, Vents, Vessels and Tanks
* Wastewater Treatment
* Welding
* Asphalt Mixing/Rock Crushing

**Operating Permits vs. Construction Permits**

Air permits required for regular operations are called operating permits. They are applicable to the entire facility. There are different types of operating air permits based on whether or not you are located in an EPA area of nonattainment, how you much you will be emitting, and what you’ll be emitting.

Air permits can also be required for specific projects where you’re going to be making changes or additions, and these are called construction permits/approvals. Even though the word construction is used, you don’t have to technically be doing “construction” activities. In this instance, it means the *process* of making any change to an operation. Once the change has been made, that change then becomes part of the operating permit because it becomes part of the facility operations.

Depending on the state, sometimes operating and construction permits are done at the same time to prevent time loss between making the change and getting the new operation up and running. Some states do them separately. Some states require construction permits be incorporated into the facility’s operating permit, and other states will issue combined construction/operating permits.

**Construction Permits/Approvals**

Except in limited situations, **air construction permits must be received BEFORE your construction or change can commence**.

Some changes to your facility that could require a construction permit include:

* Installation of new process equipment;
* Modification to existing process equipment;
* Installation of or change in an emission control device;
* Debottlenecking of a process that allows for increased production; or,
* Increases to throughput or operating hours (if currently limited by an operating permit).

**Determining If You Need a Construction Air Permit**

As with operating permits, for a construction air permit one of the first things you’ll need to do is determine how this change will affect your Potential to Emit (PTE). This is the maximum design capacity of a stationary source to emit a pollutant under its physical and operational design. Calculate the PTE for each pollutant associated with this source. There are several different ways to do this calculation and your state may have a preference on which one you use to determine your PTE.

Once the PTE for the project or modification has been calculated, compare it to the construction permitting thresholds. Please note that in some cases, you may still need to have a construction air permit even if potential emissions are lower than the construction approval thresholds. For examples, what type of equipment it is or what type of process it is may affect its status. Check your state’s rules on what their guidelines are.

**Obtaining the Permit**

If your calculations tell you the project requires an air construction permit, the customary application must be submitted for approval. If a project is going to make such a difference that it will now trigger Major Source or Major Modification thresholds, you may need to obtain a Federal Air Permit. This is a lengthy application, and approval can take quite a long time, from several months to well over a year or two, depending on your state and the workload. So, it’s very, very important you try to do this well ahead of the time you plan on making the change.

If you already have an operating permit, be aware that your change that you are looking at getting permitted under the construction permit may cause changes to your operating permit at the same time. Know exactly what the conditions of your operating permit are and see how these changes will affect it so that if you are in a state which does operating and construction permits separately, you can get started on making changes to your operating permit now so that you can operate the results of the construction.

Some states have a streamlined construction permit application process for certain equipment such as emergency generators or boilers. These applications are short and sweet and typically receive agency approval quickly.

If the project meets the exemption from air construction permitting, retain all documentation for your files. Even if exempt from permitting, state or federal regulations may have requirements for the source, and you still may need to complete some state paperwork.

With all air permits, both construction and operating permits, once you have turned in your application, be prepared to wait. The state agency will check for the completeness of your application and may have questions. Once any issues have been resolved, you should receive a draft of your permit to review and comment on. If it’s not in your state’s policy to send a draft, ask for one, especially if it’s a combined operating/construction permit.

Make sure you read this draft! You will be held to what this permit says. Make sure everything about the permit is correct, including any equipment details, inconsistencies, unclear language, typos, etc. Remove or clarify any ambiguities to make the conditions as broad as possible. Any errors could cause you issues later when being inspected, leading to an inspector thinking you are doing something differently than what’s allowed in the permit.

Once the draft has been approved, there may be a public notice period depending on state policy, and then after that you should receive your permit.

Please note, your construction permit could take several months to be approved, so make sure you plan accordingly. And also remember…construction permits must be obtained BEFORE construction can be started.

[**How does the new final rule differ from the rules that previously applied to construction work performed in confined spaces?**](https://www.osha.gov/confinedspaces/faq.html#collapse7)

The rule requires employers to determine what kinds of spaces their workers are in, what hazards could be there, how those hazards should be made safe, what training workers should receive, and how to rescue those workers if anything goes wrong.

**What is New or Different About the Construction Rule?**

There are 5 key differences from the construction rule, and several areas where OSHA has clarified existing requirements. The five new requirements include:

1. More detailed provisions requiring coordinated activities when there are multiple employers at the worksite (for more detail, [see question below](javascript:void();)). This will ensure hazards are not introduced into a confined space by workers performing tasks outside the space. An example would be a generator running near the entrance of a confined space causing a buildup of carbon monoxide within the space.
2. Requiring a competent person to evaluate the work site and identify confined spaces, including permit spaces.
3. Requiring continuous atmospheric monitoring whenever possible.
4. Requiring continuous monitoring of engulfment hazards. For example, when workers are performing work in a storm sewer, a storm upstream from the workers could cause flash flooding. An electronic sensor or observer posted upstream from the work site could alert workers in the space at the first sign of the hazard, giving the workers time to evacuate the space safely.
5. Allowing for the suspension of a permit, instead of cancellation, in the event of changes from the entry conditions list on the permit or an unexpected event requiring evacuation of the space. The space must be returned to the entry conditions listed on the permit before re-entry.

In addition, OSHA has added provisions to the new rule that clarifies existing requirements in the General Industry standard. These include:

1. Requiring that employers who direct workers to enter a space without using a complete permit system prevent workers’ exposure to physical hazards through elimination of the hazard or isolation methods such as lockout/tagout.
2. Requiring that employers who are relying on local emergency services for emergency services arrange for responders to give the employer advance notice if they will be unable to respond for a period of time (because they are responding to another emergency, attending department-wide training, etc.).
3. Requiring employers to provide training in a language and vocabulary that the worker understands.

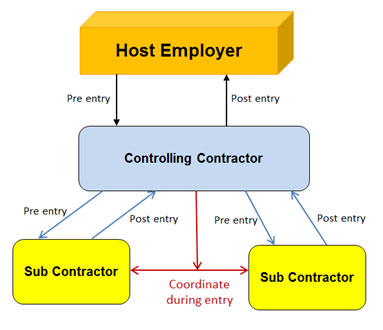
Finally, several terms have been added to the definitions for the construction rule, such as "entry employer" to describe the employer who directs workers to enter a space, and "entry rescue", added to clarify the differences in the types of rescue employers can use.

**Do employers need to have a written confined space program?**

Yes if workers will enter permit spaces.

**Tell me more about the conversations between host employers, controlling contractors and entry employers**

The rule makes the controlling contractor, rather than the host employer, the primary point of contact for information about permit spaces at the work site. The host employer must provide information it has about permit spaces at the work site to the controlling contractor, who then passes it on to the employers whose employees will enter the spaces (entry employers). Likewise, entry employers must give the controlling contractor information about their entry program and hazards they encounter in the space, and the controlling contractor passes that information on to other entry employers and back to the host. As mentioned above, the controlling contractor is also responsible for making sure employers outside a space know not to create hazards in the space, and that entry employers working in a space at the same time do not create hazards for one another’s workers.



The above diagram shows the information flow and coordination between these employers

**What Standard should I follow if my workers are doing construction AND general industry work in confined spaces?**

An employer whose workers are engaged in both construction and general industry work in confined spaces will meet OSHA requirements if that employer meets the requirements of 29 CFR 1926 Subpart AA - Confined Spaces in Construction.

**When does the new rule go into effect?**

August 3, 2015

**Who does it apply to?**

Anyone entering confined spaces at construction sties.