Lessening the Environmental Impact of Your Fire Suppression System

For many years, the only concern with a fire suppression system was whether or not it worked properly. However, serious issues about climate change over the last several decades have brought on a close scrutiny of fire suppression compounds.

First, the fire extinguishing agent halon was phased out in the 1980s because of its high ozone depletion potential. Then, hydrofluorocarbon agents (HFCs), which replaced halon, were found to also cause environmental damage. Now, with there being increased scrutiny of fire suppression compounds, and in some cases regulatory bans on them, facility managers and building owners alike are finding it necessary to take a closer look at whether their fire suppression system is earth-friendly. California has already issued a mandate that all new fire suppression systems in the state must use an agent with a global warming potential (GWP) below a minimum threshold level. It's expected that other states will be following suit.

If you are located in California and in the market for a new fire suppression system, you will have to ensure that any system you choose will use a fire extinguishing agent that complies with the state law. This begs the question – how can you make sure that your new fire suppression system is suitably earth-friendly to meet these governmental regulations? This requires you to do several key things before you invest in a new system.

1. **Choose a Qualified Fire Suppression System Contractor**
   To ensure that your new fire system is compliant, you will need to work with a skilled fire suppression system contractor who thoroughly understands the law and the available products on the market that comply with it.

2. **Determine the Right Fire Suppression System for Your Facility**
   Not all fire suppression systems are the same. The National Fire Suppression Association has classified fires into four types:
   a. Fires with combustible materials as its source, such as wood, paper, cloth, rubber, and some plastics.
   b. Fires in flammable liquids, oils, greases, tars, oil-base paints, lacquers, and flammable gases.
   c. Fires that involve electrical equipment.
   d. Fires with ignitable metals as its fuel supply.

   Most likely, your facility will have a combination of potential fire types, and thus, you should choose a fire system that is equipped to handle all possibilities.

3. **Select the Right Fire Suppression Substance**
   There are three types of substances that are utilized to suppress a fire. Some are more earth-friendly than others.
   a. Gaseous or clean agent fire suppression. The US Environmental Suppression Agency (EPA) recommends the use of non-ozone depleting fire suppression agents.

b. Water-based fire suppression. Environmentally safe, but not always the right choice in server rooms or where there are electronics present.

c. Aerosol fire suppression. A new technology that utilizes an aerosol that consists of ultra-fine particles that are expelled via generators to create a fog of suspended particles. This option does not have an impact on the environment as it uses a clean agent that is non-toxic and non-corrosive.

4. **Focus on Safety Functions**

The safety attributes of a fire suppression system can go a long way in preventing premature discharge of fire suppression substances. Thus, these attributes also contribute to the earth-friendliness of your overall system. For example, a lock out/abort switch can quickly disable a system when a worker can use a fire extinguisher to put out a localized fire.

The fire suppression system contractor you choose should work closely with you in determining what you specifically need now and into the future, along with taking into account state, city, and municipality fire codes. As well, environmental goals should also be considered. At Sabah International, we ask the necessary questions and evaluate all options before making recommendations. This gives you the confidence in knowing that you are truly getting a system that meets all of your needs. Want to learn more? Give us call today at 925-463-0431 or email us at nofires@sabah-intl.com.