

Sicamous fire chief Brett Ogino runs through an emergency training scenario for an ammonia leak.

Community gathers for emergency training

By Gail Johnson

Almost 60 people gathered in Sicamous to learn about emergency preparedness and how to respond in the event of an ammonia leak. What they learned was invaluable.

The harmful effects of ammonia exposure can unfold within seconds. In low concentrations it can cause respiratory problems, irritation to the eyes and nose, and chemical and freezing burns on the skin. In high concentrations, it can be fatal within a few breaths.

Wanting to leave nothing to chance, the Sicamous and District Recreation Centre arena teamed up with local emergency responders to carry out a large-scale training exercise, should a potentially deadly ammonia exposure ever occur in their midst.

Here's how the mock case unfolded at the arena: Toxic ammonia is leaking from the arena's ice plant and escaping the building, which is near an elementary

school and a shopping mall. There's a person down inside, while a power outage has paralyzed the emergency system that controls the centre's ventilation.

"We held this mock exposure to make sure we're proactive in what we do and how everything would be handled," says Sicamous and District Recreation Centre manager Wayne March. "We went through all the procedures and had people in place so they would know what to do and not be walking in blind to an emergency.

"You don't get second chances with this stuff."

Training exercise taught valuable lessons

Prevention of ammonia exposure is a priority for WorkSafeBC, as is an employer's ability to respond quickly and effectively in case of a leak. The recent day-long drill in Sicamous is an example of how

employers can collaborate with responders and community members so that everyone is prepared in the event of such an incident.

Nearly 60 people participated in the exercise, which was coordinated by Sicamous fire chief Brett Ogino. They included members of Sicamous, Malakwa, and Swansea Point fire departments, as well as staff from the Recreation Centre, Sicamous RCMP, Columbia Shuswap Regional District/Shuswap Emergency Program, the District of Sicamous, Eagle Valley Rescue Society, and BC Emergency Health Services. A worker from Complete Climate Control, which maintains the refrigeration system in the plant, also took part.

The end result was a few surprising, but invaluable — even potentially life-saving — lessons.

“You don’t get second chances with this stuff.”

—Wayne March, Sicamous and District Recreation Centre manager

One relates to wind direction. While an ammonia leak might prompt an immediate evacuation of the school, for instance, if the wind were blowing toward it, sending kids outdoors would be the last thing responders would want to do. Complete Climate Control manager Jamie Nicol advised the group that it would be better to lock down the building, keep children indoors, and evacuate only when the area was deemed safe.

March explains that the recreation centre has taken other steps to ensure safety, including simple but effective ways to monitor which way the wind blows. While the building has a large B.C. flag that flies several metres above it, there’s now another, smaller flag closer to the ground. “The wind could be blowing one way higher up, but a different direction lower down,” he says.

The exercise also cleared up misconceptions about how responders, particularly paramedics, are to deal with people covered in liquid ammonia.

“There might be a desire to remove the clothing off of the person, to get the toxins away from them,” Ogino says. “But the expert warned that this stuff could be frozen to skin, and peeling the clothing off right away during decontamination would not be the right thing to do.

“That was a good piece of information,” he says. “The whole thing was an eye-opening experience. It was great to get all the different response groups all together to do a big roundtable. Everyone wanted to know where they fit in and what they would do.”

First responders have also learned over the years that no one should ever enter the area of a leak alone and unprepared, since they could become a victim themselves. A two-person team each wearing full hazardous-material suits with properly fitted respirators is protocol.

Preventing a leak is the main goal

While being prepared for the worst-case scenario is crucial, prevention of a potentially deadly ammonia leak is the premier goal.

Employers that require the use or manufacturing of toxic process gas such as ammonia should connect with their local fire department, city hazmat team, and other responders, says Kim Stubbs, a WorkSafeBC industry specialist of municipalities, arts, tourism and hospitality.

“It’s about the employer determining their hazards and their risks, identifying what could go wrong, and making an appropriate plan that includes all individuals and agencies who may be involved should there be a leak,” Stubbs says. “Employers must document and practise that plan so workers are familiar with the procedures.”

Watch the video and find out more

A video of the Sicamous emergency preparedness workshop can be found on the website sicamous.today. For more information on ammonia safety, check out the Ammonia in Refrigeration Systems manual on worksafebc.com. 

