

2. Carbon Monoxide Exposure

As soon after school began, several kindergartners and first grade students complained of not feeling well. By 9:00 am five students were complaining of not feeling well. No employees at that time had complained, and the school staff thought maybe the children were coming down with the flu. Employees began to complain in the late morning and early afternoon, and five employees were admitted to the hospital and treated for carbon monoxide exposure. The school alarm system sent a silent alarm to the fire department around 1:30 pm. School staff took measurements of carbon monoxide levels with a commercial meter intended for home use. The readings peaked in the computer laboratory at 269 ppm (parts of carbon monoxide per million parts of air). TOSHA's Permissible Exposure Limits are 35 ppm averaged over eight hours and 200 ppm averaged over five minutes. The source of the problem was found to be related to a heating unit on the roof. A heat exchanger had failed and burned holes through the piping which allowed carbon monoxide to be pumped directly into the air ducts. A heating and cooling specialty company was called to the site and corrections were made. All carbon monoxide readings on the following day were 0 ppm.

Citation(s) as Originally Issued

Citation 1

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| Item 1a TDLWDF Rule 0800-1-1-.07(2)(b)1 | Employees were exposed to an airborne concentration of carbon monoxide listed in Table Z-1-A in excess of 200 ppm as a 5-minute Short Term Exposure Limit concentration. |
| Item 1b TDLWDF Rule 0800-1-1-.07(2)(d) | Feasible administrative or engineering controls were not determined and implemented to achieve compliance with the Permissible Exposure Limits. |
| Item 1c 1910.1200(e)(1) | The employer had not developed or implemented a written hazard communication program. |
| Item 1d 1910.1200(g)(1) | The employer did not have a safety data sheet in the workplace for each hazardous chemical which was used. |
| Item 1e 1910.1200(h)(1) | The employer did not provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment and whenever a new physical or health hazard is introduced into the work area. |



Inside heating unit where heat exchanger burned through pipes