

U.S. Environmental Protection Agency

Air Study at Grenada Stamping

Information for Workers



Fact Sheet #10

April 2017

Introduction

Last year, EPA directed Grenada Manufacturing, LLC (Facility), to perform indoor air sampling in the manufacturing building (commonly known as Grenada Stamping and currently operated by Ice Industries). Sampling in October 2016 and January 2017 showed elevated levels of trichloroethene (TCE) in the Facility's indoor air and in the air beneath the concrete floor (sub-slab). The Facility increased ventilation and air exchange within the building, and follow-up sampling in March 2017 showed improvements. The Facility's goal is to further reduce TCE concentrations by designing and installing an engineered mitigation system for long-term effectiveness. Levels of TCE in the air outside of the Facility were all below screening levels.

More information about EPA's ongoing work to oversee the cleanup of the site is posted at: www.epa.gov/grenadacleanup.

March 2017 Sampling

Findings from the March 2017 sampling showed decreased TCE concentrations in the indoor air sampling locations compared to the January 2017 and October 2016 sampling events (summarized in the table). In March, 15 indoor air locations were sampled in the office and production areas. TCE was detected above the screening level in five of the six samples collected within the office area. TCE was also detected above the screening level in seven of the nine production area samples collected. As in past sampling, TCE was detected above the screening level in all 14 sub-slab samples collected. EPA uses screening levels to help determine if further evaluation should take place.

During March, TCE was found to be above EPA's Removal Management Level (RML) for sensitive populations in six of the 15 indoor air samples collected in the office and production areas. There are two RMLs for TCE in indoor air, with the lower RML being used for sensitive populations (specifically to protect women of reproductive age). RMLs, often referred to as "action levels," are used by EPA to help determine if any future actions may be needed. A determination that a sample result is higher than a RML by itself does not imply that adverse health effects will occur.

Air Sampling Results for TCE at Grenada Stamping

	Range of Concentrations Detected	Screening Level	Action Level For Sensitive Population	Action Level
October 2016 and January 2017 Sampling				
Indoor Air	6.6 – 81	3	8.8	26
Sub-slab Air	70 – 2,900,000	100	NA	NA
NEW - March 2017 Sampling				
Indoor Air	2.4 - 24	3	8.8	26
Sub-slab Air	600 – 79,000,000	100	NA	NA
Notes: The range of concentrations for trichloroethene (TCE) detected are given in units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). NA – not applicable.				

Worker Health

The health effects of TCE depend upon the pathway, concentration, and length of exposure to the chemical. Long-term exposure to TCE vapors could pose potential health risks. Women in the first trimester of pregnancy are most vulnerable because of the potential for cardiac malformations in a developing fetus during the 3-week period where the heart forms. Some women may not be aware of their pregnancy during the critical period of the first trimester, so all women of reproductive age are considered to be among the **sensitive population**.

If you have health questions, you may want to consult your doctor. The Agency for Toxic Substances and Disease Registry (ATSDR) has TCE exposure information available for you and your doctors upon request. The materials explain how you can be exposed to TCE and how it may affect your health. For more information, contact:

- o Mississippi Poison Control Center: (601) 984-5577 or (800) 222-1222
- o Bruce Brackin, Mississippi State Department of Health: (601) 576-7725
- o Leann Bing, ATSDR: (404) 562-1784 or KBing@cdc.gov
- o Occupational Safety and Health Administration: (601)965-4606 or www.osha.gov/workers/file_complaint.html

Actions Being Taken

The Facility is implementing the following response actions with EPA oversight to reduce and maintain indoor air concentrations of TCE below RMLs in all areas of the building. The Facility is also monitoring to ensure that ventilation is not contributing to unsafe outdoor air levels of TCE.

*New fans added
to reduce TCE*



Immediate Interim Measures:

- Increasing building pressurization and ventilation;
- Increasing sampling of indoor air to confirm that TCE levels have decreased, using a sampling strategy with real-time monitors as well as longer time samplers; and
- Monitoring the movement of occupants in areas with higher detections of TCE in the air to limit exposure.

Long-term Measures:

- Sealing cracks in flooring where sub-surface vapors may be entering the building; and
- Reducing indoor air concentrations through installing an engineered sub-slab depressurization system (to remove sub-slab vapors before they enter the building).



CONTACTS

EPA Community Engagement Coordinator

Brian Holtzclaw
404-821-0697 (cell)
holtzclaw.brian@epa.gov

EPA Outreach Coordinator

Keriema Newman
404-562-8859 or 404-304-2490
newman.keriema@epa.gov

EPA Technical Project Manager

Brian Bastek
404-562-8511
bastek.brian@epa.gov

FOR MORE INFORMATION

Website

www.epa.gov/grenadacleanup

Information Repository

Elizabeth Jones Library
1050 Fairfield Avenue
Grenada, MS 38902