DIAMOND CHROME PLATING

NOVEMBER 21, 2019 PUBLIC MEETING

Response to Community Questions

This document answers the questions that were asked during the Diamond Chrome Plating (DCP) Public Meeting, hosted by the Department of Environment, Great Lakes, and Energy (EGLE), the Department of Health and Human Services (DHHS) and Livingston County Health Department (LCHD).

The answers are grouped by category or topic. Additionally, questions that covered the same concept were paraphrased into one question for ease of explanation.

All recorded questions are provided answers; however, if you do not see your question answered, please contact the appropriate department for more information.

Health-Related Questions:

Michigan Department of Health and Human Services Hotline
800-648-6942

Livingston County Health Department
517-546-9850

Environmental Evaluation Questions:

EGLE Environmental Assistance Center
800-662-9278

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Human Exposure and Health

1. **How much risk to our health was the exposure, especially for those that are pregnant and what actions should we take?**

   What would you advise to other residents that might have been affected by TCE?

   The amount of TCE in outdoor air coming from Diamond Chrome Plating (DCP) showed there may have been some level of health risk, but the actual risk to an individual can't be determined. This is because we do not know how much TCE or for how long an individual breathed it in. Actions have been taken to remove the health risk. DCP has stopped using the TCE chemical since the Public Health Order was issued on November 18, 2019. Local and state agencies continue to regulate DCP operations to ensure that human health and the environment are protected. For more information regarding what actions you can take, please see the Outdoor Air and For Your Home sections of this document.

   If you have health concerns about possible exposure to TCE, talk to your health care provider. You can also call MDHHS at 800-648-6942 to ask health-related questions. For more information about DCP and TCE, including detailed air sample results, please see the Ambient Air Sample Results section found on this website.

2. **If the degreaser was in operation long term, how long were we exposed and what are the long-term exposure effects?**

   We can't determine how long any person may have been exposed to TCE. What was found in recent air quality tests does not provide any information about exposures from the past. We are not certain what the long-term health risks are. Long-term air data are not available.

   Studies show that breathing in TCE may lead to certain health effects:

   - Breathing TCE during pregnancy may cause heart defects in the developing fetus.
   - Breathing TCE for a long time may affect the immune system.
   - Breathing TCE over a lifetime can increase the risk of developing kidney cancer.
   - There is also some evidence that TCE might increase the risk of developing non-Hodgkin's lymphoma (a type of blood cancer) or liver cancer.

   Having TCE exposure does not mean you will have health issues now or in the future. A person's risk of developing health effects depends on how much TCE they breathe, how long they breathe it, and how their body reacts to it. If you are concerned that you may have health problems related to possible exposure to TCE, talk to your health care provider.

3. **If TCE is breathed in, where does TCE go in the body?**

   When TCE is breathed in, some of it will be breathed out and some of it will move from the lungs into the blood. Once in the blood, TCE is distributed to other parts of the body where most of it is broken down into other chemicals. This mainly occurs in the liver. Most of the TCE that is broken down will leave your body in the urine within about a day. Once exposure stops, TCE will quickly

leave the fat. If TCE is taken in faster than it can be broken down and removed, it may be stored in body fat for a brief period.

4. **Are there specific medical tests to determine human exposure?**

   There are blood and urine tests that can check for TCE. These tests are not normally available through your doctor's office since they require special equipment and must be sent to certain laboratories. A test done a few days after exposure has stopped will not tell you how much TCE you were exposed to because TCE leaves the body quickly. Blood and urine tests will not tell you if TCE has affected or could affect your health, or if a current health condition is caused by TCE. You can talk to your health care provider about whether any medical tests would be appropriate for you.

5. **I have an infant that was born in the last two months, what should I do to make sure she doesn't have a heart defect?**

   Do kids need to have a cardiac workup if they feel they have been exposed?

   The concern for heart defects is for exposure of the fetus during pregnancy when the heart is forming. If you have concerns that your children are having health problems related to possible exposure to TCE, talk to your health care provider.

6. **I have a child and we go on walks near the facility. Should I be concerned for my child?**

   We do not have current scientific information showing children (up to age 18) would be affected differently than adults by TCE in the air. As with adults, breathing the highest levels of TCE detected in the community for a short period would not pose a health concern for children. However, breathing these levels long-term could increase the risk of developing certain cancers and immune system effects. Once the source of TCE has stopped, the chemical is quickly reduced from the outdoor air. DCP has stopped using TCE chemical since the Public Health Order was issued on November 18.

7. **Are people with respiratory issues who live near Diamond Chrome Plating more at risk?**

   The current scientific information does not show that a person with respiratory issues is at more of a health risk from breathing the levels of TCE that were detected near the DCP facility.

8. **How do we monitor for future health risks, specifically cancer?**

   Michigan does have a Cancer Surveillance Program that keeps track of cancer diagnoses throughout the state for general monitoring purposes. However, this surveillance program collects a limited amount of data and does not record any information on how that individual may have developed cancer, such as through their exposure to chemicals. Given the estimated level of exposure and the number of people that were potentially exposed near the DCP facility, it would not be possible to use health monitoring data to accurately determine whether there has been an increase in cancer or other health effects. If you have health concerns related to TCE, talk to your health care provider.

For Your Home

9. **How can I reduce the levels of TCE in my home? What brand and price are the air purifiers for those who want to protect their families?**

   If you're concerned about TCE in your home, you could have your air tested. If TCE is found in your home, you could buy an air purifier. Air purifiers that contain at least 15 pounds of activated carbon have been effective in reducing indoor air levels of TCE. These units generally cost around $400-$700. Product manufacturers should be able to provide information about whether a particular air purifying unit would meet your needs.

   TCE can also be found in some household products such as gun cleaner and automotive brake cleaner. If you have these products, store them safely in a shed or garage that is not attached to your home. Make sure containers are closed tightly to prevent vapors from escaping. If you would like to learn how to dispose of household chemicals safely, please refer to the Household Hazardous Waste page on the Livingston County website, www.livgov.com.

10. **Is there a home air tester? Are there detectors you can get for your home?**

    We are not aware of home air testing kits or home detectors to identify TCE in the amounts that would pose health risks.

11. **Will a radon mitigation system reduce the amount of TCE in the indoor air?**

    A radon mitigation system is similar to the systems used to prevent chemicals like TCE from coming into the home. However, the indoor air would need to be tested to see if a radon mitigation system is effective at reducing TCE that may be entering a home from subsurface (below the ground) contamination.

Outdoor Air Quality & Testing

12. **Are we looking at quality of air around schools?**

    Yes, outdoor air samples were taken at three locations next to daycare centers and two locations next to schools. These air samples were taken using 24-hour SUMMA canisters. They came back as non-detect, meaning TCE was not found. Detailed information on the sample results are available online. Please see the Ambient Air Sample Results section found on this website.

13. **How long does TCE stay in the air?**

    Once the source of TCE has stopped, the chemical breaks down relatively quickly in the outdoor air. This can happen within a few hours, depending on the wind speed. Since the Public Health Order was issued on November 18, 2019, DCP has stopped using the TCE chemical.

14. **How long will the SUMMA canisters stay in place?**

    SUMMA canisters stay in place for 24 hours. It takes a few days to a few weeks to receive the sample results. Detailed information on the air sample results are available online. Please see the Ambient Air Sample Results section found on this website**.**

15. **What were the outdoor air levels that triggered the Public Health Order to be issued?**

    The outdoor air sampling results that prompted the current public health action included a maximum TCE level of 22 micrograms per cubic meter ($\mu g/m^3$). This is about 10 times greater than the health-based screening level of 2 $\mu g/m^3$, which protects against heart defects in the developing fetus. Immediate action was necessary because short term exposure of pregnant women above this level could pose a health risk to the developing fetus.

Agriculture and Pets

16. **Does TCE build up in grass and should there be a concern for dogs that eat grass?**

    Should I be concerned with eating the food that food I grow in my garden?

    TCE does not generally build up in plants. If there is any TCE in plants, it tends to leave the plant and move into the air. We do not expect that TCE moved from the air into plants grown near the DCP facility at levels that would have posed a health risk to people eating vegetables or to dogs eating grass.

17. **We raise chickens and eat their eggs, does TCE build up in chicken eggs and become dangerous to eat, specifically for children?**

    TCE does not generally build up in animals. We do not expect that the levels of TCE that were found in the air near the DCP facility could have accumulated in chicken eggs in amounts that would be harmful to the health of adults or children eating the eggs.