

## City Manager's Office

## **MEMORANDUM**

**DATE:** May 11, 2023

**TO:** Mayor and City Council

**THROUGH:** Doug Thornley, City Manager Approved Electronically

**FROM:** Norma Santoyo, Director of Human Resources

Eric Sparks, Safety Management Analyst

**SUBJECT:** After Action Report on Potential Chemical Exposure at City Hall

During the May 10, 2023 Council Meeting, a council member reported exposure to chemicals while in Council Chambers and was feeling unwell. At approximately 4:00 p.m., Mr. Eric Sparks, the City's Safety Analyst, arrived at City Hall to assess the potential sources of exposure. He observed construction activities occurring on First Street directly in front of City Hall. He did not identify any odors or indicators of chemical contaminants present upon arrival.

Mr. Sparks engaged in interviews with seven city personnel, and one city contractor. Employees stated that between 1:30 p.m. - 2:00 p.m. all smelled strong odors on the first floor. One employee stated they smelled odors on the third floor of the building. For those occupying the first floor, all stated that it smelled of diesel, exhaust, or a combination of both. Four of the seven interviewed indicated the smell of acetone was also present on the first and third floor.

Mr. Sparks performed an exterior assessment of the building, interviewed employees from SNC who were performing construction activities, reviewed exterior security footage from that time, and performed air sampling.

**Findings:** At approximately the same time odors were noticed in the building, an SNC water truck began idling immediately next to the south facing doorways of City Hall. Mr. Sparks observed what appeared to be a building air intake present at that location. The odors identified by all interviewees were likely a result of exhaust introduced through the intake. Interviewees reported odors quickly subsiding once the truck departed.

Additionally, Mr. Sparks identified the use of a concrete cure/sealant used by the construction crews. The product contains high levels of stoddard solvent, which produces a strong kerosene-like odor. While the odor differs slightly from acetone, they can be easily confused with one

another. Mr. Sparks did not identify any other chemical sources, so he concluded it was likely the stoddard solvent produced the odors identified by four of the seven interviewees.

Stoddard solvents can be potentially harmful if employees are exposed above permissible exposure limits, or ceiling limits (short incursions). The odor of stoddard solvents is detectable in concentrations as low as 0.34 ppm. Permissible exposure limits are set at 500 ppm, with ceiling limits (short incursions) substantially higher. In the absence of sampling at the time of the event, Mr. Sparks could not confirm whether permissible exposure limits were exceeded during the event. Based on his observations of the chemical type, delivery methods, quantity used, and proximate location to the suspected intake point, he believes it is extremely unlikely exposures met or exceeded the permissible exposure limit.

**Health Exposures:** Air sampling was performed in the first floor lobby area at approximately 4:30 p.m. Readings did not indicate any potential exposure concerns. At approximately 5:40 p.m. additional air sampling was performed in Council Chambers. No potential exposure concerns were identified in this area.

One employee interviewed indicated they had a short-term fleeting headache. They stated they were unsure if it was related to exposure, as "it could have been dehydration". No other employees or contractors interviewed stated they felt any symptoms, however they all agreed the odors were strong. In the absence of sampling at the time of the event, Mr. Sparks could not confirm whether permissible exposure limits were exceeded during the event. In the absence of other reported illness, he believes it was likely these levels remained at a level below 100 ppm during the incursion

**Immediate Actions:** Mr. Sparks met with the SNC foreman on-site. He identified the suspected air intake and notified work crews not to idle any vehicles near the location.

Additionally, Mr. Sparks met with Kerrie Koski, Director of Public Works/City Engineer, and discussed strategies for future use of stoddard solvent near the intake system. Ms. Koski stated she would contact Facilities Maintenance to arrange a brief ventilation system shutdown when the solvents are used near this location in the future. It is anticipated work will be performed near the suspected intake this Friday, and for a number of days next week.

**Mid-Term Recommendations:** Mr. Sparks recommends signage be placed in front of the southern facing doors stating "No Idling Vehicles", or something similar. Temporary signage has been added as recommended.

**Long-Term Recommendations:** Mr. Sparks recommends an assessment of whether intake locations can be moved from publicly accessible areas. An assessment will be conducted as recommended.