

**Mountain View Corridor Air Working Group**  
**Meeting Minutes**  
**March 31, 2014**

**Attendees:**

- Reed Soper – former UDOT (MVC EIS)
- Cameron Cova – Breathe Utah
- Kathy Van Dame – Wasatch Clean Air Coalition
- Michelle Hofmann - MD, Faculty at U of U, Breathe Utah, co-chair of CAAT (Clean Air Action Team)
- Lee Logston – Planner, West Valley City
- Tina Bartholomew – Utah Transit Authority
- Linda Hansen - PTA
- Don Adams – Asst. Supt. of Support Services, Granite School District
- Steve Forbes – Construction Services Manager, Granite School District
- Paul Roberts – Sonoma Technology, Inc.
- Jerry Ludwig – Environmental Health & Engineering, Inc.
- Andy Neff – Langdon Group (facilitator)
- Jennifer Fowler – Langdon Group (co-facilitator)

**Meeting Minutes**

**Monitoring Update**

- Equipment was installed March 7-8, monitoring began March 18 and will continue through late June 2014
- Indoor (one classroom in each school) and outdoor monitoring underway at 4 schools (Hunter High, Hillside Elementary, Hunter Jr. High, Whittier Elementary)
- Monitoring Black Carbon (BC), PM2.5 and Carbon Dioxide (CO2)
- Also measuring wind speed/direction, temperature and solar radiation
- Results thus far indicate HVAC systems are removing about 25-50% of BC (about the same as the Las Vegas case study) and 33-50% of PM2.5
- Outdoor concentrations are relatively low - more data is needed
- Kids are currently on spring break and the readings are low.
- The classroom monitored at Hillside Elementary shows elevated CO2 levels. Teachers and students say room feels stuffy.
  - Monitoring room 107
  - Minimum requirements are not being met. 15 CSM (1000 parts per million) is regulation or code.
  - School built in the 1970's
- Referencing Las Vegas tests from a few years ago, measuring CO2 and ventilation.

**Website Monitoring Data**

- Now getting good data after troubleshooting the equipment issues.
  - 9 cell modems on cellular systems. Info and data are run several times an hour.

- Real Time Data: Sonoma Technology, Inc.
  - Recent data: Hunter High School inside 1.31 BC. Indoor concentrations are straying lower than the outdoor; same with Hillside Elementary.
  - The indoor concentrations follow the outdoor peaks and valleys but at lower levels.
  - Are there no idling regulations at the schools? Are buses idling or increase of traffic? There are peaks at 8 a.m. and 7 p.m.
    - These levels could be due to general traffic increase on nearby roads.
    - Need a little more data to understand why the increase is happening at 8 a.m. and 7 p.m.
  - Particles in the classroom remain because there is not a clearing out of air from indoor to outdoor. Numbers do not reach zero.
  - CO2 Data: Concentrations go back down to 200 on the weekends.
    - Concentrations during the day increase.
    - The outside air is 400 at Hunter High School.
    - The wind direction also affects when and where the pollutants are entering the schools and buildings from nearby roadways.
- Some schools have outdoor air data equipment attached to the HVAC system. Some schools show numbers from 400 to 800.
  - Above 400 is worrisome. There could be a nearby generator or similar (idling cars). Or the instruments may need to be re-calibrated.
- Would like to compare the results from the website with the Granite School District air monitoring system data. HVAC may need to be re-calibrated or serviced. (Don will send info to Paul.)
- All schools with upgraded air conditioning systems have the air monitoring attached to the HVAC.
  - Will find out which schools have these systems and provide the system settings and measured ventilation.

## Report

- Paul's comments on the report were helpful.
- Is there flexibility of the AWG to move away from the ROD? There is currently no need for this.
- Should the filtration and mitigation measures/monies be implemented through enhanced filtration in the schools?
  - Generally, Yes. The outdoor levels will indicate how quickly this needs to happen.
  - Reed: Would like to see more outdoor/indoor monitoring and data moving forward before making decision on the mitigation and filtration enhancements. Not ready to make recommendation to the schools. Would like the final recommendation with the full outdoor/indoor results.
    - These results should be available in June after further monitoring. A report could be ready in July.
  - Could be a few years of implementing the recommendations and enhanced filtration. The students will be exposed to the higher levels during that time.
  - Hunter High School: 9<sup>th</sup> grade students will be added to the high school and portables will be added and placed near the highway.

- Page 45: Install a portable HVAC system in the portable classrooms. This would be costly.
    - Will be presented to the board in May and decision would be made. If approved, the portables will be installed a year from August.
    - The portables should be placed as far away from the roadway as possible. This needs to be recommended. Put as close to the main building as possible. (Sonoma will add recommendation to report.)
    - Newer portables may be less expensive to add ventilation systems? The newer portables could be moved to the high school and the older portables moved to schools that are not as near to roadways.
      - The portables could be engineered in a way to improve the efficiency and reduce the cost associated with installing HVAC and ventilation.
      - Language can be added to the document to include re-engineered portables. (Would require Sonoma contract MOD to research options.)
  - Ventilation modifications, if approved now, would be installed in the summer of 2015. Is that too late? If the recommendation is made later this spring/summer, that time period would get pushed later.
    - The earliest construction of another phase of Mountain View Corridor would be Fall 2015. Funding is in place for one section (that is currently unknown). Probably go to SR-201.
- Will the AWG approve the report today?
  - Approve the report and put the PDF on the AWG website.
  - Decide later what information to include in the public presentation.
  - The report needs the addition and reference to L.A. industry standards before the report can be reviewed and approved. (Sonoma will add.)
  - The group will be allowed to review the report one more time before approving it. Sonoma will send the updated report and the group has by COB Monday, April 7 for final review.
- Are people going to read the report and wonder “so what?”
  - Should people know how the air quality data compares to other areas of the valley and other similar metropolitan areas?
  - Bountiful is the only area with air toxics data. The measurements are similar. The results are also similar to Los Angeles.
- The Air Quality Management District has put in standard requirements, “industry practice,” to mitigate air quality in 200-300 schools in the L.A. area.
  - This MVC AWG is following the standard practices of L.A.
  - This aspect should be included in the recommendation to the Board and the public presentation. (Sonoma will add reference to report.)
  - Need to decide how much detail is appropriate to present to the Board and to the public.

#### **Next Meeting**

- Schedule one more meeting Monday, April 28<sup>th</sup> @ 1:00 p.m. at Granite School District. Andy will send out the appointment.

**Action items**

- Discuss future AWG facilitation needs and adding contract MOD for Langdon Group services. (Reed to email AWG.)
- Discuss Sonoma contract MOD to research portable recommendations. (Reed to email AWG.)
  - Add language to the report to include re-engineered portables. (Sonoma)
- Add recommendations to report regarding portable location. (Sonoma)
- Add reference to L.A. industry standard in report. (Sonoma)
- Compare monitoring results from the website with the Granite School District air monitoring system data. HVAC may need to be re-calibrated or serviced. (Don to send info and CO2 measurements to Paul.)
- Determine who/when to present report to School Board (AWG)