

# **ROSEMARY'S MOUNTAIN QUARRY**

## **Facilitated Community Dialogue**

**May 4, 2011**

### **MEETING SUMMARY**

This facilitated Community Dialogue between residents of Fallbrook and others interested in the operation of Rosemary's Mountain Quarry and Granite Construction Company began with an overview of the dialogue process since its inception in February of 2008 by Susan Garrett, a neutral facilitator from Sharp Resolutions. A more detailed description of this process can be seen in a separate attachment to this summary. Also, for additional information about the quarry, please log onto [www.rosemarysquarry.com](http://www.rosemarysquarry.com) where summaries of all Community Dialogues, air quality monitoring reports, the Environmental Impact Report (EIR) for the project, SR 76 widening construction and other information can be found.

This evening's dialogue then moved to an update by Mr. Nolan of the current activities at the quarry and projections for the next few years. Because of the weak economy, the primary function of the quarry – rock crushing for aggregate for road construction – is at approximately 10% of capacity. The aggregate production will remain relatively low until the rock crushing plant is constructed and full operations begin. This full operation date has been extended by Granite from 2012 to 2013 because of the economy. Mr. Nolan also reported that following the opening of the asphalt plant in the last week of April, asphalt production is at about 20 % of its maximum output. Mr. Nolan estimates that the

asphalt plant will generate about 100, 000 tons in 2011 in gross sales and will cap out at about 500,000 tons per year thereafter.

The dialogue then turned to the featured presentation and discussion about the air quality monitoring results from January 2009 through the first quarter of 2011. The results were presented by Paul Schafer from the independent monitoring company, SCS Tracer Environmental, and supplemented by comments and observations by two panelists from the Air Quality Monitoring Working Group (Working Group): Jim Oenning from the Fallbrook community and Mr. Nolan from Granite Construction. Neutral facilitator Susan Garrett of Sharp Resolutions moderated the presentation fielding periodic questions and comments from the Fallbrook residents in attendance throughout the PowerPoint presentation.

After a brief summary of the development of the Working Group (of which a detailed background can be seen in the separate attachment), Mr. Schafer began the presentation. He reported that SCS Tracer Environmental is testing the site on an ongoing basis to determine the level of smaller particulates of dust that our bodies cannot safely emit (by coughing) from the lungs. This smaller size measures 10 micrometers or less (called PM 10), is about 1/7 the width of a human hair or less and has been set by the federal Environmental Protection Agency (EPA) and its California counterpart, the Air Resources Board, as an appropriate size to measure for public health protection purposes. Mr. Schafer noted that, "PM 10 is comprised of finely divided solids or liquids such as dust, fly ash, soot, smoke, aerosols, fumes, mists and condensing vapors that can be suspended in the air for extended periods of time."

Mr. Schafer then set out the daily (24 hour) average exposure health standards established by the federal EPA (150 microns/cubic meter) and the state agency (50 microns/cubic foot). He noted that these standards are set for chronic (repetitive) exposure at these particulate measurements, not for single or infrequent exposure at these levels. For comparative purposes, the monitoring at the quarry is conducted in the same manner and on the same six day cycle that is done throughout the state, including at the closest testing stations in Oceanside and Escondido. Mr. Schafer further noted that while the PM 10 health standards are being met in San Diego County, including at the quarry, they are not being met at some sites throughout the state, particularly in surrounding counties.

Mr. Schafer next identified the locations of the four portable monitors at the quarry. Because of the topography of the area, he noted that the upwind monitor is located at the south end of the quarry. This site, he explained, measures concentrations of PM 10 coming onto quarry the vast majority of time because the westerly wind blowing in from the ocean gets funneled northward because of the surrounding mountains and valleys. The downwind site is located directly opposite towards the other end of the quarry to measure concentrations of PM 10 coming off the site. Two other monitors on the east and west side of the quarry are used primarily to capture background PM 10 concentration in the adjacent areas as well as to serve as upwind/downwind sites when wind conditions vary on occasion (for example, during a Santa Ana condition).

The dialogue then turned to the results of the monitoring through the first quarter of 2011. Mr. Schafer reported that PM 10 concentration measurements throughout the nine quarters of testing (from January, 2008 through March, 2011) consistently averaged well below the California and federal standards for air quality health safety. During this two and a quarter year period, there were only a few days in which measurements exceeded the California standard of 50 microns/cubic meter and no days that exceeded the federal EPA standard of 150 microns/cubic meter. Except for one day, all measurements exceeding the California standard were recorded on the upwind site (i.e., coming onto the site) and, therefore, were not caused by dust created at the quarry. The panelists speculated that these higher levels were likely due to from construction on SR 76, other nearby housing construction, I-15 traffic, fruit washing at the Pankey orchards and other causes.

The only downwind measurement during the entire nine quarters that exceeded both the upwind level and the California standard occurred on August 18, 2010. On that day, there was a downwind measurement of 60.32 microns/cubic meter and an upwind measurement of 29.32. In reviewing Granite's work records, Mr. Nolan reported that while the amount of crushing was consistent with other days during the period, August 18th was a very hot, dry and stagnant day. Granite's records also indicated that more water was used that day to keep the dust down compared to most days in the quarter. He speculated that either this stagnant condition or nearby fruit farming could have caused the higher downwind reading.

Because this was the only day of the entire two plus year testing period where the monitoring differential demonstrated a contribution of PM 10 exceeding the California standard (but still well below the federal EPA standard of 150 microns/cubic meter), Mr. Schafer and the Working Group were not concerned by this anomaly. This lack of concern was additionally supported because monitoring for all PM 10 measurements since the beginning of 2009 had not shown Granite contributing to particulate levels beyond the California standard.

Mr. Schafer next outlined the measurement principles of PM 4 size crystalline silica. Mr. Oenning noted that size studies have shown that these smaller sized particulates can travel very long distances and are of particular concern because repeated exposure to them can cause a lung disease called silicosis. During the 3<sup>rd</sup> quarter of 2010 the monitoring included the addition of two monitors at the upwind and downwind sites to measure concentrations of crystalline silica in the respirable range (PM 4 or below) to compare directly with the California Office of Environmental Health Hazard Assessment (OEHHA) Reference Exposure Level (REL) for crystalline silica using the identical sample size.

During this quarter, there was only one measurement of PM 4 size crystalline silica that exceeded the OEHHA standard of 3.0 microns/cubic meter. This measurement also occurred on August 18<sup>th</sup>. As noted above, August 18, 2010 was a hot, dry and stagnant day. Mr. Nolan's again speculated that this reading appeared to be due to the weather conditions or nearby fruit farm activity. As with the PM 10 measurement noted above for this date, the Working Group was likewise not concerned – because it was an anomaly and because of Mr. Schafer's representation that crystalline silica has serious health implications only with chronic exposure to levels above the REL, not very infrequent ones.

After outlining the data limitations of this type of monitoring (detailed in the report that can be viewed on the quarry website), Mr. Schafer then presented SCS Tracer's conclusions regarding the quarry's activities:

- Site #1 was predominantly the upwind monitoring site and Site #4 was predominantly the downwind monitoring site.

- All of the samples (Upwind and Downwind) taken in the last two quarters in regards to PM10 concentration were significantly less than the state standard ( $50 \mu\text{g}/\text{m}^3$ ).
- The significant relative humidity and precipitation during the past two quarters significantly reduced the airborne concentrations of PM 10, both regionally and at the quarry.
- For the crystalline silica sampling performed during the third quarter of 2010 the arithmetic mean of the crystalline silica concentrations per site were considerably less than the OEHHA standard. Also, the mean differential of the upwind and downwind monitoring site was  $-0.04 \mu\text{g}/\text{m}^3$ . On an average basis, the quarry did not have a significant impact on elevated levels of crystalline silica downwind from the site during this quarter.
- The Quarry was not an appreciable source of crystalline silica or PM 10 relative to background levels in any of the 9 quarters this sampling project has been in operation.

In addition to clarifying the monitoring results, the panelists also addressed another concern raised by the community: heavy layers of dust many residents have found on their windows and patios the past couple of months. After discussion by the panelists and the community participants in the audience, it was agreed that the dust was most likely generated by construction of SR 76 west of I-15 and a concrete plant being built by the Rainbow Water District just south of Rancho Monserate, not by the quarry.

At the end of the dialogue, Mr. Nolan showed a video of a blast at the quarry that was conducted in March of this year. Before the blast, noise monitors were placed at three locations surrounding the quarry: at the Granite Ranch House (located between the quarry and Pankey orchards); near Rice Canyon; and, at Lake Rancho Viejo. The video showed the noise readings at the locations and all were within environmentally acceptable ranges. It was noted that the noise from the quarry blasts lasts between 2 and 3 seconds and are very different in nature and

intensity to the blasting done at Camp Pendleton. This video can be viewed on the quarry website.

The community participants in attendance thanked Mr. Nolan and Granite Construction for providing information to Fallbrook residents about the quarry's operations and for conducting the air quality monitoring and the Community Dialogue was adjourned.