

ROSEMARY'S MOUNTAIN QUARRY

Facilitated Community Dialogue

November 3, 2010

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 a review of the dialogue process since its inception in February of 2008 by neutral facilitators from Sharp Resolutions, Inc. A detailed summary of this process can be viewed on the Granite website devoted to the quarry at www.rosemarysquarry.com along with summaries of previous dialogues, air quality monitoring and reports, the EIR for the quarry, SR 76 widening construction and other information.

Gary Nolan, Senior Project Manager for Granite Construction, then gave an update of the quarry's status and activities. He reported that the quarry is producing about 5000 tons of crushed rock per month, almost all of which is being used for public works highway and road construction. Because the economy remains slow, particularly new private construction, Granite is producing about 10 -15 % of the quarry's permitted capacity. The crushing is being done by a portable crusher that will eventually be replaced by an enclosed plant that will be built when the local economic environment will support a level of production closer to full capacity. Mr. Nolan further reported that there will be no more blasting until next spring because Granite's inventory of large rocks are sufficient for projected needs until then.

The facilitated dialogue then moved to the air quality monitoring at the quarry. After a brief overview about how the Air Quality Monitoring Working Group (Working Group) – made up of community members and Granite Construction representatives – was formed following the July 2008 Community Dialogue to address air quality concerns raised by the community. Jim Oenning, a member of the group from the community, and Mr. Nolan outlined the purpose and goals of the group. Mr. Oenning explained that the primary concern of the community was the possible exposure to crystalline silica (microscopically small dust particulates) that are created by the crushing of rock to create aggregate for road construction and that can cause serious health problems for human lungs (called silicosis). This concern led to the creation of the Working Group to develop with Granite Construction an air quality monitoring plan and system to test the air coming off of the quarry to ensure that the quarry’s activities are safe for Fallbrook residents.

Mr. Oenning also noted that, according to his research, no other quarry in North America is conducting the level of air quality monitoring being done at Rosemary’s Mountain. Both he and Mr. Nolan explained that Granite’s permit requires opacity testing (a form of visual test performed by persons certified at the quarry to determine the extent to which one can see through dust created at the site) but does not mandate more extensive monitoring of the type created by the Working Group.

Review of the Creation and Goals of the Dust Monitoring Working Group

[Note: The following few paragraphs are excerpts from the March 3, 2010 Community Dialogue that more fully described the creation and background of the Air Quality Monitoring Working Group since its inception in July, 2008. This background was briefly summarized at this dialogue but is provided here to give readers new to this process a fuller understanding of the Working Group’s purpose and efforts.]

Mr. Oenning and Mr. Nolan noted that after extensive discussions, the Working Group decided to have three phases of monitoring done at the quarry: the first phase monitoring for the larger particulates (PM 10 size – 10 microns and

smaller) since the vast majority of dust created would be of this greater size from the construction of the quarry and the widening of SR 76; the second phase, after the full quarry operations begin in 2012 or 2013, will monitor primarily for crystalline silica (PM 4 size -4 microns and smaller) because of the greatly increased amount of rock crushing; and, the third phase, when the asphalt plant is built and operating, will include measurement of even smaller particulates (PM 2.5 size – 2.5 microns and smaller) from diesel emissions.

After extensive screening and interviewing, the Working Group selected the independent air quality monitoring company, SCS Tracer Environmental to conduct the monitoring of the quarry in 2009. It was also decided to conduct the monitoring for the PM 10 and below size particulates on the same 6 calendar day cycle done statewide by the Air Resources Board and more locally by the San Diego Air Pollution Control Board (including the closest air quality testing sites in Oceanside and Escondido) so that the results of these regional sites could be readily compared to the quarry. Mr. Nolan noted that this staged monitoring plan has been approved by the County.

It was made clear by Mr. Oenning throughout the dialogue that it is his and his fellow community members of the Working Group's goal and objective to make sure that, throughout the life of the quarry, it is not emitting dust particulates that are harmful to the public (particularly crystalline silica). Mr. Nolan similarly maintained that it was his objective to demonstrate to the Fallbrook community that Granite's work at the quarry will cause no harm to the community from the additional particulates that may be created during its operations. Mr. Nolan stated that there are or will be several ways that Granite Construction will help keep any particulates created at the quarry from leaving the site including: frequent watering of roads and crushing equipment, etc. to keep dust down; coating the road with dust suppressant products; when full operations for aggregate begins, all rock crushing will be enclosed in buildings equipped with bag houses for dust reduction; all roads will be paved, including those leading into and out of the quarry; and spraying truck loads with water as they are loaded.

In addition to the PM 10 monitoring in 2009, the Working Group also decided to have some random analyses conducted of the samples to determine the amount of crystalline silica that may be present at the site. In the last two quarters

of 2009 six such analyses were performed by Tracer, the results of which are described below. The reason for gathering this data before the second stage of monitoring a few years from now, according to Mr. Oenning, is to establish some baseline measurements for future comparisons (specifically to those collected when full rock crushing operations begin).

3rd Quarter 2010 Air Quality Monitoring Report

The November 3rd Community Dialogue then moved to the night's featured presentation and discussion of the air quality monitoring results through the 3rd quarter of 2010. Paul Schafer from the independent monitoring company, SCS Tracer Environmental, led the presentation during this portion of the dialogue with Mr. Oenning and Mr. Nolan adding their comments from the community's and Granite Construction's perspectives. Please note that the 3rd Quarter 2010 Air Quality Monitoring Report and all others to date can be viewed in their entirety on the website dedicated to the quarry at www.rosemarysquarry.com.

After describing the equipment used to monitor the dust at the quarry (that meets EPA approved standards), Mr. Schafer gave two reasons why the monitors were set to measure only smaller particulates measuring 10 microns or less (PM 10): first, because it is only in this smaller size that the state and federal environmental agencies have determined that the dust would be a significant health hazard (because our nasal passages and lungs are capable of filtering or coughing out larger particulates); and, second, so that the results could be directly compared to the identical PM 10 size measurements being conducted around the state. Mr. Schafer further noted that monitoring is done on the same six-day cycle as the statewide schedule so that monitoring results from the quarry can be compared to the readings in the nearest monitoring stations in Escondido and Oceanside. In an aside regarding these locations, Mr. Oenning commented that because of the extensive development activities in the area being done now or in the coming years (e.g., SR 76 expansion, Palomar College construction, commercial development, the quarry and other projects), it might be in the community's interest to press the state for an additional monitoring station to be located in the Fallbrook area.

Mr. Schafer next identified the locations of the four portable monitors at the quarry. Because of the particular 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 amounts in the adjacent areas as well as to serve as upwind/downwind sites when wind conditions vary on occasion.

During the third quarter of 2010, two additional monitors were added to measure particulates measuring 4 microns or less (PM 4). These were located at the upwind and downwind sites (at the south and north ends of the quarry) specifically to capture samples to be analyzed for crystalline silica content. The Working Group added this smaller size measurement to directly compare to the standard set for health safety of crystalline silica by the California Office of Environmental Health Hazard Assessment (OEHHA) standard of 3.0 microns/cubic meter.

Mr. Oenning reminded the community that the reason for doing this level of crystalline silica testing – that is not required of Granite at this time under its permit – is because this form of dust is the most concerning to the community from a health standpoint. It is his and other community members on the Working Group's desire to create baseline measurements of PM 4 size crystalline silica to compare to results when the quarry goes into full production (as set out above, when the economy recovers sufficiently).

A Fallbrook resident from the audience then posed a question regarding the monitoring: why are the results calculated on a 24 hour average rather than capturing the highest particulate levels coming off of the quarry during its primary hours of operation? Mr. Schafer responded that there are two reasons for this format of monitoring: one, because, as mentioned above, this is the method used by the California environmental regulators and the results can be directly compared to their results and to the federal EPA standards; and, second, because the standards are set by regulatory bodies for chronic (continuous) exposure to these particulates, not for acute (periodic) exposure to them.

The dialogue then turned to the results of the monitoring through September, 2010. Mr. Schafer reported that PM 10 size measurements in the third quarter of this year continue to be consistent with previous results and well below the California and federal standards for air quality health safety. There were two days in which measurements exceeded the California standard of 50 microns/cubic meter, August 6th and August 18th. On August 6th there was reading of 97.8 measured on the upwind site (i.e., coming onto the site and, therefore, not created by the quarry). Mr. Schafer and Mr. Nolan speculated that this could have been due to fruit washing somewhat near the upwind monitor or from construction on SR 76.

On August 18th there was a downwind measurement of 60.32 microns/cubic meter. Since the upwind measurement was 29.32, it appears that the quarry contributed to the exceedance of the California standard (of 50) that day. In reviewing Granite's work records, Gary reported that the amount of crushing was consistent with other days during the period but that it was a very hot, dry and stagnant day. The records indicated that more water was used that day 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 month 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 (although there had been some scattered days where measurements of PM 10 coming onto the quarry had exceeded the standard).

Mr. Schafer next outlined the measurement of PM 4 size crystalline silica. Mr. Oenning noted that in this smaller size studies have shown that these particulates can travel very long distances. As noted above, during the 3rd quarter the monitoring included the addition of two monitors at the upwind and downwind sites to gather readings for particulates measuring PM4 or below to compare directly with the California standard 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 California Office of Environmental Health Hazard Assessment (OEHHA) standard of 3.0 microns/cubic meter. This measurement also occurred on August 18th. As noted above, August 18th 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 with chronic exposure to it, 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 (quoted directly from his power point slides):

- Site #1 was predominately the upwind monitoring site and Site #4 was predominantly the downwind monitoring site.
- All of the samples (Upwind and Downwind) taken this quarter in regards to PM 10 concentration were less than the state standard (50 microns/cubic meter) except for the upwind sample (Site #1) on 8/6/2010 and the downwind sample (Site #4) on 8/18/2010.
 - The upwind sample from August 6th was upwind from the quarry operations and the exceedance is likely not attributable to the Rosemary's Quarry.
 - The downwind sample from 18th of August was downwind from Quarry operations.
- During this quarter, the measured concentrations of crystalline silica at the downwind sites were generally not appreciably higher than the upwind monitoring site with the exception of August 18th.
- The arithmetic mean of the crystalline silica concentrations per site are considerably less than the OEHHA standard. Also, the mean differential of the upwind and downwind monitoring site is -0.04 microns/cubic meter. On an average basis, the quarry did not have a significant impact on the elevated levels of crystalline silica downwind from the site during the quarter.

- The Quarry was not an appreciable source of crystalline silica or PM 10 relative to background levels in any of the 7 quarters this sampling project has been in operation.

During the dialogue, two questions not relating to air quality monitoring were also raised, both of which have been addressed at greater length in previous dialogues (please see minutes of previous dialogues on the quarry website, particularly those in 2008, for a further exploration of these issues). The first question dealt with water use at the quarry. Mr. Nolan reported that all water used by Granite (for example, to keep dust down at the site) is recycled water from the adjacent Pankey farm or from rain in a collection pond at the quarry. The second question posed was whether there is a requirement that all trucks be tarped when leaving the quarry with their loads to help prevent small rocks from spilling out onto the road. Mr. Nolan answered that while some states have laws which require such tarping, California does not and that Granite does not have the authority to require it.

Mr. Nolan also reported that the asphalt plant on the quarry is near completion but that Granite is waiting for SDG& E to turn on the electricity so that asphalt production can commence. He hopes that this will occur before the end of the year.

The next Community Dialogue will be held on the first Wednesday evening in May, 2011. This meeting will feature air quality monitoring conducted through the first quarter of 2011 along with a dialogue regarding any other concerns the community may have with the quarry at that time.