

EMERGENCY STORAGE PROJECT

San Vicente Pipeline Update

Presentation Summary

DATE: Sept. 8, 2005 **TIME:** 9 a.m.

EVENT: Central Shaft Site Visit

MEETING LOCATION: San Vicente Pipeline Central Shaft on Stonebridge Pkwy.

PRESENTER(S): Andrew Oleksyn, SDCWA

STAFF RESOURCES: Shannon Reed, SDCWA
John McCullough, McCullough Environmental Consulting
Rachel Kulis & Jessica Berlin, Katz & Associates

PRESENTATION SUMMARY:

Shannon Reed welcomed everyone to the San Vicente Pipeline Central Shaft and introduced the project team members in attendance.

Andrew Oleksyn gave an overview of the San Vicente Pipeline project. He said that it will be an 11-mile pipeline connecting the San Vicente Reservoir to the Water Authority's Second Aqueduct just west of Interstate 15 at Mercy Road. The San Vicente Pipeline is a part of the Emergency Storage Project, which is a series of projects to increase the amount of water stored in San Diego County in case of an emergency. Andrew said that up to 95 percent of our water is imported and the aqueducts that bring the water to the county cross fault lines, so in a major earthquake the pipelines could be severed and residents in the county could be without water within three days. The Emergency Storage Project increases our water storage capabilities. Water will be sent through the San Vicente Pipeline to be stored in the San Vicente Reservoir and in an emergency water will be pumped out through the San Vicente Pipeline.

Andrew said the Central Shaft (where the presentation was located) is the mid-point for the pipeline. There are four access points along the pipeline: the San Vicente Portal, the Slaughterhouse Shaft, the Central Shaft and the West Shaft. Tunnel boring machines (TBMs) will be used to tunnel the alignment. One of the TBMs will start tunneling from the Central Shaft and will excavate west. Another TBM will start at the eastern end and will excavate west to connect with the Central Shaft.

The Central Shaft will be an oval-shaped hole at the back end of the property owned by the Water Authority off Stonebridge Pkwy. No material excavated from the Central Shaft site will leave the site. Instead, the material will stay on the site. This will lessen the number of trucks on the nearby roadways.

Andrew explained that the construction trucks accessing the site will bring pipe segments, tunnel lining segments and other materials needed for construction. The construction trucks will travel on

Scripps Poway Parkway through the Vulcan Materials Company access road on to Stonebridge Parkway to access the Central Shaft site. Smaller deliveries will use Stonebridge Parkway.

Andrew said that the Water Authority and the contractor have about one month's worth of set up and mobilization at the Central Shaft site and then after the set up the contractor will begin to excavate the shaft, which will take about 2 ½ months. When the TBM is delivered to the site and it will take about a month to assemble the TBM. Tunnel excavation will take up to one year. Once excavation begins, there will be about two dozen workers on the site. During mobilization, there will be only one 10-hour work shift, but during excavation there will be two 10-hour work shifts.

Twenty-four hour a day work is authorized for tunneling. Andrew said that in order to avoid the rush hour traffic, delivery hours for the site will be from 9 a.m. to 7 p.m. Work hours for surface activities will be from 7 a.m. to 7 p.m. A fence will be installed on the berm, which is between the work site and the roadway. The excavated material removed from the tunnel on the site will be placed there and not hauled away. It will be limited to about 50 feet high, so the fence should block the view of the muck pile and drivers going by the site should not be able to see the muck. Work during the late shift will be limited to tunneling work only. The contractor will not be allowed to spread the excavated materials or do any surface activities during the late hours in order to minimize the noise for nearby neighbors.

Questions and Comments During the Presentation:

Q. Construction trucks will not use Beeler Canyon Road?

A. There will be no construction trucks through Beeler Canyon Road. A gate was installed west of the Vulcan Materials Company, which will help keep truck traffic off Beeler Canyon Road. The Water Authority has established fines for the contractor if trucks use Beeler Canyon Road.

Q. Trucks won't be able to use the Vulcan access road until 9 a.m.?

A. Yes, that's correct.

Q. Where are the tunnel boring machines being manufactured and what's the cost for the machines? When will the TBM be on site at the Central Shaft?

A. I believe the TBMs are being manufactured in Europe – it's a German manufacturing company. On our display board, we have pictures of TBMs with a rotating cutterhead, but the contractor has decided to use TBMs with digger shields instead because the soil along most of the tunnel alignment is a conglomerate of stones and cobbles, the TBM with digger shields is better suited for the job. The contractor has a February/March timeframe for getting the TBM started at the Central Shaft. I believe the TBMs are about \$3 to \$5 million each.

Q. Will excavated material be taken out of each of the ends of the alignment also?

A. Yes. About 20% of the tunneling will be in hard rock and the rest will be in the conglomerates, which is the type of soil that can be seen at the site.

Q. Did you do seismic tests to figure out where the geology in the tunnel alignment?

A. Yes.

- Q. Who did the geotechnical studies?
A. A firm called Geopentech.
- Q. Are you planning to archive any of the materials from your coring tests?
A. The Water Authority keeps all coring samples.
- Q. I'm doing a groundwater study throughout San Diego County. Can I get samples of the groundwater or the results from your tests?
A. Studying groundwater was a big part of the geotechnical studies the Water Authority conducted. We laid the tunnel elevation to avoid hitting groundwater. We don't anticipate hitting any groundwater during the excavation of the tunnel. The Water Authority has also been monitoring the wells in Beeler Canyon, but the tunnel is above the groundwater table, so we don't expect to affect the wells in the area.
- Q. What is the maximum depth of the pipeline?
A. The depth ranges between 50 and 600 feet below the surface.
- Q. So, it's about 250 feet above sea level?
A. I believe it's a little higher than that. (The tunnel is between 400 and 670 feet above sea level).
- Q. Did the Water Authority have to obtain an easement under the properties along the pipeline alignment or did you already own the property?
A. We obtained tunnel easements, but the tunnel will not be under any homes. The alignment follows the SDG&E right of way and then goes under Scripps Poway Parkway. Easements were obtained from homeowners' associations.

Shannon Reed concluded the session by thanking everyone for attending and explaining that there will be tours throughout the project, including one at the San Vicente Portal next Thursday, Sept. 15 at 9 a.m. at the construction trailers. As construction continues, additional tours will be scheduled. We will also continue to notify you through the ESP Update, letters, and information on the Water Authority's Web site.

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