

## Farewell to haul trucks!

by Jon M. Casey



A haul truck brings material to the processing plant while the overland conveyor is in its final days of installation. The dragline crane that mines the sand and gravel is located to the left of the conveyor on the left of this photo.

While David Hoobler says that the installation of a new Supreme Overland Material Conveyor at the Slippery Rock Materials plant near Volant, PA will eliminate the need for several of the plant's haul trucks with a chuckle, he is quite serious when it comes to how highly he values the importance of this new system. Designed with a footprint that traverses more than 3,000-feet from the mining pit on an adjacent site, to the existing processing plant that has been in operation for years, the system will be in full production by the time this article is in print. More importantly, the new conveyor is expected to take the place of three or four of the older haul trucks at this western Pennsylvania sand and gravel plant.

Once the system is calibrated and up to full capacity, Hoobler said it won't be long before the quarry will begin to realize its return on investment. Because of the savings in long term plant operations by way of reduced fuel, maintenance and truck replacement costs, the three or four haul trucks leaving the fleet means more revenue dropping to the bottom line. As the president Slippery Rock Materials, Inc., Hoobler says he can hardly wait.

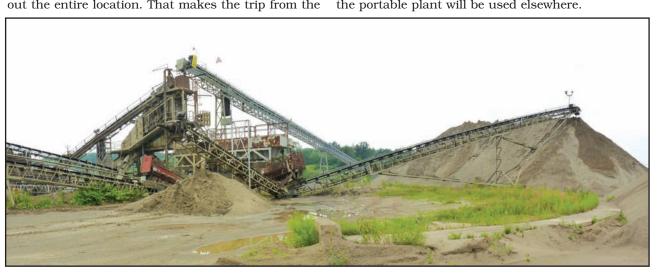
As we toured the Lawrence County, PA facility, it was clear that the new system would enhance the expansion that is currently under way at Slippery Rock. Hoobler said traversing existing roadways was a part of the design of the conveyor system because they needed to go over two of the three roads on the properties rather than under them, because the water table averages approximately 21-feet throughout the entire location. That makes the trip from the pit to the plant a more challenging one. Just the same, with two elevated crossovers their 18-foot height made the process seem virtually seamless as trucks passed under the conveyors with ease at either location.

"When we open our third pit in the coming months, we plan to go under that roadway," he said. "That township road is more elevated and it will allow us enough differential that we can tunnel under the road safely and still be above the water table. That will give us an easier, less costly access to the newest pit when it is developed."

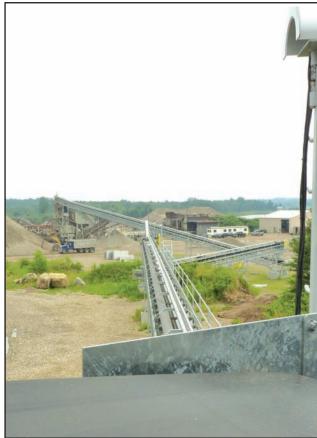
Currently, Slippery Rock is mining with a dragline, but Hoobler says that the plans are to launch a Supreme Mfg. dredge to mine the current pit, once the dragline is no longer effective. Eventually they would like to mine to the maximum depths of their permits, but for now, they are satisfied to mine within the range of the dragline that they are using.

He notes that they currently have a need for a portable crusher, a Pioneer Fast Trax Jaw crusher, at the head of the conveyor, to break up some of the oversized material as it is mined. That is most effective here, because the formation that they are currently mining has rock that is larger than they desire to crush at the primary. He said that when the 54-inch, LJ Cone crusher that they are refurbishing at their fabrication shop in Stoneboro is installed at the plant this fall, they will be capable of handling larger material than the existing 2136 Jaw currently in use is capable of handling. When that takes place, the portable plant will be used elsewhere.





Sand is stacked in a stockpile with a 150-foot Supreme Radial Stacker after it comes from a McLanahan twin screw sand washer. The new overland conveyor is in the center of the photo, terminating atop the processing plant.



From atop the overland conveyor, we can see a portion of the system that will deliver material to the processing plant. SlipperyRock from 3

## SlipperyRock from 3

"We are refurbishing a gyratory crusher that we acquired, and we are reconditioning it from top to bottom," he said. "When that is complete, we will install it here. We plan to have that done before winter."

As material will drop into the new crusher, it will go across a Deister triple deck screen where the material is washed with the clean aggregate going to a secondary cone crusher and the sand passing through an classifier tank and twin 36-inch dewatering screws before being stockpiled as concrete or asphalt sand. At this location, the site produces a ratio of about 70 percent rock with 30 percent as sand

"Much of the material from this plant is used as sub base or drainage aggregate, but a portion of it goes as decorative stone," he says. "We recently sold one of our larger, more colorful stones as a lawn ornament for a customer in the local area. He had heard about how we have them lining our driveway here at the plant and he stopped in to see what they looked like. He liked what he saw and our plant superintendant, Rodger Brocklehurst sold it to him. On a price per ton basis, that was an excellent sale!"

Hoobler says that as they move from one mining site to the next, they have an extensive reclamation program in place, one that involves the establishing of wetlands and habitat for waterfowl and other inhabitants of marshy areas in the region.

"Unlike a surface mine, where the excavated site can be reclaimed and reseeded as grasslands, much of what is left in a sand and gravel plant like those in northwestern, Pennsylvania, require the establishing of natural wetlands," he says. "We have done a great job here at our first site. We completed mining this a few years ago, and since then, we have enjoyed several species of birds including nests of Eagles, a welcomed sight in this area. We also enjoy other creatures such as muskrats, frogs and turtles of various kinds. For more information on Supreme Manufacturing and their products, contact them at 724-376-4110 or online at www.suprememfg.net.



Welders work on support steel as they fabricate new conveyor structures in the Supreme Manufacturing, Inc. plant near Stoneboro, PA.



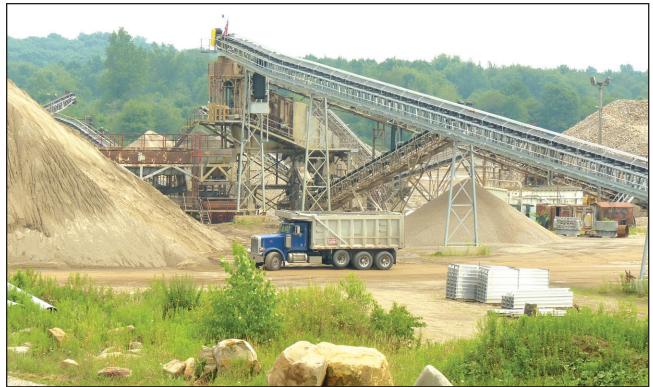
A loader dumps gravel into the primary crusher.



Areas of the Slippery Rock Materials facility that have completed mining are reclaimed as wetlands like this. The reclaimed sites attract wild and domestic water fowl like the swan, the Blue Heron and the Canada Geese shown in the insets.



It is haul trucks like these that Hoobler is looking to replace with the overland conveyor being installed.



A dump truck waits its turn to be loaded.

## Moving material overland is a profitable idea!

by Jon M. Casey

If you could choose between six conveyors with 290 electrical horsepower and no operators or four haul trucks with 1,320 diesel horsepower and four operators, why of course you would choose the Supreme Manufacturing, Inc. Overland Conveyor System

With the installation of Slippery Rock Materials' new Supreme Overland Conveyor System nearly complete, Dave Sapala, Marketing and Sales consultant for Supreme Manufacturing, Inc. says that moving material overland via conveyor is becoming more profitable and a more effective than ever before.

"With the increasing costs of fuel and equipment, especially rolling stock like haul trucks and other heavy equipment, the thought of lengthy, overland conveyor systems is a cost effective solution to materials handling in today's aggregates and mining industry," said Sapala. "We can see conveyor systems like this one taking the place of haul trucks with increasing regularity. The return on investment can be quicker than you might realize."

Wherever it is feasible, a conveyor system is the logical choice. In this case, the pit does not need to be next to the processing plant as it is in many of the rock quarries. The mining can take place a good distance away with the processing plant remaining where it is currently located."

You can call Supreme Manufacturing, Inc. at 724-376-4110 or visit their Web site at www.suprememfg.net to see how they can help your company be more profitable.