

Superheroes team up to bring Wolverine forward

Wardrop Engineering rises to the challenge

■ Heather Ednie

Yukon Zinc's Wolverine Mine will meet its own tough targets and open for business later this year, says COO Ray Mah. Just a year and a half after the project at the silver-rich zinc-copper-lead-silver-gold deposit began, the detailed engineering and construction are already complete. Mah says the key to the small company's success has been an extraordinary display of teamwork.

"The key was to bring in the right people," says Mah. "We complemented a strong owner's management group with Canadian consulting firm, Wardrop, a Tetra Tech Company, to provide the detail design and procurement services." As a group, the team ensured all the bulk of equipment and materials required arrived when and where they should. "The extra efforts and commitment made by the employees, the engineering and construction groups, and our contractors meant we were able to execute and target early completion," says Mah. "We, as a small junior company, are taking a greenfields project straight through to production. You don't see that every day."

Challenging times

That does not mean it was easy. "On this fast-tracked program, our challenge was to provide the detailed engineering design and execute equipment procurement with a milestone of catching up with the construction season," explains Sash Vidic, project manager of the Wolverine project for Wardrop.

"Wardrop worked on the feasibility study in 2006, before executing the engineering, bringing a continuity



Construction underway on concentrate building

Photo courtesy of Yukon Zinc Corporation

of knowledge to follow through the design," says Mah. "They brought in other people to complement their team — seasoned design engineers — and were able to meet our aggressive schedule."

For this project, the Vancouver office simply did not have the manpower to meet all targets. This included about 110,000 hours within just over a year, around 85,000 of which were design hours. At its peak last summer, Wardrop had about 80 designers dedicated to the project.

To meet Yukon Zinc's deadlines, Wardrop called in the troops from its other offices across Canada. As well, the Wardrop offices in India remotely worked on 3D modelling. "Through this collaboration, we were able to bring the project together," says Vidic with satisfaction. He notes that Wardrop regularly works on such large collaborations, so its people know how to rise to the occasion. "It's more of a challenge to coordinate but if we all leave our egos behind, the

focus is on teamwork and collaboration. That's one of the biggest challenges of any project — getting everyone on the same page."

Nuts and bolts

Once the manpower issues were sorted out, the two companies could start making things happen at the site, which is located around 600 kilometres northeast of Whitehorse. Long-lead equipment was ordered in late 2008 and the last of it will be on site by March. The 205-person camp was delivered in May 2009, at which time full-scale construction began.

"We successfully provided enough data so the site could meet their construction targets," Vidic says. "One target was to have all buildings constructed, closed and heated by November, and we were successful. On this type of project, construction dictates the engineering and procurement schedule. Normally, a project of this size takes 16 months to execute. We did it in 12."

A year-round access road was built in 2007, which was a major step forward for the development of Wolverine. “With that road, resources and equipment can be delivered year-round, avoiding the necessity of much more costly transportation options,” Mah says. The site also has an all-season gravel airstrip.

Before committing to major construction, Yukon Zinc ensured that a First Nations agreement and the major permits were in place. In 2005, a socio-economic Participation Agreement was signed with the Kaska First Nation, and in 2006 and 2007 permits were secured.

Project wrap-up

Wardrop’s engineering and procurement contract will wrap up in the spring, but some of its personnel will be staying on site at Wolverine for the commissioning period, to aid in the setup and training of the operators. As well, Wardrop is contributing to an



Photo courtesy of Anne Clausen

Vibrating the concrete in the mill building

updated NI 43-101 feasibility report for the operation.

Overall, Mah is satisfied that the right team came together. “We’ll be in production by mid-2010,” he says. “We have put a mine in production in just over a

year from start of construction. It’s one of the first greenfields base metals mining projects in the Yukon in quite some time and a project we’re all very proud of.” **CIM**

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