

# A Case Study on Managing a Remote Mine Site, the Yukon

Foreseen & Unforeseen  
Challenges in Remote Mine  
Water Operations

## PROJECT OVERVIEW

**Location:** The Yukon, Canada

**Challenge:** Managing a remote mine site poses several considerations when assembling an operations team. It demands a flexible, dynamic team to provide organization, commitment, and expertise to properly commission and operate a mine water treatment system.

## SOLUTION

Ensuring the safety of the community and staff was top of our priority list. Arranging travel and accommodations at the remote site was new territory for Clearford, but the complexity doubled when factoring in adherence to fluctuating COVID-19 measures.

## BOTTOM LINE

Learning about the Yukon and its 43,000 population was a critical component in Clearford's strategy to staff the mine site with a combination of local and remote operators. Twenty-five percent of this tight-knit community is made up of First Nations, which became an initial component in Clearford's operating plan at this site. Harmonizing existing Clearford staff with remote mine operators and local First Nations operators, made for a suitable operations team, one that helped us overcome all challenges.

## BACKGROUND

In this case study, we encountered foreseen and unforeseen challenges in water operations at a remote mine site. Ranging from unique situations derived from an isolated location to ongoing changes to COVID-19 public health measures, our team remained hands-on and adaptable throughout the full operations cycle.

## FORESEEN CHALLENGES

### *Lack of cellular reception*

As one would imagine, the phone reception at a remote site is nonexistent due to a lack of cell towers. To ensure the operations team had a reliable form of communication, our team set up a satellite phone to alleviate site issues and safety concerns.

### *Rugged rentals*

The road to the mine site is one less travelled, making for a rough, potholed ride on the dirt roads. Not only does it take a durable truck to endure the windy 9-hour drive from Whitehorse to the mountainous mine site, but it requires a diesel truck, the only gas offered at this remote location.



### *Curious wildlife*

Curious bears, moose, foxes, and other wildlife were frequent roamers near the mine site. Although only a 3 km distance between the water treatment facility and the camp where the operations team resided, it was deemed unsafe to walk the 3 km route. It was advised that our team drive their durable trucks to and from the camp and it was not uncommon to be greeted by a wandering fox when arriving to the site.



### *Limited travel options*

The severely limited travel options to a remote location and significant COVID-19 public health measures created a real logistical challenge. Travelling from our home base, Ontario, to the Yukon, is not a common trip and takes approximately two days. When mapped out, you are looking at three flights and over 10 hours of driving, not including the layover hours spent in between.

It takes a committed team to travel nearly 6,000 kilometers to provide water management services, and Clearford was determined to get the job done.

# UNFORESEEN CHALLENGES

## *Working alone*

Releasing a Working Alone Policy is a top priority for operating at the mining site. However, gauging the level of check-in frequency was determined upon start-up of the treatment facility. When drafting the site-specific Working Alone Policy, Clearford implemented the requirement for operators to check-in every 3 hours when alone on site. A preventative measure like this aids in minimizing or eliminating identified risks through an effective means of communication.



## *Scheduled holidays*

Unlike the majority of Clearford's site locations, spending your time off within the site location was not optimal. Although the Yukon site scenery is unmatched, the location is intended for operations and our team quickly learned there is not much social entertainment on or near the mountain. Preparing a structured schedule allotting for time off spent in Ontario was essential for personal and professional care of our operations team.



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*“There is beauty at a remote site that you don’t often come by elsewhere. Between the sunsets and wildlife, the Yukon site became one of our more scenic places to operate.”*

– William Wheeler  
Hub Supervisor, Ottawa

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## *Internet access*

Though spanning approximately 120,000 square kilometres across Ontario, Clearford's model of dispersed service hubs do not often face the challenge of limited internet access. Whether you are on the road, at a site, or in the office, it is easy to become dependent on internet access.



Achieving reliable internet access to share information and effectively communicate in a remote location was a challenge. Working towards an objective of sharing the same documents, with the same quality, and in the same timeframe as our other sites, was a key success factor on the Yukon site.

Working alongside a local technology company specializing in supply and support of communications systems in western and northern Canada, we were successful in obtaining reliable internet to digitally submit daily water reports. These reports are key in achieving safety and long-term operations.

## CONCLUSION

Operating in the Yukon presented new experiences for Clearford's operations, compliance, and management. Between expected challenges and first-hand adaptations, Clearford remained committed to meeting compliant effluent requirements while ensuring staff were safe and energized throughout the operating season.

For a company whose services work towards environmental stewardship and safety of public health, Clearford was receptive in supporting the mining market, one that can be tough on the environment.



### CLEARFORD WATER SYSTEMS INC.

#### ABOUT

Clearford Water Systems Inc. (Clearford) is a provider of concept planning, guidance through regulatory approval process, engineering, manufacturing and construction supervision and long-term operations and management of water infrastructure.

With over 250 systems under management, we are the largest operator of privately owned communal water and wastewater treatment systems in Ontario. For more information, visit [www.clearford.com](http://www.clearford.com).

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