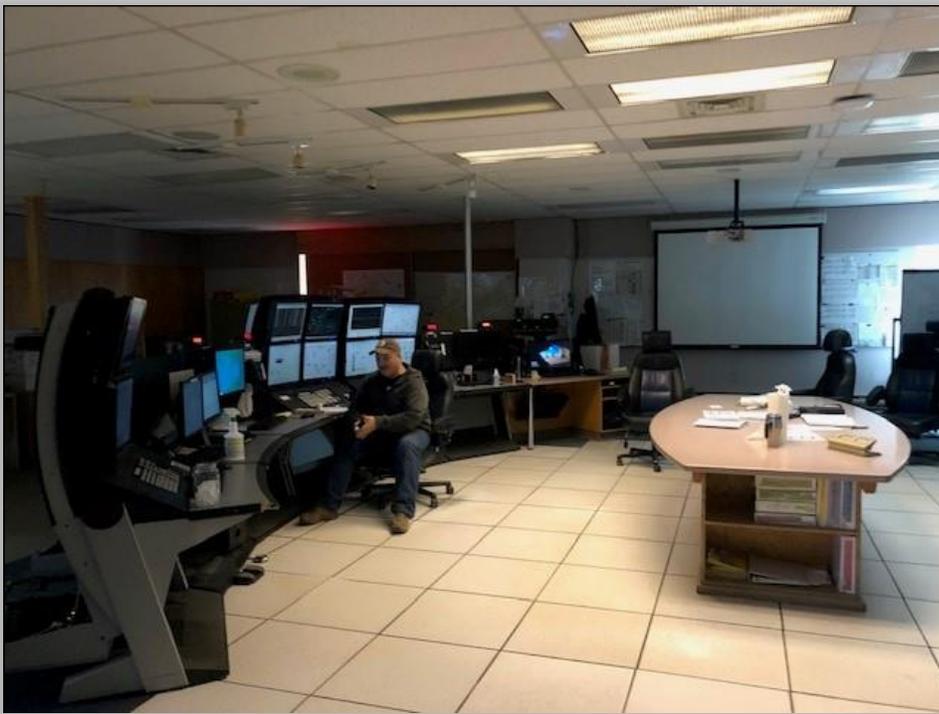




Feature Article:

‘How Do You Safely Operate a Complex Gas Plant During a Pandemic?’

A Story of Ingenuity, Respect & Results



Control Room at the Caroline Gas Complex

Mark Weiss – Superintendent, Caroline Gas Complex:

“Every day I wake up and say to myself ‘maybe today is the day something happens, or someone falls ill, then, it’s a shift from medium to high alert’.”

Such has been the daily life of Mark Weiss since mid-March. Mark is the superintendent of the Caroline Gas Complex, a high-tech gas processing facility built for close to a billion dollars in the early 1990s. Pieridae produces the natural gas Albertans need to cook their food and heat their homes. Daily, we are producing enough gas for 660,000 homes in the province.

On a good day there are many challenges to keep these types of facilities running safely and reliably. Layer onto that the COVID-19 pandemic and its impacts, and all scenario planning is out the window.

Mark remembers when that first phone call came to all three superintendents at Pieridae’s gas plants. COVID-19 had hit, Pieridae needed to react quickly to maintain safe, reliable operations but with one key caveat: the majority of employees now had to be working from home. The gas complexes had to start operating very differently, and in a hurry...

“Holy sh** this is happening, this is how we have to run our business with a rapidly advancing virus and this is what we need to do to prepare,” says Mark. “We are told senior leadership needs your plan on how we are going to keep these gas plants operating in the next couple of hours.”



Pieridae’s Caroline, Jumping Pound and Waterton Gas Complexes



Conrad Kenny – Superintendent, Jumping Pound Gas Complex:

“When we got the news of the increasing pandemic risk in Alberta, we wanted to ensure our workforce was safe during the outbreak. This was our number one priority.”

Developing a Complex Plan in a Matter of Hours

So how do you develop a plan that quickly for something no one has likely has ever lived through or would even think of planning for? The last true global pandemic was the seventh wave of Cholera from 1961 to 1975, closing in on 50 years ago.

Not much corporate memory to draw from there...

The leadership teams at the three plants hit the ground running. They talked, discussed, brainstormed and came up with a plan for senior management, one that involved low, medium and high-risk level responses.

“When we got the news of the increasing pandemic risk in Alberta, we wanted to ensure our workforce was safe during the outbreak. This was our number one priority,” says Conrad Kenny, Superintendent of the Jumping Pound Gas Complex. “In order to accomplish this, many adjustments had to be made to our daily activities. We immediately implemented social distancing, virtual meetings, isolated different work groups from each other, adjusted our operating schedules to minimize face to face contact and those who could work from home have with little disruption to the safety and reliability of our complex.”

Conrad says everyone had to quickly come to terms with this new way of operating while keeping health and safety as a top priority.

“It speaks volumes to the character of our people and the support they have shown for the site,” he adds. “Many went above and beyond to accommodate the unfamiliar situation we were all in. Our remarkable team has been working to sustain safety, production and operations to meet our targets and continue to contribute to the success of Pieridae. Our priority has been and continues to be to protect the health of our employees and surrounding communities.”

Darrell Archibald – Superintendent, Waterton Gas Complex:

“I remember the first time someone called in sick and we all needed to be tested for COVID. We quickly did the social contact tracing on site but were thinking ‘how are we going to recover if this person turns out to be COVID positive?’.”

Down in Southern Alberta near Pincher Creek, Waterton Gas Complex Superintendent Darrell Archibald had experience managing natural disasters, from the Kenow fires to the floods in Waterton and Jumping Pound. He and his colleagues knew they needed to get proactive to prepare for COVID-19 but with nobody having ever seen a global situation like this. It was difficult at first to develop a plan to protect the team while managing the needs of safely running a complex operation. And to compound matters, who would have thought there was going to be a national shortage of toilet paper!

At the start of COVID, Darrell remembers every couple of days someone would ask about what the plan would be if the situation escalated. He never really had a good answer. What helped pull things together was the alignment in the teams on the risk they all faced and what was at stake. They would build the right plans, make the right decisions, but there was always a chronic unease.

“How are we actually going to keep this out of our facility when it is entering our communities?” Darrell recalls. “I remember the first time someone called in sick and we all needed to be tested for COVID. We quickly did the social contact tracing on site but were thinking ‘how are we going to recover if this person turns out to be COVID positive?’”

Thankfully, the individual did not test positive but this pandemic and dealing with its impacts has been a challenge, especially having the majority of Pieridae employees embrace the new normal of not coming into work.

“It was very difficult transitioning people offsite, I literally had to direct people to stay offsite,” says Darrell. “But to everyone’s credit, people quickly learned how to safely protect themselves from the virus in public and that has helped to protect our facility from COVID.”

Running a Gas Complex Safely with A Lot Fewer People

If you were reading the daily COVID-19 updates from our CEO during the height of people contracting the virus a few weeks back, you will remember we were and still are on medium alert. From a plant perspective, that means, among other things, operating a very complex facility and surrounding assets with 33 people instead of 84.

The high-risk version of the plan exists, of course, but not a scenario we would ever want to implement. If an employee at one of the gas plants were to test positive for COVID, then Pieridae shifts to high-risk mode. Instead of there being 33 employees on a regular shift, that number drops to 18, with two operators in the control room. All other operations would remain outside of the room. During a medium alert, six operators are working in the control room. Other elements of a high alert include one person per vehicle while travelling at all times, and only operating staff on site during steady operations. Maintenance staff would be on call and would drive to the plant only if there is a breakdown. And finally, a plan is in place to safely shut a plant down, if necessary, if safe operations could not be achieved due to illness.

Can You Operate a Large-Scale Gas Complex Remotely?

Operating remotely with a team of 33 has been quite the challenge for Mark Weiss. He was used to meeting face to face, where everyone would look each other in the eye and map out the day, whether that be getting permitting in place, procurement, parts delivered on site – all the things necessary to running a complex gas plant. Now, everyone was working remotely, many without laptops, trying to absorb the new reality of maintaining Pieridae's base business from home.

Mark moved to a system where all meetings became virtual, involving multiple offices and many people on conference calls. It started out bumpy and disjointed but is old hat now. The people of Pieridae met the challenge.



The 'Nerve Centre' – Mark's Kitchen.

Mark Weiss – Superintendent, Caroline Gas Complex:

“The success we have had so far all across the board – maintaining production with no incidents – speaks to the quality of the people we have and the respect they have for one another.”

Darrell Archibald – Superintendent, Waterton Gas Complex:

“The co-operation between the teams, the quick adjustment to virtual communication really made the difference in managing the situation,” says Darrell Archibald. “Our Flint team onsite has done an amazing job working together, they have been completing every job, every task. I can’t say enough good things about our Flint team here at Waterton.”

Darrell is really happy to see how much care the business had for their people as well. When individuals had personal situations they had to deal with caused by COVID, things such as closures of schools and businesses, Pieridae leadership was flexible and supportive of employees and their families. In return, employees were flexible and supportive when the business needed them, he adds.

Embracing the ‘New Normal’

Three months ago, Mark Weiss would not have believed we could have operated the three gas plants and field assets as safely and as reliably as we have. He has only seen the best in people.

“The fact all employees have managed to do the work and keep things operating safely has been remarkable,” says Mark. “People have taken this very seriously. The success we have had so far all across the board – maintaining production with no incidents – speaks to the quality of the people we have and the respect they have for one another. It makes it easy for us as leaders because we don’t have to remind them to be safe, everyone is doing the right thing.”

“COVID has created a new normal for the teams going forward,” adds Darrell Archibald. “We are slowly transitioning back to a situation closer to what we had pre-COVID but with our new understanding and behaviours.”

And that should ultimately lead to an enhanced culture of safety overall at Pieridae, which will benefit everyone.



The Muster Board:

This is normally used to track workers who are on-site in the event there is an emergency.

A strong visual of the impacts of COVID-19 as no administration staff are listed on the board, everyone is working from home.



Caroline Gas Complex – Reception:

This is a photo of the permit desk in the control room, complete with protective plexiglass due to difficulties in maintaining social distancing at the counter.



Caroline Gas Complex – Control Room:

Normally a bustling area, but due to COVID, numbers were severely cut back, yet safe, reliable operations have continued.