

If You Can't Manage Safety, You Can't Manage: Increasing Safety Performance and Reducing Cost at Crestwood Midstream



In the lead up to the 2019 **Operational Excellence in Oil and Gas Summit** in Houston, we caught up with Chris Humes, Senior Vice President of Operations at Crestwood Midstream. Chris provides insight into how the company has saved \$14 million in operating costs while simultaneously improving safety performance and compliance.





Chris, can you tell us about your professional background leading up to and including your current role as Senior Vice President of Operations at Crestwood Midstream?

I graduated from Oklahoma State with a mechanical engineering degree in the '90s and I started my career as a drilling engineer for Arco in the Permian Basin. After three years I began working on the pipeline side of things as a reliability engineer. I worked on small continuous improvement, optimization, and reliability projects before I took on a project management role with Arco's midstream assets in Houston.

From there I got my first supervisor's job, supervising a crude oil import terminal down in Freeport, Texas. In 1999 I went to work for Sonat where I was asked to run the operations for South Georgia Natural Gas (SGNG), where I got my first exposure to natural gas. SGNG distributed gas to LDC, large industrial loads, and power plants. From there I was transferred to Birmingham, AL where I managed the maintenance crews. Then in 2002 I was asked to run the LNG Operations for El Paso. We did several expansions on the Savannah import terminal and also built an import terminal in Pascagoula. It was my first role that really dealt with growth and making things bigger.

At the time, the LNG operations did not have a good safety record. In addition, they weren't making much money, and as a regulated facility it should have been making a nice return. This is where I really honed my skills in the area of process improvement, safety and regulatory compliance,

and improving cost efficiency. I took these skills to Houston I was responsible for the Maintenance Capital Project Management team who worked on the four major pipelines that made up El Paso execution on about \$300 million worth of projects and upgrades each year. After that assignment I was put over the major projects group for Kinder Morgan. I found the same opportunities within these groups as well – they were coming in over budget, not on-time, and a lacklustre safety record. I worked on this for about 3 years, and then 5 years ago I joined Crestwood Midstream.

Crestwood had grown very quickly. Ten years ago the company didn't exist, and by time I arrived they had bought up 20 companies. They were great at buying companies, but weren't disciplined in integrating them into Crestwood and developing a Crestwood way of doing things. Naturally, we didn't have a stellar safety record, we weren't financially disciplined, and we had room for improvement when it came to compliance. I was able to use and hone my previously developed process improvement skills, and that's how I got where I am today. I started with a small responsibility in Gas Processing, and now I am responsible for all of Crestwood's Operations including Marketing, Supply, and Logistics operations.

Crestwood has eight cryogenic gas processing plants, soon to be ten, and a few thousand miles of pipeline. We have 100 Bcf of underground storage with a couple hundred miles of regulated pipeline and a fleet of roughly 200 trucks.

Tell us about Operational Excellence at Crestwood Midstream

We're about five years into the journey at Crestwood. When I started here, we had a lot of really good people, but we lacked leadership. So we opened up the Operational Excellence discussion. It isn't anything hi-tech, it's fundamentally about communicating expectations and holding people accountable and keeping them focused on what really matters.

For example, five years ago, safety was seen as the Safety Department's responsibility. Well, as operators, we need to take responsibility and accountability for how we do our work. At the end of the day, we are responsible for getting jobs done safely. Communicating this and holding folks accountable has had a huge impact on our operations.

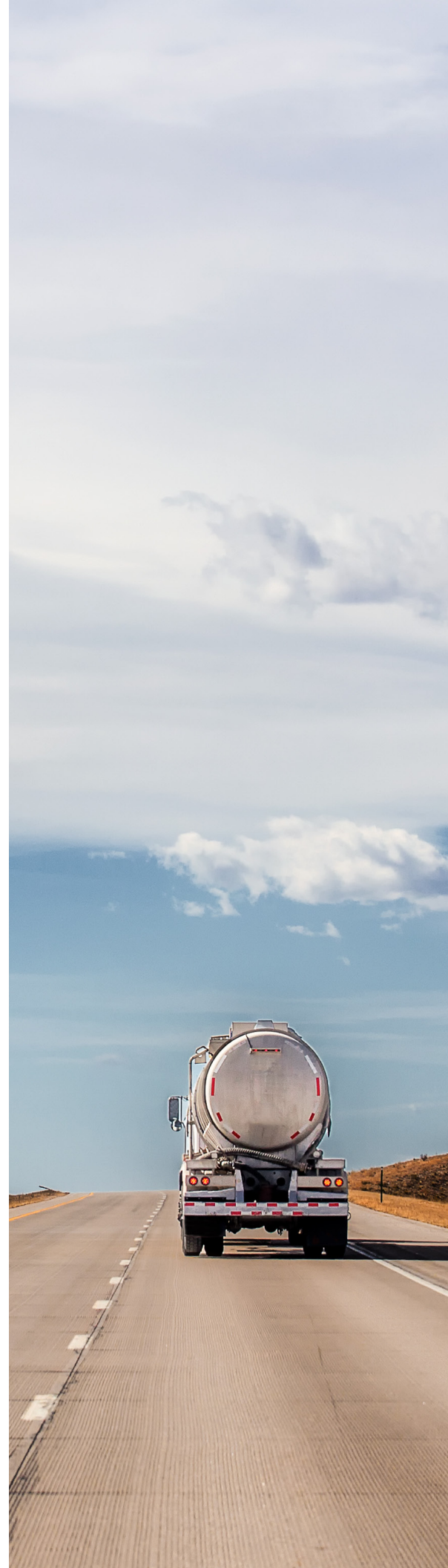
We also wanted to drive consistency. When events arise where we do a look back exercise, we wanted to make sure we learn the appropriate lessons to help us all become smarter and better at what we do. We've worked to develop better procedures and a Crestwood way of doing things, which is really a combination of all the great ideas out there.

Now, I think, we are finally able to go from good to great. All of the easy cost-saving ideas have already been flushed out, and now we are asking; how do we get more efficient at the work we do? How do we make our operations more reliable?

At the upcoming IQPC Operational Excellence in Oil & Gas Summit, you're going to discuss how you've been able to decrease operational costs, while simultaneously improving safety performance and compliance. Can you elaborate on this?

Early in my career I learned that if you can't manage safety, you can't manage. I'll give you a few examples. I recently took over our Marketing, Supply and Logistics, which is mostly trucking companies with about 200 trucks in total. I was meeting with my new leadership team and discussing our approach to how we want to do things. We want to focus on safety and compliance, financial discipline, and reliability. We want to provide a service that our customers want, and we want to focus our people and developing them. So I'm doing my normal spiel that I do with new groups, and a leader from the trucking group tells me that in trucking you can either be safe or you can be cost competitive, but you can't be both.

Five years ago we were paying a little over \$10 million for incidents in the company, through litigation alone. We were paying another \$10 million in insurance premiums, and by lowering our vehicle incident rates, we've been able to lower our litigation to less than \$500,000 a year, our insurance premiums to about \$6 million – that's \$14 million in savings. To put that in perspective, if the commercial group does a deal that generates



\$14 million a year EBITDA, they're going to have to invest \$140 million. So, saving a dollar can be just as powerful as the deal that earns a dollar. It's important to have an open dialogue to generate these discussions where we can demonstrate the value of safety beyond the obvious.

On top of this, we were really shooting ourselves in the foot when it came to compliance. We would go out and do the work without documenting it properly, or we weren't doing it quite the way the regulators wanted. So we did a total revamp of our work management system. We made sure that all the equipment that has a regulatory requirement was represented and that is synced up with regulatory timelines, and we came up with appropriate procedures to satisfy the regulations.

We now run a report every month that shows the regulatory work that will become past due in the next 30 days. We've greatly reduced our NOV's and our fines. In 2015 we received 97 NOV's and in 2016, roughly \$400,000 in fines. Last year we received only 4 NOV's and \$13,000 in fines. This year we have received none so far. Putting in the time and effort to be compliant has substantially reduced our expenses.

That work management system has also helped us to become more efficient as a whole. We've been able to reduce our operating expenses roughly 10-18% per year, while actually increasing the volume that we moved in some of those years. Because of that, our margin has increased from 62% back 2014 to 71% in 2019.

A lot of that comes from working with our people in the field and coming up with new, innovative ways of doing things. On one of our assets in Arkansas, we used to contract out maintenance and we paid a company \$1.5 million a year to do operate and maintain our equipment. We talked to our people about what would it cost to do that ourselves. We estimated that we could do it for \$1 million in house, and in practice we found that we actually saved \$800,000 per year. We are constantly looking at what we can do

enough to stay proficient enough to do it ourselves effectively and efficiently.

“Safety and environmental performance really comes down to leadership. It's about communicating expectations and holding people accountable.”

So it was clear when you started that you needed to improve your safety and environmental compliance. How did you go about making those improvements?

One of the things I made clear to my leadership team was that we were going to find ways to save money, but that we had to understand the non-negotiables. I've always believed that you can be safe, compliant, environmentally conscious and profitable at the same time. Safety and environmental performance really comes down to leadership. It's about communicating expectations and holding people accountable. For example, there is a great young man who runs our West Virginia assets. A couple of years ago they didn't have a great safety record, so I talked to him and told him he was capable of doing more in that area. He responded by telling me that this was a dangerous industry and his team had other challenges to focus on.

I responded by saying the day you stop making excuses is the day you will start working safer, and now the site has gone over 500 days incident and injury free. They haven't had any lost time, recordables, or vehicle incidents in over 500 days. This is really impressive, and it shows that when there is a commitment by leadership to work safely and be compliant, you can make it happen.

How else has the focus on safety and compliance impacted your operations?

Overall, we've been able to put a greater focus on reliability. Previously, by not maintaining our equipment we were spending a lot of money and losing time on equipment failures. We've gone back to following the OEM's maintenance recommendations. By not following those we ended up doing mini overhauls on a regular, sometimes weekly, basis, and that was quite expensive.

One of our KPI's is no failures in excess of \$50,000. We've been able to reduce the number several years in a row and that has really brought down our operating expenses. When we are working safely and in compliance people aren't getting hurt on the job and having to leave, there is less downtime, and we are able to be much more efficient.

Finally, let's talk about technology. What technologies is Crestwood using to further operational efficiencies and safety performance?

This is one area within Crestwood where there is an opportunity to improve. There is a barrage of new technology that is developed on a weekly basis and it is tough to discern what adds value and what is just the next new shiny object. Specifically we are currently looking at how we manage work and how technology can help us. On one extreme you have almost a self-directed workforce and on the opposite end you have a program that plans out every minute of the day for the technicians. There has to be a happy medium where we can see further efficiencies in the way we manage work in a way that is forward thinking. What work is coming up in the next few weeks? Do we have the necessary tools? Is there other work that we need to do on that piece of equipment? We are also looking into some of the new leak detection technology that would really add value.