

The *Flow Informer*

your resource to eliminate turbulence

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Steady and Secure

Planning and preparation results in a stable supply of flow improvers

After an unprecedented hurricane season, the Texas and Louisiana Gulf Coast continues to rebuild and restore.

The 2005 hurricane season took a toll on many industries across the

U.S., including petrochemical raw materials production and supply. With several manufacturing facilities completely shut down or working with supply shortages and delivery constraints, lower supply

and increased pricing has been a continuing issue. Several declarations of force majeure have been announced because of the storm's destruction, including plant damage, flooding, manpower shortages and loss of utilities.

So, how does a specialty products company keep up when supplying the world with flow improvers? The answer is really simple: be prepared.

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An aerial view of CSPI's Bryan, Texas manufacturing facility.

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You Heard it Through the Pipeline

Meet Darin Fields!



Birthplace:

Bartlesville, Oklahoma

Education:

B.S., Chemical Engineering,
University of Oklahoma

Career Background:

Darin has worked in a number of specialty chemical operations environments, in a variety of roles. Most recently, Darin was the Solvents Market Development Director for ConocoPhillips.

In this issue of The Flow Informer, Darin Fields, manufacturing manager for CSPI, contributes to "You Heard it Through the Pipeline."

Since the day the ConocoPhillips Specialty Products Inc. manufacturing facility in Bryan, Texas, opened its doors in 1996, our operation has been 100 percent safety and customer focused. Although most customer contact is through our sales, customer service and field service relationships, the plant associates and staff are also focused on meeting customer needs.

Our ability to supply our customers has never been put to the test more than during the recent hurricane events along the Gulf Coast. From securing raw materials and arranging transportation, to the work it takes to produce our high-performing flow improvers, we have been able to supply our

customers without disruption.

The Bryan, Texas plant is a world-class facility exclusively dedicated for CSPI's hydrocarbon flow improver business. This dedicated facility is capable of shipping product to customers 24 hours

a day, 7 days a week. The plant staff is involved daily with customer relationships through our production scheduling cycle. This is one of the many critical steps we take to ensure your needs are met.

Health, safety and environmental measures are vital to the success of our facility. Our operating personnel put HS&E issues at the top of their priorities list each and every day. Just some of our recent HS&E achievements include:

- Achieving 9 years without a lost workday case
- Receiving the National Petrochemical Refining Association award for safety performance achievements in 2002, 2003 and 2004
- Active waste reduction programs have reduced non-hazardous waste generation by 50 percent from 2004 levels

In addition to all of this, we completed a number of customer and quality focused upgrades that will translate into additional operating flexibility and a more consistent product. Our debottleneck project unlocked capacity by an additional 20 percent. A new control system installation was completed earlier this year, allowing us to proactively manage our process along with capturing key process data for future improvements. Further upgrades include advances in one of our key product quality measurement capabilities and the installation of online analyzers that will allow us to monitor quality in real-time versus inspecting quality after the product is produced.

Each associate and plant staff member at the Bryan facility takes great pride in producing the highest quality products for our customers. I take great pride in the work they do each and every day.

Darin Fields

If you would like to talk with Darin, feel free to send him an e-mail at Darin.L.Fields@ConocoPhillips.com.

We hope you enjoy this issue of *The Flow Informer*. If you would like to be added or removed from our distribution list, please contact Monica Silva at Monica.Silva@ConocoPhillips.com. Feel free to also contact Monica with story ideas, feedback or comments. All issues of *The Flow Informer* are available on our Web site, www.LiquidPower.com.

Steady and Secure

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CSPI has an extensive list of tested and approved raw materials providers for its flow improver products. With several long-standing commitments in place, CSPI has not had any issues receiving the raw materials needed to manufacture its high-performing flow improver solutions to the global customer base.

“We are committed to meeting the needs of our customers without fail”

“We are committed to meeting the needs of our customers without fail,” said James Diarte, contracts specialist for CSPI. “The recent hurricanes caused some disruptions for the oil and gas industry, and we are fully aware that our flow improver products are necessary to achieve throughput and guarantee the delivery of crude oil to refineries and fuel to consumers. That is why we take the time to anticipate all possible scenarios.”

Diarte, along with technology and manufacturing support, is charged with the duty of finding alternatives and solidifying supply agreements when necessary. He works at finding global alternatives in the event CSPI’s main source supply is unavailable for any reason.

To guarantee a high-

performing flow improver, each raw material used in CSPI’s line of flow improver products is put through stringent quality and performance tests. Only when the replacement raw material passes all tests, is it added to the list of approved suppliers. The tests confirm that the specified raw material works cohesively with the other raw materials used, and that the flow improver batches made with different raw materials co-mingle without event.

performing a raw material provider. The process of qualification is extensive, but it’s the only way to ensure that our customers’ pipelines perform consistently.”

By having alternative suppliers, CSPI is able to continue shipment and delivery of LiquidPower™ Flow Improvers around the world without interruption.

“I’m glad that we are able to provide a reliable supply of LiquidPower™ Flow Improvers to



By having alternative suppliers, CSPI is able to continue shipment and delivery of LiquidPower™ Flow Improvers around the world without interruption.

“We complete thorough research and testing to ensure that the new raw material not only performs to specification in the lab, but also in the field,” said Rena Armstrong, senior quality engineer for CSPI. “Performance and quality cannot be jeopardized when quali-

our customers worldwide,” said Ann Oglesby, manager of CSPI. “Supply reliability was noted as one of the top 10 characteristics customers valued most in our most recent customer satisfaction assessment. We made it a priority, and now the team’s work has definitely paid off.”

When the Pressure's On *or Off*, Turn Up the LiquidPower™ Flow Improvers

When a pipeline smart tool found anomalies in a segment of a pipeline, pressure had to be lowered immediately, meaning a substantially lower crude flowrate of the delivery to a Texas refinery. But the pipeline and the refinery saw virtually no effects from the loss in pressure, and what could have resulted in a substantial economic loss, was avoided. You see, what flow the pipeline operators lost in pressure, they gained by utilizing LiquidPower™ Flow Improvers.

Adhering to routine maintenance, a smart tool was launched in

the pipeline, which originates in Oklahoma. Pipeline integrity personnel directed pipeline operators to decrease the maximum operating pressure when the tool reported that a segment of the pipeline had some potential anomalies.

"We always err on the side of safety, but we knew that the 20 percent decrease in operating pressure would mean a potentially huge loss of revenue," said the pipeline optimization engineer working on the pipeline. "This pipeline runs at maximum capacity all of the time, and any

reduction surely means a reduction in revenue to the refinery."

The pipeline operators avoided this potential loss by increasing the amount of LiquidPower™ Flow Improvers being injected into the pipeline. Prior to the smart tool run, LP™ 100 Flow Improver was being injected into the pipeline to achieve flow increase. Now, all the operators had to do was increase the level of flow improver being injected into the pipeline to compensate for the dramatic loss in pressure.

See **The Pressure's On** on page 5

Skid Spot

Tips for Optimal Performance of CSPI Injection Equipment

Winter's here! Here are some tips to ensure your injection equipment maintains optimal performance through the cold winter months.

1) Brrrr ...

Be sure to turn off the skid air conditioner if outdoor temperatures will be below 80°F/27°C.

2) Warm it up

Ensure heaters are in proper working order. Test your heaters and check on them regularly. If you ever have any questions about your skid heater, contact a member of your Customer Focus Team.

3) Bundle up

Properly insulate any exposed piping. Protect pipes by making sure they will not freeze or be subject to nature's elements.

We're always here to help. Questions, comments or concerns about CSPI injection equipment? Contact a member of your Customer Focus Team!

The Pressure's On

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"We were confident this would be the answer to our problem," said the scheduler of the pipeline. "Since the injection of LiquidPower™ Flow Improvers has increased, we have been able to meet our scheduled guarantee to the refinery. If we had done nothing, or left the flow improver injection rate at the level it was prior to the smart tool run, we could have lost approximately 2,400 barrels per day (bpd)."

A new flow improver injection system had to be installed to handle the increased injection into the pipeline, but the operation proved to be seamless.

"Our ConocoPhillips Specialty Products Inc. (CSPI) Customer Focus Team stepped right into action. They knew that this was a very time sensitive matter and had no problem installing an injection skid at one of the pump stations to accommodate the increased flow

improver levels," said the pipeline optimization engineer.

Doug Stover, field service representative for CSPI was called in to lead the installation of the new injection skid and ensure proper flow improver injection at the site.

"It was a Thursday when the word was sent that pressure on the pipeline needed to be decreased," said Stover. "By Saturday, the new injection skid was fully operational and the flow levels were back on target."

Now that the new skid is installed, the pipeline company personnel anticipate continuing the injection of flow improver at the additional pump station injection site for power optimization purposes, even once the repairs are made to the pipeline and the pressure constraint is removed.

"Now that we have the new skid at the additional pump station, it makes sense to use LiquidPower™

Flow Improvers to maximize flow and decrease our energy costs," said the engineer.

With pipeline integrity regulations becoming more stringent, pipeline operators are looking for ways the effects of lowered maximum operating pressure can be alleviated.

"As the industry works to improve the integrity of the nation's pipeline infrastructure, there are more instances where regulations require operators to temporarily reduce line pressure based on integrity assessment results," said the director of pipeline integrity for the pipeline company. "In many cases, pipeline operators can use flow improvers to compensate for decreased throughput caused by the pressure reduction, avoiding the loss of revenue to refineries and allowing scheduled deliveries to remain unaffected."

The use of flow improvers in this way is definitely becoming more and more popular, but some pipeline operators do not realize the value of increasing the injection of flow improvers can bring to the pipeline and the refinery.

"We want people to recognize that using LiquidPower™ Flow Improvers can make what looks like a dire situation have virtually no economic consequence," said Martin Guillory, senior technical sales representative for CSPI. "It's becoming one of the ways that people are thinking of our (CSPI's) flow improvers differently."

Stay Connected

Visit www.LiquidPower.com for product information, including product datasheets, case studies and informative links.





On the road again ... and again ... and again ...

Congratulations are in order for Sentinel Transportation's Bryan, Texas drivers. Sentinel's Bryan fleet achieved its **1,000,000 safe mile goal** on June 20, 2005. Through miles of rain, fog, construction-zoned roads and traffic-filled highways, the drivers were able to safely deliver millions of gallons of LiquidPower™ Flow Improvers. The drivers not only maintain a safe driving record and practices, but also make sure their trucks are properly maintained and continue to run safely. Onward to 2,000,000!



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