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INNOVATION IN MINING

Caddo Creek Resources uses the NUUO Remote Live Viewer to show a snapshot of the live ‘operator’s view.’
Source: Caddo Creek Resources

ON THE COVER
HDR streamlines Section 404 permitting through innovative approaches.
Source: HDR

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As I was pondering about this edition’s column it dawned on me that fall is just around the corner. Hard to believe that July is over, we are in the dog days of summer, and that football season is almost upon us. In recapping the last few months, the 84th Texas Legislature concluded. Our Governmental Affairs committee put forth another stellar effort in protecting and supporting TMRA’s Owner/Operators’ and Support Members’ interests. We all celebrated with another spectacular TMRA Sine Die event at session’s end. I would personally like to thank all of our sponsors for this event, because without you it would not be possible to achieve the success we have enjoyed in thanking our legislators and their staff members for their service to Texas. Unfortunately we have several major federal battles to fight in the coming months with the Clean Power Plan, which will affect every American citizen, Office of Surface Mining’s Stream Protection Rule and the numerous other edicts coming from the Environmental Protection Agency. The best way to keep abreast of these and other industry issues is to get involved, become more active and participate in TMRA’s quarterly meetings and special ad hoc committees; don’t just sit on the sidelines.

In the middle of July, one of the lignite Teacher Workshops was held at the Texas Westmoreland Coal Co. Jewett Mine. This is one of my favorite annual TMRA events to be a part of. I can speak on behalf of all Texas Westmoreland Coal Co. employees. We want to thank Francye Hutchins and the TMRA Education Committee for allowing us to demonstrate to these educators that coal mining can be conducted safely, we are stewards of the environment and our employees are proud of the activities we accomplish on a daily basis. It is always great to see the faces and hear the dialogue among the teachers throughout the week, of the experiences they were a part of, as well as what they observed and were taught. They in turn will pass on this same information to the respective students at each of their schools. Our communications folks do a great job of getting the word out to the local press when these workshops are held in their respective regions of the state. These are the types of events and stories our industry needs to publicize more often.

As always, please continue to be active in TMRA. This is your organization and the more the participation, the more benefit we provide to all our members.

Our theme for this issue of TX Mining is “Innovation in Mining.” Innovation can be described in many ways, some of which include advancement, improvement, invention, modernization, originality, or simply put, new ways of doing things better, bigger, cheaper and faster. With respect to mining and reclamation, innovation has been a never-ending process from the good old pick-and-shovel days when man first started mining ore bodies. If you have been lucky enough to attend MINExpo in Las Vegas, innovation in the mining industry is on full display every four years. Equipment manufacturers continue to develop larger surface mining equipment that years ago was not even imaginable. Conversely, underground mining equipment has been downsized and not compromised safety features to allow for recovery of even thinner seams of coal. In the pages ahead, you will find great articles on the innovative ideas and techniques our TMRA member companies exhibit in enhancing our mining and reclamation practices, not only in Texas, but worldwide.

One final “thank you” goes out to all of the TMRA members who have recently provided stories and/or photographs for use in our quarterly TX Mining magazine. The increased participation, quality of content and ability to meet deadlines for on-time publication and distribution of the magazine has certainly been enhanced over the past year or so. We have plenty of exciting stories to tell and ideas to share with our fellow members. It certainly is nice to walk into the Railroad Commissioner’s foyer and see copies of our magazine sitting on the tables for others to read while waiting for their appointments. Please do not hesitate to contact Ches or me if you have an article you would like to include in a future issue.

In closing, if you have not done so yet, please mark your calendars for Oct. 25 - 27 or, better yet, register online for our TMRA Annual Meeting. We are in final preparation mode, and the event will be held once again at the beautiful Hyatt Regency Lost Pines Resort & Spa. Hopefully we can make this year’s meeting the best one yet with record attendance and exhibits. I hope to see you all there and will certainly try to visit with as many of you as possible. As always, please continue to be active in TMRA. This is your organization and the more participation, the more benefit we provide to all our members.

—Mike
ASFE Fleet Solutions Provider

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New MSHA Coal Mining Dust Rule Takes Effect August 1, 2014
EXECUTIVE DIRECTOR’S MESSAGE

Can it really be that, in mid-July, I was reminded of my opportunity (I try not to use the word “task”) to write this “Executive Director’s Message” for our fall TX Mining edition? Where has this year gone? Sure, I know, the first half was the 84th Texas Legislature. We have a very good legislative summary as a part of this edition. Even more effectively than in the past, TMRA has been active in supporting and protecting your interests. That included hosting a TMRA Lunch and Learn and the end-of-session TMRA Sine Die event, both successful but with the Sine Die event over-the-top successful, thanks to all of you and our many sponsors. I unofficially stepped in to a more active role with TMRA last August, followed by my being allowed this opportunity to serve more officially as your executive director as of Jan. 1, 2015. I want to thank our TMRA leadership and, so very importantly, all of our TMRA Members and Contractors, for accepting me and, for sure, helping and welcoming me. Never think I don’t need and appreciate your input, feedback, support and, yes, criticism. What I love about TMRA is that it truly is a collaborative effort.

Our theme for this edition is “Innovation in Mining.” This great topic is strongly reflected by TMRA’s members, both Owner/Operators and our valued Support Members. You’ll see that clearly demonstrated by this issue’s articles, keeping in mind that they are just the tip of the iceberg on all that our TMRA members bring to this industry. We should be proud, always, of what we do and how we do it and keep the “pedal to the metal” on continuing to “innovate.”

I want to thank all TMRA members for your support in a great number of ways. I offer a very special “thank you” to all of you who have taken the time and effort to contribute to our TMRA magazine during 2015. This fall edition really highlights the great support and talents that so many of you contribute to your industry, your company and, of course, to TMRA. We encourage all of our members to get involved in whatever way works best for you. We’d love to also make your work a part of our magazine going forward.

“In-NO-va-tion” is a noun. Innovation includes creativity, originality, ingenuity, inspiration and inventiveness. Synonyms include change, alteration, transformation, new methods and measures. The action of innovating! That’s the topic and that is exactly what this TMRA membership so well exemplifies. A very good friend of mine gave me a spiral bound book back in 2003 titled “Pearls of Wisdom” by Roger Kirkham. Its insights for business and life remain on the mark. Elbert Hubbard, for example, said: “People who want milk should not seat themselves on a stool in the middle of a field in the hope that a cow will back up to them.” One has three options when confronted with a problem:

1. Suffer: do nothing except wish for things to get better
2. Get Out: quit, leave
3. Confront: confront the problem and seek solutions.

As you’ll see, our TMRA members are confrontational in the very best way — whether it is innovation through education, as in our article on “Data Driven Simulation Training Delivers Results for Kiewit Mining Group,” or “Caddo Creek Resources Installs Dragline Camera System,” or innovation through our approach to reclamation, or in many other ways. Our industry, Owner/Operators and the talented Support Members providing guidance, services and equipment, all are working together to meet production and reclamation goals while maintaining and enhancing our environment. You should all be very proud!

We welcome and applaud your support. We hope you’ll join with us and be active. Start this activity by supporting and participating in our committees, at our annual meeting and related activities and, importantly, in your continued support for our education and outreach efforts.

—Ches
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On June 1, 2015, the Texas legislative session adjourned sine die, bringing the 84th Texas Legislature to a close. Texas Governor Greg Abbott (R) indicated he does not anticipate any special sessions during the interim, meaning that the Legislature would be anticipated to return to Austin in January 2017 with the convening of the 85th Texas Legislature.

During the session, 6,476 bills and joint resolutions (constitutional amendments) were filed. This was nearly a 7 percent increase over bills filed in the previous session. As of sine die, the Legislature had passed 1,329 bills, or 21 percent of legislation introduced, which is a slight decrease from the previous session when the Legislature passed 24 percent of legislation introduced. The Governor had until Sunday, June 21 to sign or veto legislation. In Texas, any passed legislation that is not vetoed by the Governor before June 22 becomes effective, regardless of whether or not it is signed by the Governor.

TMRA had a successful 84th Texas Legislature. TMRA actively monitored 50 bills. Overall, most bills TMRA opposed did not pass.

Water

HB 2647 by Rep. Trent Ashby/Sen. Craig Estes (vetoed by the Governor) related to a limitation on the authority to curtail groundwater production from wells used for power generation or mining. This is the groundwater legislation introduced that offers a process for generators to receive an exemption from curtailment orders for groundwater wells that support power generation or mine operations. Generators may petition a Ground Water Conservation District to delay a groundwater curtailment order when such an order would impact public health, safety or electric grid reliability. The ground Water Conservation District may grant an exemption from curtailment for up to ten years.

SB 1101 by Sen. Kevin Eltife/Rep. Chris Paddie related to the authority to determine the supply of groundwater in and potential impact on public health of certain regional water plants. Language was added to the bill that directs regional water planning groups to consider the impact on “public health, safety and welfare” in their overall planning process. This language supports the underlying policy rationale behind HB 2647 and will be an argument to point to the future water planning process. TMRA supported efforts to pass groundwater legislation (HB 2647) introduced by Rep. Ashby/Senator Estes. Unfortunately, the bill was vetoed by the Governor after the session adjourned. Despite the veto, the bill established a “seat at the table” on groundwater policy.

Tax/General Business


It permanently cuts the basic rates of the franchise tax by 25 percent. The estimated fiscal impact for the 2016-17 biennium is a reduction in revenue of $2.56 billion. The rate for retail/wholesale is reduced to 0.375 percent, and the rate for other industries is reduced to 0.75 percent.
One notable bill from the session will fundamentally change the contested hearing process for environmental permits — matters referred by the TCEQ to the State Office of Administrative Hearings for a contested case proceeding under Texas Water Code § 5.556.

SB 709 provides that: (1) an applicant’s filing with the AU of a draft permit, the executive director of the TCEQ’s preliminary decision, and any other supporting documentation in the administrative record establishes a prima facie presumption that the permit application meets all state and federal legal and technical requirements, and the permit would be protective of the public’s health and physical property and the environment; (2) the burden shifts to the protesting party in the contested case hearing to rebut the established presumption by presenting evidence that the draft permit violates specific state or federal legal or technical requirements; (3) the TCEQ may not find that a group or association is an affected person unless the group or association identifies a member of the group or association who would be an affected person in the person’s own right; (4) that the TCEQ Commissioners may consider various factors for the purpose of determining whether a hearing requester is a person affected, including the administrative record (as it exists to that point); the analysis and opinions of the executive director and other expert reports; and affidavits and data, so long as timely submitted; and (5) the TCEQ must provide notice to the state senator and state representative of the area in which a permit for a facility is to be issued.

No other top priority environmental bills passed. There were a number of bills filed related to the EPA’s Clean Power Plant Rule. As a matter of policy, TMRA was opposed to all versions on the grounds that they were “premature” given that the proposed rule is not yet final. Governor Abbott also preferred that the Legislature wait to take action on CPP. Though many of the bills had hearings, none passed. There were also several bills filed regarding climate change—none passed. Finally, TMRA-supported appropriations to TCEQ for S0 monitors were included in the budget.

As a matter of policy, TMRA opposed all bills related to the EPA’s Clean Power Plant Rule, given that the proposed rule is not yet final. Though many bills had hearings, none passed.
Do your eyes glaze over when you think about Section 404 permits and which one is necessary for your project? You’re not alone. All coal mines must simultaneously fulfill the Clean Water Act, Section 404, and Surface Mining Control and Reclamation Act of 1977 requirements. So, when you’re working at a Texas lignite mine, these permits are a key part of the process—a complex part that can benefit from a little simplification. That’s why HDR Vice President Matt Tanner set out to rethink the process and approach to Section 404 permits.

Putting years of mining knowledge and a good ration of common sense to use, Tanner worked closely with the Fort Worth District of the U.S. Army Corps of Engineers to streamline the process. Initially, State Program General Permits were standard issue. But it didn’t take long for the Nationwide Permit 21 (NWP 21) for surface coal mining to be required. With no formal template for the application process in place at the Fort Worth District, Tanner reworked old Pre-construction Notification (PCN) documentation as the NWP 21 program developed. His goal: To simplify and organize documentation and plans for mitigation, and in turn create an easier review process for Forth Worth District staff. During the two years it took to implement his documentation process, Tanner built close ties with USACE staff. At the time, he was responsible for Section 404 permitting at TXU Mining. When he came to HDR years later, his relationships and Section 404 permit documentation processes came with him.

The overarching permit application process and documentation continues to evolve as federal regulations change. In 2008, USACE wanted to improve the consistency of Section 404 and streamline staff review. So, they selected HDR to develop user-friendly permit and mitigation banking templates for public (applicant) use. A year later, HDR worked with USACE to create the Texas Rapid Assessment Method (TXRAM), which was published in 2011 as the “Final Draft for Public Review.” As previously discussed in the Fall 2014 issue of TX Mining magazine, TXRAM is a tool that evaluates the condition of streams and wetlands within the Fort Worth District, and uses that information to calculate impacts and mitigation requirements for Section 404 regulated activities. Today HDR is working with USACE to revise and finalize TXRAM based on public comments and field testing.

The evolution continued in 2014, when HDR’s John Wooten came up with a solution for a client that needed a Section 404 permit to remining an area. The current options didn’t quite fit the situation, so he took a different approach and used the NWP 49—which had never been used in Texas—for coal remining activities. The permit was approved on time, and now NWP 49 is part of our permitting arsenal. The use of NWP 49 enables TXRAM to be tied into the permitting process, further simplifying it.

Since 2005, these new processes and approaches have led to HDR’s successful track record of obtaining permits. With a hard look at permit documentation and processes, Tanner and Wooten continue to reimagine Section 404 permitting and initiate workable solutions for the lignite industry in Texas.
With quality equipment and an experienced team, we can help bring conservation and productivity to your mining operations.
What do you do?
As an HDR marketing manager, I work to bring a book of work to HDR that supports the Mining Sector in Texas. This entails working with lignite mining operators and HDR staff at all levels. Keeping staff busy and fulfilling client expectations might be another way to look at it. I also connect with several clients in a principal role to ensure contractual obligations are equitable for both parties. I’m involved with organizations such as Texas Mining and Reclamation Association, which is important and sometimes includes technical support or general support of the industry regarding regulatory or policy issues. From a global perspective, I work with staff across North America and in Brisbane, Australia, to research and understand the coal market. As a company, we analyze coal clients in North America and globally, in addition to conducting market analytics and researching the global market trends related to thermal and metallurgical coal. This information is analyzed and packaged for use with a wide range of clients and at various layers in specific organizations. HDR products in the global space range from board room presentations to market trend newsletters on coal and other mined resources.

What is your favorite part of the job?
Strategic Planning. I have a high regard for HDR’s strategic planning process, which is one of my favorite responsibilities and a large part of my current job. I also worked on several long-range planning teams and scenarios in my previous role at TXU Mining. Strategic planning keeps me up-to-date with clients and supports my 30-year relationship with many of my friends in Texas. I also have additional coal client relationships outside Texas in North America. Another favorite is watching how mining has progressed at HDR. In 2005 we did not have a cohesive program, and when the company asked me to look at the overall picture, I jumped at the opportunity. Things really took off after 2008, and the program has progressed to where it is today. The 2015 Engineering News-Record placed HDR as number five in mining.

Why is your role important to the mining industry in Texas?
Institutional knowledge surely helps the lignite mining industry resolve specific problems. I am “all in” with the lignite industry and use my knowledge, gained from working within TXU Mining and permitting multiple mines under the Clean Water Act, Section 404, and Surface Mining Control and Reclamation Act (SMCRA) permitting systems. When I joined HDR, I applied this knowledge across many of the other mines, and I have shared and transferred the things I know to others within HDR so they understand the big picture of how lignite mining works from a permitting and regulatory perspective.

What would you tell a young person interested in pursuing this field?
Mining in general (not just coal mining) is a great career field. Once you become engaged, you soon learn that mining “the earth’s resources” is one of the chief building blocks of the global economy.”
What do you do?
As an environmental project manager, I manage a number of environmental permitting projects for various mining clients throughout the state. Many of the projects consist of obtaining different permits and ensuring compliance with Section 404 of the Clean Water Act. The role of a project manager varies day-to-day. Some days I am in the field performing wetland delineations or running a Texas Rapid Assessment Method (TXRAM) evaluation. Other days, I am in the office working with other environmental scientists and clients to develop permit applications.

What is your favorite part of the job?
The people. Whether it’s working with folks in the office or in the field, it is always great to work with people in the mining industry. Everyone works as a team to get the project done or obtain the permit. Unlike other industries, the mining industry works closely together to further mining in Texas.

Why is your role important to the mining industry in Texas?
While wetland permitting is pretty far removed from coal extraction, it is an important part of the overall mining process. According to Section 404 of the Clean Water Act, impacts to waters of the United States (for example, wetlands, streams, etc.) require authorization. At HDR, we have helped obtain permit authorizations for most of the state’s coal mines and continue to work with various mines to remain compliant.

What would you tell a young person interested in pursuing this field?
Try to find an internship. Many of the mining companies offer internships that provide excellent mining experience. Several of our environmental scientists at HDR participated in internship programs before working full-time. While education is very important, nothing can replace experience.
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Through training, Walnut Creek Coal Mine in Central Texas has transformed big data into fewer equipment damaging operator-induced errors, resulting in lower equipment maintenance costs.

The data used to focus operator training was generated by two information systems: equipment health monitoring and Immersive Technologies’ SimControl.

Health monitoring is a web-based application that allows a quick and easy view of equipment event and diagnostic codes from electronically controlled systems in nearly real time. Exception reporting from health monitoring results in early detection of issues with equipment, allowing the miner to be proactive in resolving the issue. Some common exceptions that many truck mining operations focus on include engine overspeeds and transmission abuses. Data from health monitoring was used both prior- and post-training. Prior to training, health monitoring data evaluation indicated a number of engine overspeeds and transmission abuses that were occurring; training objectives were then developed to reduce both events. Post training, health monitoring exception reporting e-mail notifications enabled prompt coaching opportunities to correct the behavior causing exceptions.

SimControl is the information database generated during operator training onboard a simulator. SimControl collects and reports operator and equipment data during training sessions. In addition to meaningful measures, such as travel speed, spotting accuracy, gear selection, speed and braking technique, the simulator can identify operator response to loss of steering, loss of braking and onboard fires. Data from the SimControl was used to identify and measure operator skill and ability and to focus training time on engine overspeeds and transmission abuses. The results of using the SimControl data during training included both increased field application of training objectives and reduced training time because mastery of the skill could be measured during the training.

Both overspeeds and transmission abuses are within the control of the truck equipment operator. The operator skill necessary to prevent both events was gained through simulator training.

Engine overspeeds occur most frequently on declines, such as ramps into the pit or ramps off of a dump, where the weight of the truck forces the engine to turn (RPM) beyond its design limit. The consequences of an engine overspeed are reduced engine life or, depending on the severity of the overspeed, even catastrophic failure. Prevention of overspeeds has been accomplished by training an operator on the simulator to control travel speed with proper throttle position and transmission gear selection when approaching
and while traveling down a decline. Transmission abuses also occur most frequently on ramps and at the dumping location. The event can occur if a transmission is shifted out of neutral or park with engine RPMs too high, or if the transmission gear selection is placed in the direction opposite of vehicle travel (shifting into reverse while still traveling forward or visa versa).

Through realistic hands-on simulator training, Walnut Creek's operators practiced techniques on haul roads and dumps with live feedback of OEM-suggested operating parameters provided through the SimControl until the mastery of the skill was verified.

Walnut Creek is very satisfied with the results from the training delivered through the Simulator by KMG Training. KMG employs adult learning principles in their delivery with multiple delivery methods, including operator handbooks, e-learning, classroom discussions, simulation modules and field training. Operator-induced errors can be costly in terms of repairs and/or rebuild component costs. Since training took place, engine overspeeds have been reduced by 50 percent and transmission abuses by 66 percent. The KMG Training Team was recently recognized for its training initiative by receiving the Global Business Improvement Award from Immersive Technologies. KMG competed against more than 265 global mining operators in 39 countries.

Stephen Mullaney is area manager for Kiewit Mining Group. If you would like additional information or KMG training at your site, contact him at stephen.mullaney@kiewit.com.

Simulator training is used to identify and measure operator skill and ability and to reduce training time.

Source: Kiewit Mining Group
In the mining business, we are always looking at new ways to enhance safety, improve availability and increase productivity. Over the years, advances in technology have played a role in achieving these goals. Specifically, the use of cameras has become more prevalent in the last decade as quality and affordability have improved. Cameras are widely used now for site security, blind spot monitoring on mobile equipment, and even on draglines for operator visibility of the machinery deck, boom point, and other various locations around the machine. To this point, most of these applications have been set up as local systems, meaning the mobile equipment or dragline operator had the feedback in the cab, but no one else could see what they were seeing. The same is true for most site security systems. Only the individual looking at the monitor could see what the cameras were recording. When Caddo Creek developed the Marshall Mine, we decided to take the technology to the next level.

During the design phase of our site and dragline construction, we tried to find ways to improve our systems to make our operation safer, more secure and as efficient as possible. We had the luxury of being able to make numerous upgrades to our dragline as a result of lessons learned running other machines. But like any other operation, we wanted to try something new to further improve our system. So, we decided to investigate the possibility of integrating remote monitoring technology to complement the camera systems we were installing at the office facility, but more importantly on the dragline. With the help of our IT department, we were able to find a system that allows remote access to all the cameras on the mine site through our wireless network. The NUUO Remote Live Viewer allows us to watch all the linked cameras from our desktops. Even better, like many things today, there’s also an app that can be downloaded onto your mobile device for viewing even when off site. The initial installation was a success with both the security cameras as well as those on the dragline. However, once we saw the benefit of this system in action, we decided to add one more camera to the dragline, the “Cab View.” The benefits we’re gaining from this application are outstanding.

With the addition of the last camera, we gave ourselves the ability to not only see what the operator was seeing, we also took it a step further and began using it as a remote planning tool. Being a relatively small, yet still seven-day operation, we don’t always have planners on site.

By Chris Taylor, Operations Manager, Caddo Creek Resources
So, in the event a question comes up about the digging plan, we can pull up the camera on our cell phones while talking with the operator and supervisor in the cab of the machine to develop a plan of action. Now our planners can be involved seven days a week without having to physically be at work. Since our operation is still fairly compact, we also can use the live camera feed for spoil grading and water management planning meetings in the office. Instead of just looking at locations on a map, we can literally point to the areas of the pit and spoil we need to address before heading out to the field to perform the work. Our level of effective communication has drastically improved with the help of the camera system.

Despite all the positives we’ve seen with our camera system, there are a few potential negatives to keep in mind. First, most operators don’t like the supervisors and managers looking over their shoulders... with the “Cab View” camera that’s literally what you’re doing. It may take a little time to reassure the operator that Big Brother isn’t watching. Also, there’s a potential impact on your cellular data bill—watching the dragline dig can be very addicting!

“Our level of communication has drastically improved,” said Chris Taylor of Caddo Creek Resources.
Luminant’s Reclamation Efforts Boost the East Texas Economy

By Caroline Atkins, Communications Manager, Luminant

Building upon Luminant’s commitment to reclamation excellence, reforestation efforts at the company’s Martin Lake mines in Panola and Rusk Counties are sprouting environmental and economic results.

“We’re principally focused on reclaiming the land to commercial forestland and wildlife habitat,” said Sid Stroud, Luminant environmental director. “Luminant’s reforestation efforts are establishing valuable forest assets that complement the native cover and support the East Texas timber industry.”

With more than 75 percent of all post-mine land at Martin Lake mines reclaimed to forest cover, Luminant has sought to reforest the land to a level consistent with the local and regional economic and environmental needs. A majority of the trees planted annually are native loblolly pines, which is the fastest-growing species of all southern pines.

“We view mine reclamation and reforestation as an opportunity to renew an important natural resource that will contribute to the local economy for many years,” Stroud said. “With its added benefit of improving wildlife habitat and watershed protection, reforestation has become a cornerstone of our reclamation program,” Stroud said. “We view mine reclamation and reforestation as an opportunity to renew an important natural resource that will contribute to the local economy for many years.”

Luminant began reclaiming the land and planting trees before federal and state laws were written. Over the past 40 years, the company has reclaimed nearly 77,000 acres that meet or exceed pre-mine productivity, planting more than 37 million native tree seedlings.

Reforestation enhances wildlife habitat and provides long-term watershed protection by reducing soil erosion and improving water quality. Luminant also plants a wide variety of native grasses and forbs to achieve quality wildlife habitat and species diversity.

Learn more about Luminant’s reclamation efforts and dedication to land stewardship at www.Luminant.com.

“We view mine reclamation and reforestation as an opportunity to renew an important natural resource that will contribute to the local economy for many years,” said Luminant’s Sid Stroud.
Re-Defining Waters of the United States: 
What the 2015 Clean Water Rule Means for Surface Mining Operators

By James Thomas, Professional Wetland Scientist, HDR

On June 29, 2015, after several years of development, review and controversy, the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers jointly published revised definitions for waters of the U.S. The Final Rule became effective in Texas on Aug. 28, 2015, superseding previous definitions and regulatory guidance for jurisdictional determinations. Leading up to the August effective date, there has been mounting legal and legislative opposition. An eleventh-hour injunction in a North Dakota Federal court halted implementation of the rule in 13 states. Currently, the Fort Worth and Galveston Districts are implementing the rule with guidance documentation forthcoming.

The lack of guidance, combined with the complex nature of some of the Final Rule’s language, is certain to result in confusion during permitting and reclamation planning for mining activities. However, it may also have some hidden benefits for mining entities during reclamation and permit closure activities.

Why the Change?

Definitions for waters of the U.S. remained unchanged for approximately 30 years since being codified in the Federal Register in 1986. However, guidance on which waters were under federal jurisdiction kept changing as a result of legal case rulings, jurisdictional determination guidance documents and regional interpretation. In 2001, a U.S. Supreme Court decision rolled back protection previously held over isolated wetlands. Litigation resulted in a 2006 Supreme Court ruling providing two standards for determining federal jurisdiction: first, a “continuous surface connection” to confirm influence on the biological, chemical and physical condition of downstream navigable waters. Second, a “significant nexus test” of waters and wetlands would document connections to navigable waters. What has been lacking is clarification on when and how to apply the nexus test. The agencies contend in the preamble to the Final Rule that the two previous guidance documents did not provide the public or agency staff with the information needed to ensure timely, consistent and predictable jurisdictional determinations. It is important to note that while the Final Rule doesn’t result in new regulations, it is anticipated to result in changes and confusion of how existing CWA regulations are applied, not only under Section 404, but also Sections 311 and 402.

The Good, the Bad and the Confusing

The Final Rule is intended to clarify the extent of federal jurisdiction on waters by establishing clear boundaries to determine jurisdiction without the need for a significant nexus test.

The Clean Water Act (1972) and all previous rules and guidance, and the 2015 Final Rule, clearly provide federal jurisdiction over the following types of waters:

- All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
- All interstate waters, including interstate wetlands; and
- The territorial seas.
Exempted Waters and Aquatic Features

For the first time, the 2015 Clean Water Rule excludes from jurisdiction some waterbodies, such as certain ditches and stormwater structures that had previously been treated as potentially jurisdictional on a case-by-case basis.

The exemptions do provide some much-needed clarity for artificial, designed wastewater and erosional features and may reduce time spent evaluating these types of aquatic features. Yet a careful reading of the language related to ditches and stormwater conveyance channels, which often “naturalize” over time, will create as many questions as the exemptions answer.

Streams, Tributaries and Ditches

Perennial and intermittent streams have consistently been considered waters of the U.S. by the agencies and courts. However, streams with ephemeral flow were subject to much debate and changes in jurisdictional status due largely to their highly variable nature.

The Final Rule offers the first definition of a tributary, as a water that contributes flow, either directly or indirectly, to a water of the U.S., and has sufficient flow to create a bed and bank, and original high-water mark. Since very few ephemeral streams do not eventually contribute even small amounts of flow to downstream waters, it appears questions regarding them are solved for the time being.

The Rule also states a tributary can be natural, man-altered or man-made and includes waters such as rivers, streams, canals and ditches not excluded in other parts of the Final Rule. This is the part of the Rule most likely to generate confusion. EPA states that ditches generally will not be jurisdictional; however, the same documents say ditches that serve as tributaries are potentially jurisdictional.

Furthermore, while the agencies state that ditches constructed wholly in uplands and draining only uplands are not waters of the U.S., the Rule is silent on the common condition of wetlands forming in the bottoms of ditches excavated in uplands and subject to developed storm water drainage. In these cases, where ditches are no longer “draining only uplands,” the potential exists for coordination and permitting delays. Confusion regarding the jurisdictional status of ditches is likely until clear guidance and precedent are developed in each region and Corps District.

Wetlands and Other Waters

Under the Rule, wetlands and other non-exempt waters located within the 100-year floodplain or 1,500 feet of a stream are jurisdictional. For wetlands and other waters between 1,500 and 4,000 feet from a stream’s ordinary high-water mark and not in a 100-year floodplain, the same rule applies. The 2015 Clean Water Rule defines a tributary as a water that contributes flow, either directly or indirectly, to a water of the U.S., and has sufficient flow to create a bed and bank and original high-water mark. Source: HDR
floodplain, a significant nexus evaluation will still be required. While this provides clarity, it presents potential for permit actions on small, hydrologically isolated wetlands and aquatic features with speculative connection to, or influence on, downstream waters.

Still, this change may not result in substantial upfront permitting costs, and could actually result in time and cost savings by avoiding significant nexus evaluations of noncontiguous wetlands. Additionally, the Rule may help mining operators by allowing them to more clearly claim mitigation credit for the high-quality wetland habitats they design, construct and enhance during their extensive reclamation activities.

**Guidance for Mine Operators**

The Rule increases the importance of mine engineers and CWA permitting specialists working together to develop clear pre- and post-mining documentation related to all aquatic and stormwater drainage features. Mine operators should carefully document premining condition and contours of locations where ditches and drainage channels will be constructed as Best Management Practices and to meet Office of Surface Mining and State rules. Delineations and jurisdictional determination documents should accompany drainage plans to help ensure the records are consistently using the terminology needed to minimize future regulatory permitting actions on drainage ditches.

Conversely, for post-mining reclamation features intended to meet Section 404 mitigation requirements, it will be important to utilize design features that are consistent with natural streams and tributaries so a feature isn’t excluded as an upland vegetated ditch.

Surface mine operators in Texas have a long history of constructing functional wetlands and streams during reclamation. The Rule will encourage continuation of this practice, as well as use of new tools and techniques to further habitat conservation and restoration.

**HDR permitting experts and restoration ecologists will continue to monitor the development of guidance and regulatory decisions related to the Final Rule, and are prepared to assist TMRA’s mine operators with permitting efforts.**
Kingsville Engineer to Lead National Energy Organization

The Uranium Producers of America recently announced that Harry Anthony, a senior advisor with Uranium Energy Corp, has been elected president. Founded in 1985, UPA works to promote a sustainable and strong domestic uranium mining and conversion industry by fostering free and fair competition.

Anthony, a resident of Kingsville for almost 40 years, is a past board member and chief operating officer of Uranium Energy Corp, a publicly traded uranium exploration, development and production company based in Corpus Christi.

“UEC has garnered tremendous benefit from Harry Anthony’s leadership and experience,” Amir Adnani, president and CEO of Uranium Energy Corp., said. “With his service to UPA, the entire country will now benefit from his extensive knowledge of the uranium industry. We are pleased the UEC team continues to participate at the highest levels of the U.S. uranium industry, including, among other appointments, our Executive VP Scott Melbye having earlier served as president of UPA.”

Prior to joining UEC, Anthony was a senior officer and director of Uranium Resources Inc.

During his 20-year tenure at URI, he was responsible for all technical aspects of mine development. He has also provided technical consulting services for many international energy production companies and is a sought after speaker on uranium and related issues, having written and presented numerous reference papers on behalf of leading internationally recognized bodies, including the International Atomic Energy Agency.

Anthony has a bachelor’s and master’s degree in engineering mechanics from Pennsylvania State University.

Harry Anthony, newly elected president, Uranium Producers of America

TERP Fees on Non-Road Diesel Equipment to Drop

New legislation from the 84th Texas Legislature will reduce the Texas Emissions Reduction Plan fees on the purchase or lease of non-road equipment.

HOLT CAT® worked extensively with state legislators and other Texas Caterpillar® dealers to craft legislation providing a 25 percent reduction in long-standing fees on the sale or lease of non-road equipment powered by diesel engines. Fees will decrease by 25 percent, creating savings for customers ranging from approximately $250 to $2,500 on some of the most popular models sold and leased at HOLT.

The fees contribute to the funding of TERP, a nationally-recognized grant program designed to accelerate fleet turnover, which is aimed at reducing diesel emissions and protecting air quality for all Texans. According to Senior Vice President of Finance and Chief Financial Officer Paul Hensley, “This fee reduction will allow HOLT to provide even greater value to our customers, while sustaining an important program that protects air quality.”

The new, lower fees took effect on Sept. 1, 2015.

Concerning other aspects of the TERP grant programs, HOLT worked with a diverse group of industry, government and non-profit representatives to successfully advocate for an $80 million increase in the appropriations of TERP grant funds for the upcoming biennium.

Approximately $40 million of this increase will be added to the grant pool for diesel projects. This will make it easier for our interested customers to receive grant awards as we continue to assist them with TERP applications.

With more than 30 locations in Texas, HOLT CAT is the authorized Caterpillar heavy equipment and engine dealer for 118 counties in South, Central, North and East Texas. Established in 1933, HOLT sells, services and rents Cat equipment, engines and generators for construction, mining, industrial, petroleum and agricultural applications. HOLT offers total machine and engine rebuild capabilities, sells used equipment around the world and fabricates its own line of land-clearing equipment and HOLT Spray King® water tankers.

“This fee reduction will allow HOLT to provide even greater value to our customers, while sustaining an important program that protects air quality,” said Paul Hensley, HOLT senior vice president of finance and chief financial officer.
The TMRA Annual Meeting is each October in various parts of the state. Each year we offer a casual, informative meeting for Owner/Operators, Support Members, exhibitors and visitors to mix and mingle, visit with established contacts and make new contacts. We encourage all TMRA members to attend this annual event.

The Hyatt Regency Lost Pines Resort & Spa in Bastrop, Texas, offers a beautiful setting and many amenities for you and your family, including: Crooked River and Pool, Nature Tours and Self-Guided Hikes, Trap Shooting, Horseback Riding, Woldancer Golf Club, Biking, Evening Campfires, Spa Django, Tennis, Fly Fishing and Camp Hyatt for Kids.

**Keynote Speakers**

**Commissioner Ryan Sitton,**
Railroad Commission of Texas

**Dr. Frank Clemente, Ph.D.,**
Professor Emeritus of Social Science and Policy at Penn State

**Chairman Drew Darby,**
House District 72

**Schedule Preview**

**Sunday, October 25**
- 8-12 p.m.  Professional Development
- 1-2 p.m.  Industry Meetings
- 2:30-5 p.m.  Board of Directors’ Meeting
- 5-6:30 p.m.  Welcome Reception

**Monday, October 26**
- 6 a.m.  Fishing
- 7 a.m.  Golf
- 6:30 p.m.  Fun Night and Recognition of Legislators and Local Officials

**Tuesday, October 27**
- 8-4 p.m.  TMRA Annual Meeting
- 5:30 p.m.  Dinner and Auction to benefit Education Program

The TMRA Annual Meeting could not be held without the generosity of our Sponsors, who help offset our cost for the meeting and keep registration fees as low as possible. Thank you to our Sponsors!

For more information, contact: Cathy Pierce, TMRA Planning Committee chair, cathy.pierce@tmra.com.

For cost and registration: log onto http://tmra.com/tmra-annual-meeting-2/ and follow the instructions.
MEETINGS AND EVENTS

TMRA SPECIAL EVENTS

OCT. 25-27
TMRA Annual Meeting
Hyatt Regency Lost Pines Resort & Spa, Bastrop, Texas

OCT. 24
Education Committee

DEC. 2
Environmental Committee, Task Force Lunch & Meeting

DEC. 3
Lignite, Uranium and Executive Committees

INDUSTRY SPECIAL EVENTS

SEPT. 30-OCT. 2
Texas A&M University Reclamation Workshop
College Station, Texas

Check out our website at www.tmra.com for a full schedule.

Planning to Mining to Reclamation

Texas Westmoreland Coal Company
Jewett Mine
903-626-5485
**TMRA LEADERSHIP**

**Officers, Committees and Board of Directors**

**Executive Committee**
Chairman: Mike Altavilla, Texas Westmoreland Coal - Jewett Mine  
Vice Chair: Chris Sumner, Lhoist North America  
Secretary: Rick Ziegler, North American Coal  
Treasurer: Brett Wilson, Luminant  
Past Chair: Peter Luthiger, Mesteña Uranium, LLC  
Lignite Committee Chair: Jeff Mason, Luminant  
Industrial Minerals Committee Chair: Matt Hallmark, Trinity Construction Materials, Inc.  
Uranium Committee Chair: Craig Wall, Uranium Energy Corporation  
Member: Nellie Frisbee, San Miguel Electric Cooperative, Inc.  
Executive Director: Ches Blevins, Texas Mining and Reclamation Association

**COMMITTEES**

**Industry**
Lignite Committee Chair: Jeff Mason, Luminant  
Industrial Minerals Committee Chair: Matt Hallmark, Trinity Construction Materials, Inc.  
Uranium Committee Chair: Craig Wall, Uranium Energy Corporation

**Functional**
Communications and Public Awareness: Christian Goff, Pure Energy PR  
Education: Robert Gentry, Luminant  
Environmental: Derrell Ezell, Texas Westmoreland Coal Co.  
Governmental Affairs: Gene Jernigan, Energy Future Holdings  
Membership: Denny Kingsley, Texas Westmoreland Coal - Jewett Mine  
Nominating: Peter Luthiger, Mesteña Uranium, LLC  
Planning: Cathy Pierce, Texas Mining and Reclamation Association  
Safety: Steven Schauwecher, Luminant

**TMRA Board of Directors**
Harry Anthony, Uranium Energy Corporation  
Diane Lowe, NRG Energy  
Steve Eckert, Capitol Aggregates, LTD  
Jan Horbaczewski, Texas Municipal Power Agency  
Nellie Frisbee, San Miguel Electric Cooperative, Inc.  
Denny Kingsley, Texas Westmoreland Coal Company - Jewett Mine  
Peter Luthiger, Mesteña Uranium, LLC  
David Martin, Kiewit Mining Group  
Ricky Goodwin, Luminant Mining  
Scott Perlet, HOLT CAT  
Kevin Raabe, Rio Grande Resources, Corporation  
Martin Ballesteros Regalado, Dos Republicas Coal Partnership  
Mark Russell, Russell & Sons Construction  
Greg Shurbet, American Electric Power  
Darrell Silverthorne, Marshall Mining, LLC  
Adam Sinclair, Trinity Materials, Inc.  
Chris Sumner, Lhoist North America  
Keith Wheeler, Pastor Behling & Wheeler, LLC  
Rick Ziegler, North American Coal Corporation

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**EDITORIAL CALENDAR**

**TX Mining Magazine**

**Winter 2015**

**Year in Review and Philanthropy in Mining**

This issue will recap the year as well as feature philanthropic and civic projects invested in by Owner/Operators and Support Members. We’ll demonstrate the ripple effect of how a sound industry impacts so many other areas of the state from the arts and sciences to education and beyond. We’ll include year-end reports from our committees.

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**ADVERTISING DEADLINES**

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*For more information, contact:  
Lance Lawhon, TMRA advertising manager  
512-832-1889 • lance@solafidei.com*

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**TMRA Membership Benefits**

As the owner of a business that is influenced by the mining economy, you have an interest in the issues that impact the industry. When you join TMRA, you will:

- Receive *TX Mining*, a quarterly magazine featuring industry-related subject matter and member news.
- Have access to key decision-makers in Owner/Operator companies and other support/service companies.
- Support a reasonable balance between the business of mining and environmental stewardship.
- Affiliate with an organization committed to advocating on the industry’s behalf.
- Receive access to an online membership directory with names, mailing addresses and telephone numbers.
- Track mining and environmental regulations, legislation, tax proposals and other issues through standing committees.
- Be protected by TMRA industry task forces prepared to take action whenever necessary.
- Be encouraged to attend the TMRA Annual Meeting with up-to-the-minute information and quality speakers, such as state and federal legislators, regulatory officials, media representatives and business leaders, as well as other industry meetings.
WE MAKE DRAGLINES PERFORM BETTER

Bring us your fleet’s biggest heavy equipment challenges. Our engineers and field specialists will work with you to improve your draglines for better performance under harsh conditions, throughout the life of your equipment.

Honestly Better.
A specialized service to support Caterpillar® draglines with:
- Dedicated 50,000 square foot service facility
- Complete machine audits: mechanical, structural and electrical systems
- Critical component ultrasonic testing and inspection
- Dragline outage planning and execution
- Machine relocation team and tooling
- Tubular boom welding
- Field machining
- Dragline bucket replacement, rebuilding or repair
- Dragline parts manufacturing
- Emergency repairs