THE RECLAMATION ISSUE

PLUS!
Celebrating TMRA Teacher Workshops
ON THE COVER
In this issue, TXMining features the latest reclamation projects and steady commitment from our Owner/Operators and Support Members, highlighting the positive impacts on the environment. This Jewett Mine stream reclamation project uses native species and improved planting methods to reclaim the land. 

Source: Texas Westmoreland Coal - Jewett Mine

RECLAIMING THE LAND FOR WILDLIFE
Mallard ducks frequently use lignite mine reclamation waterways as they migrate through Texas. Source: Matt Tanner, Natural Light Photography.

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Keeping safety top of mind while working around Luminant’s Turlington Mine dragline, bulldozer operator Kenny McCann uses Human Performance Improvement tools to go home safely to his family. Source: Luminant
I have always been amazed by the quality of work and the level of detail that goes into reclamation. Reclamation is a reflection of a company’s commitment to restoring a mine site, and represents the culmination of diligent work by its experts, mine personnel, vendors and consultants, i.e., TMRA Support Members. Reclamation is also the public’s lasting impression of our industry.

Reclamation is a mine’s end-product and can take on many forms. Simply scaling back high walls and removing hazards can produce a Six Flags Fiesta Texas or Quarry Golf Course. Reclaiming a mine site with planned grades, soils, water features and vegetation can restore it to an even more productive state than before it was mined; suitable for cattle grazing, agricultural crops, timber, habitat and wetlands.

However, let’s consider what the public knows about mining in Texas. TMRA is a significant ambassador for the industry; promoting mining as a driver of the Texas economy, making electricity affordable and supplying the building blocks of our homes, roads and schools. TMRA Teacher Workshops educate K-12 school teachers; taking them through the lifecycle of a mine, while transforming them into knowledgeable industry advocates. I believe, however, we can do more.

And after reading this issue, you’ll know that TMRA members feel the same – always striving to not only satisfy an extensive list of federal, state and local laws and regulations, but also to go way beyond what is asked of them. We hope you enjoy learning about their efforts.

—Chris

"TMRA is a significant ambassador for the industry; promoting mining as a driver of the Texas economy."
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By the time this issue arrives and is online, it will be Summer 2016. Summer means vacations, I hope; kids out of school and both the fun and sometimes the “challenges” that go along with that. VERY importantly to our TMRA Owner/Operators and many of our Support Members, it also means RECLAMATION is and must be in full swing. So SUMMER is the perfect time for our magazine to focus on reclamation.

I love this issue because, once again, it gives us the opportunity to showcase the consistently outstanding reclamation at our mining operations. This means consistently meeting or exceeding all state and federal requirements and, in many cases, innovative approaches in the use of equipment, technology, water resources and vegetation. You will be informed and inspired by what you see and read. Never pass up a chance to get out in the field and visit our TMRA Member operations. I’ve always found them welcoming and proud of their work, and this includes ALL of the employees. Teamwork and commitment, along with safety, are always out front.

Our TMRA Mission Statement includes, in part, our TMRA Member commitment “...to create a balance between mineral production, environmental protection, economic strength and public welfare...” Environmental protection includes “reclamation, from the initial stages of resource delineation and environmental assessment through final restoration, reclamation and release of the fully reclaimed land for its approved post mining land uses.”

The Coal Mining Regulations of the Railroad Commission of Texas are the key guideline for reclamation responsibilities on land mined for coal and lignite in Texas. The regulations define “reclamation” as “those actions taken to restore mined land as required by this chapter to a post-mining land use approved by the Commission.”

This simple definition is not at all simple to follow when taken in the context of all of the reclamation provisions of the regulations. Nonetheless, our Owner/Operators and those who assist with reclamation do a job that wins state and national recognition and awards for excellence. Our reclaimed lands under the regulations fit the definition of reclamation that includes returning land to its former or a better state.

Over the last few months, I’ve had the privilege of touring the mined and reclaimed lands at several of our member operations and I can assure you that the lands mined and environmental resources impacted are being, and in many cases have been, returned to a condition as good as or better than they were prior to mining. This is pretty incredible, and could not be done without commitment, dedication and lots of skills and resources.

While the state and federal regulations and regulatory agencies certainly play a part in our successful Texas mining and reclamation efforts, those only provide the guidelines. Our TMRA Members assure that the work actually gets done, is successful and showcases what’s good about our TMRA Owner/Operators and Support Members and to show our state leadership that we understand that energy and resource development can occur responsibly and with the highest regard for our environmental resources and the public welfare.

—Ches

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FAMILY OWNED. TEXAS BASED SINCE 1961.
In 2009, Texas Westmoreland Coal Company (TWCC) embarked on a mission to not only improve the stream restoration program at the Jewett Mine, but also to build a process that would be recognized as the premier stream restoration program in the U.S. This ambitious effort stemmed from the growing awareness of stream functionality and stability.

Reclamation activities at the Jewett Mine, including stream restoration, had been underway since the late 1980s. Although the previously constructed streams functioned well, they did not include several components of a naturally functioning stream system. As with all best practice processes, excellence begins with planning and design.

Planning included the gathering of baseline data of the impacted stream channel and was a vital step in the process. To account for pre-mine baseline stream conditions, such as habitat quality and species composition, qualitative surveys were conducted on local, similar type tributaries.

TWCC Uses Innovation to Ensure a Natural Design

The design component was initiated from this data and ensured that the final design mimicked channel functions found in the local setting. Significant advancements achieved through the use of innovative technologies, such as Carlson’s Natural regrade software, have resulted in final streams that exhibit increased geo-fluvial characteristics and require far less reinforced structures.

Historically, final stream channel designs at the Jewett Mine were very limited in natural aspect. These designs exhibited linear channels, with virtually no sinuosity, and typically addressed elevation changes with riprap, concrete reinforced riprap or concrete-reinforced drop structures. Thought was not given to matching the post-mining stream conditions utilizing effective or innovative reclamation techniques to resemble pre-mine conditions.

Today, TWCC has improved its initial and final design capabilities through revised and more comprehensive initial planning and the use of Carlson’s Natural Regrade software. Several concepts and elements from the summary of the OSM Stream Protection Rule were evaluated and utilized by Jewett Mine staff for each individual stream channel to be restored following lignite removal. Using the GeoFluv™ design methodology for landform design, this software allows TWCC to prepare several iterations of a stream channel restoration project design before any dirt is moved. This design methodology results in a more natural, sinuous channel and landscape that is similar to pre-mine stream conditions.

Prior to design of the Limestone, Leon and Freestone Counties structure, TWCC conducted field observations of the watershed, soils, vegetation and the general topography to be affected. The review confirmed that there were no pipelines, occupied dwellings or cemeteries within the projected vicinity. The watershed encompasses less than 640 acres and is not consid-
ered intermittent. Furthermore, it was deemed the reclamation project would not adversely affect any wetlands, cultural resource sites, prime farmland or endangered/protected species.

**Drop Structures Ensure Elevation and Proper Drainage**

In order to provide stability and manageable surfaces conducive to the general topography of the area, a series of three permanent drop structures was designed to manage the flow from this watershed in the E West mining area. According to the reclamation contours, there was an approximate 20-foot elevation difference and a 1,300-foot length for the proposed drainage. This elevation difference and channel length were challenges in protecting the channel from erosion. The channel between the drops had varying slopes and methods of erosion protection. Three sections of the channel that have 10-15 percent slopes were protected with a rock-filled cell confinement material called EnviroGrid.

The remainder of the channel has a 0.25 percent slope and was designed to include an underlay of EnviroGrid 6” EGA 30, with Bermuda grass established to the crest of the defined channel.

The vertical drop structures were enhanced by the addition of features developed by a landscape architect. The concrete faces were designed to be covered with flagstone to give the appearance of a natural rock waterfall, while maintaining the structural integrity of concrete. Large native stone boulders were strategically designed within the channel to assist with energy dissipation of the expected flow rates. In the basin area below the drop structures, a one-foot deep pool was also created to dissipate channel flow.

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铁路委员会德克萨斯州的法规要求，必须有一种永久性渠道的排水流量大于640英亩的排水流量，能够承受10年的六小时暴雨。根据排水量，有一个近似20英尺的高差和1,300英尺的长度，用于设计的排水。这个高差和渠道长度是保护渠道免受侵蚀的挑战。渠道之间的下降具有不同的坡度和侵蚀保护方法。三个部分的渠道具有10-15%的坡度，被保护用于石笼，称为EnviroGrid。剩余的渠道具有0.25%的坡度，并被设计为包括EnviroGrid 6” EGA 30下的草皮，带有巴西南草在定义渠道的顶峰建立。

这些垂直下降结构被增强通过功能开发由一个景观建筑师。混凝土表面被设计为被覆盖与花岗石以给予出现的自然岩石瀑布，同时保持混凝土的结构完整性。大本地石块被战略性地设计在渠道内以帮助能量从河床的预期坡度的消耗。在基坑区域以下的下降结构，一英尺的深池塘也被创建以消耗通道流量。

**TWCC Uses Native Species**

In conjunction with advancement in design and construction, TWCC has enhanced the revegetation process of streams at the Jewett Mine by utilizing native species and improved planting methods. Due to previous stream designs that exhibited increased slopes and highly erodible soils, Bermuda grass is often the primary herbaceous species utilized for revegetation due to its quick establishment and increased ground cover potential.

TWCC transitioned from the placed sod to beyond the crest of this channel utilizing hydro mulch methodology. The hydro mulching process of applying seed, mulch and a tactifier to the soil provides an alternative revegetation method where steep slopes inhibit planting by conventional means. This process allows for quicker seed germination, adds organic matter and retains soil moisture. Both native trees and shrubs were planted along the slopes and crests of this structure. Woody species selection was based on factors that included flooding tolerance, specific planting zones for semi-flooded to perennially flooded riparian zones, mast production and growth rate.

At the Jewett Mine, all designs for streams, drainage channels and tributaries are treated with a respect for the natural and sustaining functions of the stream process. The Jewett Mine staff takes great pride in the development of the overall stream restoration and looks to find better ways to incorporate even more process improvements. The design aspect of the process is layered with checks and balances to ensure that the best possible plan is developed and the construction of the stream channel boasts the best available technologies – both during and after the basic channel is formed.
Luminant Celebrates New MSHA Safety Achievement

By Caroline Atkins, Luminant Communications

Luminant’s mining employees are digging into the record books. The team recently achieved the lowest injury rate in the nation among the largest mining companies, according to a review of the 2015 MSHA Recordable Injury Rates.

Communication, teamwork and a resolute focus on safety were key factors in reaching the milestone, according to Steve Kopenitz, Luminant senior vice president of mining.

“Everyone’s relentless dedication to safety, as individuals and as teammates looking out for each other, led to this superb result,” Kopenitz said.

“Such an industry-leading performance can only happen when a group committed to safety depends on all the tools and training available.”

The safety achievement is equally impressive, considering record-breaking rain in 2015.

“With all the rain and mud, the conditions that the miners worked under last year were extremely challenging,” Kopenitz added. “To think that our team was able to achieve this safety accomplishment under those conditions is just absolutely incredible in my mind.”

For Luminant’s mining team, safety is about learning and improving every day to work safer. Processes have evolved over the years and are now helping employees achieve top performance.

“To help reach our goal of zero recordable injuries – Safety Zero – employees use numerous safety tools, including Human Performance Improvement best practices and behavior-based safety observations,” said Steve Schauwecker, Luminant mining safety director. “By using our safety tools, we’re building upon our legacy of safety excellence.

“At Luminant,” says Schauwecker, “Safety Zero is more than just a phrase – it means building a safety culture and constantly improving, not only for yourself, but for your coworkers and your family.”

“I work safely for my family,” said Austin Wall, Kosse Mine specialist. “Going home safe to my wife and daughters is my top priority every day.”

As a company, Luminant also marked its safest year in history in 2015, due in large part to the safety record of the mining team. The milestone is a big step in Luminant’s relentless journey to Safety Zero.

Watch the latest Eye on Luminant video to learn more about the achievement at http://bit.ly/1WSPp88.
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A Texas county has celebrated its founding by instigating a unique restoration project led by the Sons of the Republic and with the help of the Texas Municipal Power Agency (TMPA) and others dedicated to the proud history of the state. The venture centers on the careful restoration of a 160-year-old cabin.

On Oct. 9, 2015, the completion of the first phase of the Boonville Heritage Park Project was celebrated in Bryan, Texas with the opening of a restored log cabin dating back to 1856. Ultimately, the project will include a number of other log structures and a garden that is representative of that period. The grand opening is planned for 2016 to mark the 175th anniversary of Brazos County.

Led by the William Joel Bryan Chapter of Sons of the Republic of Texas, the cabin restoration is one of commitment to preservation as a part of the mining and reclamation process, representing an outstanding cooperative effort among a number of organizations. These also include the cities of Bryan, Denton, Garland and Greenville, the Texas Historical Commission, Brazos County, numerous other supporters and TMPA.

**TMPA Sees the Value of Peters Cabin**

For TMPA, the story of the cabin began in July 1986 when the agency purchased a 723-acre tract for its Gibbons Creek Lignite Mine operation. The appraisal of the tract noted that it contained a hewn-log, dog-trot cabin of “no value.” Upon investigation, TMPA’s cultural resource consultants quickly realized that Peters Cabin – named after the last family to own it – had considerable historical value. The State Historical Preservation Officer (SHPO) agreed and on July 18, 1991, formally determined that the cabin was eligible for listing in the National Register of Historic Places in the architectural category – a dog-trot log building with square notching – deemed to be a “rapidly vanishing resource.”

By that time, the structure was at risk of imminent collapse. A videotape made on Aug. 24, 1990 shows slumping of the structure at the east end and significant deterioration in other places.
After review of a number of mitigation options, the Texas Historical Commission approved a plan on July 19, 1991 to stabilize the cabin. This involved the bracing of the four corners of both the west and the east pens, the installation of a new roof over the original wood shingles and the addition of awnings over the end walls. These protective measures were designed to be removable and to cause as little damage as possible to the historic fabric of the building. The stabilization work was completed in February 1992 and was effective for the next quarter of a century. Over the years, the only additional work that was needed was minor maintenance, such as the securing of doors and windows and the removal of trees and insects.

By 2013, the possibility of relocating the cabin began to look more feasible. Descendants of the Peters family had expressed an interest in relocating the cabin to a more accessible site for educational purposes. However TMPA, as a political subdivision of the state, needed the state’s consent because any cultural artifacts on its land automatically belonged to the state. The Texas Historical Commission was initially reluctant to allow relocation because the cabin’s “historic context” and its eligibility for the National Register might be lost. In fact, in January 1993, the Historical Commission recommended preservation of the site as a whole as a State Archeological Landmark.

Conditions for relocation became more propitious over the next few years. In 1996, TMPA closed the mine and started selling the property that would no longer be needed. Recognizing this, the local chapter of the Sons of the Republic of Texas prepared a detailed relocation and preservation proposal for the Commission’s consideration in September 2012. The TMPA Board of Directors supported the relocation and passed a resolution authorizing the conveyance of the cabin for free in November 2012. Finally, the Texas Historical Commission gave its consent to the move on Feb. 21, 2014 and TMPA formally conveyed the cabin to its new owners three days later, with dismantling and removal of the cabin from its original site completed in April 2014.

“TMPA is proud of its role as a responsible steward of cultural resources,” says Bob Kahn, general manager of the Texas Municipal Power Agency. “We are honored to uphold the standards of the Texas mining industry, which is to responsibly mine and utilize natural resources.”

Visitors will be able to see the Peters Cabin once it has been officially opened later in 2016 (a website is currently being established). Google Boonville Heritage Park to learn more about the project. Visitors are also invited to view the Archeological Exhibit at TMPA’s offices in Carlos, Texas, which features Paleo-Indian artifacts recovered ahead of mining that are older than the pyramids in Egypt.
Reclamation has been Embraced by the Industry

By David Martin, Kiewit Mining Group

Since the beginning of civilization, man has extracted the earth’s raw materials to improve their way of life. From the earliest known systematic mining activity around 40,000 to 50,000 years ago to more modern European mining in the 17th century to today’s cutting-edge mining in America, mining has allowed humans to live better and more efficiently.

It is only in recent history, however, that mining reclamation has become industry-standard practice and indeed an aspect of the business that mining companies embrace and welcome.

Congress Enacts SMCRA

Small-scale surface mining occurred throughout the ages, but in the United States, large-scale surface coal mining got its start in the 1930s. As surface coal mining grew it became apparent that there would be huge amounts of land left unusable once mining was complete. In the 1940s, some states began to enact laws regarding surface mine reclamation. These laws were inconsistent and quite often requested mine operators to reclaim the land at their own discretion, leaving no enforceable action. In 1977 Congress sent a bill to President Carter that was signed into law to become the Surface Mining Control and Reclamation Act of 1977 or SMCRA.

SMCRA created the Office of Surface Mines and set minimal federal regulations for reclaiming active and abandoned coal mines. Most mining states followed suit by creating their own state mining agencies. Texas’ state agency is the Surface Mining and Reclamation division of the Railroad Commission of Texas (RCT). Some states adopted the SMCRA rules verbatim and others used the SMCRA regulations as guidelines to create enhanced rules for their state. Before 1977 reclamation of mined lands had occurred on a limited basis, but SMCRA brought reclamation to a whole new level. Funds were created through a coal tax to address the reclamation of abandoned mines. For active mines and new mines, the act required a detailed plan for post-mine reclamation and bonding to ensure funds would be available should mine operators default on their obligation.

A New Era Begins for the Industry

SMCRA was not necessarily met with open arms, as it was a major change for the industry. Some mining companies saw it as placing undue financial burden on their operations, as they had no financial plans in place to handle the reclamation liability. The act was initially challenged as unconstitutional. However, the challenge failed and the new era of surface mine reclamation began.

Eventually the concept of reclamation was
accepted and became engrained in surface mining. Over time regulations have increased and often times they are deemed unnecessary or the interpretation of regulations by state agencies is seen as overreaching. However, the concept of reclamation as a viable part of mining and an inherent value to the environment and the public has continued to grow within the industry. With the cooperation of operators, support entities, academia and regulators, surface mine reclamation technology has advanced tremendously.

Operators have been able to manage reclamation costs, while improving quality and in most cases the landscape is more productive and appealing after reclamation than it was before mining. In fact, today’s surface miners take as much pride in producing quality reclamation as they do in developing techniques that improve safety, cut costs or improve productivity.

As a mine employee, one of the most rewarding things I do is to take a group of visitors on a tour through reclaimed areas of the mine. It is especially rewarding when they are in disbelief and have to be convinced that what they are seeing was once an open-pit mine. It seems the expectation is to see something resembling a barren wasteland. Instead, they encounter rolling hills with lush vegetation, beautiful water resources and abundant wildlife. This tremendously helps to dispel the rumors and propaganda that are all too often spread about the mining industry being a filthy business with no regard for environmental and human health.

Creating Community Areas of Enjoyment

SMCRA was specifically intended to ensure reclamation of disturbance due to surface coal mining. There are also great examples of reclamation success in other types of mining. Rock quarries have been repurposed as lakes, golf courses, theaters, amusement parks and housing developments. Abandoned sand and gravel pits have been turned into water and off-road recreational areas. Old underground mines contain museums, restaurants and community centers. Not all of these venues were built by mining companies, but the fact remains that abandoned mines were put to beneficial use once their viable mining life expired.

The main thing the mining industry and other entities have proven over the last 40 years is that our natural resources can be used for the benefit of society. With proper reclamation practices, the environment will be at the least left unharmed and quite possibly better off in the end. Reclamation has come a long way in a short time span. With the mining industry under constant attack by environmentalists, there has to be diligence going forward to not only maintain the current standards, but also to continue to exceed the growing expectations in reclamation.
TMRA Teacher Workshops are in full swing this summer and a timely opportunity for us to celebrate one of our teacher facilitators – Shauna Duby, an Austin-area science teacher. She tells us about the week-long, hands-on workshops that help educate Texas science teachers on the mining industry and its policy of promoting safety, education and environmental stewardship.

Q. Where and what do you teach?
A. In Austin ISD I taught 6th grade at Joslin Elementary, 8th grade science at Porter Middle School and 8th grade science at Bedichek Middle School. At the SHRC (Science and Health Resource Center) I now teach Outdoor Learning.

Q. How long have you been a teacher?
A. For 41 years I taught in my own classroom and now for the last four I have enjoyed being a support teacher. The kiddos come to the SHRC on field trips to visit our gardens and learn about the environment. I get to share with them and then return them to their teacher at the end of the visit. The other part of my job includes visiting campuses and facilitating science learning in the district (K-12).

Q. Why did you enter the teaching profession?
A. Because I’m bossy and I like to show off! No really, I love learning. My grandmother was a teacher and I loved to listen to her describe her classroom. I even had a pretend school set up in my basement as a child!

Q. What motivates you to teach?
A. I want to share my passion for science and especially earth science with others. My time with TMRA serves as my geology “fix” for the year.

Q. What is your favorite thing about teaching?
A. My favorite thing about teaching middle school is seeing the children they are and the adults they will become. In elementary school, it’s the excitement of new learning and listening to them explain that learning to each other.

Q. What role do you play in the TMRA Teacher Workshop program?
A. I came as a participant and now I am a presenter. Sometimes I am the comic relief.

Q. Did you know much about mining in the U.S. before becoming involved with the TMRA Teacher Workshops?
A. Yes, I’m from Montana so I knew about mining, but not how they operate or especially how they work to reclaim the land.

Q. What is the most important thing teachers can learn from the workshops?
A. Teachers can see for themselves all the aspects of mining. The activities have connections to the state standards for natural resources.

Q. Can you discuss the value of hands-on learning?
A. The hands-on learning of the TMRA Teacher Workshops is invaluable! Confucius said: “I hear and I forget, I see and I remember, I do and I understand.” TMRA Teacher Workshops mean teachers can:
  • Go in the mine and hold the coal in their hands
  • Go in a soil pit and test soils
  • Stand in knee-high grass in a reclaimed area
  • Climb up in a dragline
  • See the size of the equipment

Q. What are your most fond moments of the TMRA Teacher Workshop program?
A. The best parts for me are:
  • Getting to meet and learn from the experts at each mine
  • Discovering the personality of each workshop group
  • Getting to see the salt room at the J.J. Pickle Research Campus at the University of Texas at Austin
  • Looking into the spent rod pool at the nuke!
  • And on the lighter side:
    • Welcoming the mine workers to the WRONG mine during lunch!
    • Dancing with flashing shoes for weathering (Shake, Shake, Shake)
    • Seeing buzzards looking into the workshop thinking we were lunch
    • Walmart as a common thread for many workshops and a source of many strange items.
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New MSHA Coal Mining Dust Rule Takes Effect August 1, 2014
The National Mining Hall of Fame and Museum’s Board of Directors presented its 2016 Prazen Living Legend of Mining Award to the Women’s Mining Coalition at its 29th Annual National Mining Hall of Fame induction banquet on Sept. 24 in Las Vegas.

Every year, the National Mining Hall of Fame & Museum (NMHF&M) selects an individual or entity that has demonstrated ongoing, innovative work educating the public, policy makers, educators or related institutions about the importance of the mineral and mining industry to everyday lives. The awardee is selected from a pool of nominations reviewed by the National Mining Hall of Fame’s Prazen committee.

After an unprecedented election of women to Congress in 1992, geologist Kathy Benedetto saw an opportunity to go to Washington, D.C. and educate newly elected women lawmakers about minerals exploration and mining. Kathy recruited the help of two other female geologists, Ruth Carraher and Debra Struhsacker, and together they organized what would become an annual Fly-in to meet with the nation’s policy makers. Women’s Mining Coalition (WMC) evolved from that first Fly-in in 1993, with its membership continuing to actively educate and advocate for the mineral and mining industry.

The Fly-ins garner the attention of legislators and federal agencies to send the message, “A strong mining industry is vitally important to our nation, our communities, our families and our livelihoods.” WMC members emphasize that many jobs across the country depend on mining and practically everything people use in their daily lives is the direct result of mined products.

WMC has recruited its membership to have representatives from coast to coast and from all aspects of the mining industry, including geologists, engineers, metallurgists, miners, environmental experts, attorneys, mining vendors and suppliers, energy producers and other related fields. WMC members advocating for the varied mineral and mining sectors are able to provide policy makers with first-hand information about the technological advancements and environmental stewardship of today’s mining industry. Particularly effective among policy makers is the fact that WMC members are not typical lobbyists; they are daughters, wives and mothers, as well as highly-qualified mining industry professionals.

Frank McAllister, NMHF&M Board of Directors chairman commented, “The Women’s Mining Coalition embodies the spirit of the Prazen Living Legend of Mining Award through 24 years of ongoing mining advocacy and education activities. Their membership has had a tremendous influence and impact on promoting all aspects of the mining industry and spreading the message ‘Everything begins with mining. Everything!’ We are proud to recognize their efforts and bestow WMC with this prestigious award.”

More information about the Prazen Living Legend of Mining Award, this year’s inductees into the National Mining Hall of Fame and the Annual Induction Banquet to honor them can be found at www.MiningHallofFame.org.
The Railroad Commission of Texas (RCT) celebrated its 125th birthday in May, lauding its “long, proud tradition of protecting public safety and natural resources.” The RCT is Texas’ oldest regulatory state agency, established on April 3, 1891 by the Texas Legislature, giving the Commission jurisdiction over rates and operations of railroads, terminals, wharves and express companies. Since then, it has been given responsibility for overseeing numerous industries and currently has primary oversight and enforcement over the state’s oil and gas exploration and production industry and intrastate pipeline safety.

The Commission also regulates alternative fuels’ safety, natural gas utilities and surface mining. The agency’s jurisdiction over rail safety was transferred by the Legislature to the Texas Department of Transportation in 2005.

“The Railroad Commission has shaped Texas’ energy industry, and our energy industry has changed the world,” said Chairman David Porter. Said Commissioner Christi Craddick, “We could not be more proud of the Commission’s position as a global leader in energy regulation, standing as a testament to the fact that environmental safety and energy development can coexist for the betterment of all Texans.”

Current and former Railroad Commissioners celebrate Railroad Commission of Texas’ 125th birthday.

Source: Railroad Commission of Texas
Four of HOLT CAT’s top technicians have won a state dealership competition, earning a spot in the multi-dealer TECH WARS competition.

HOLT CAT®, the Caterpillar® dealer for South, Central, North and Northeast Texas, participated in the TECH WARS dealership competition, with four technicians making their way to the top.

From the Machine division, Jarrett Payton of San Antonio and Autry Adams of Longview represented HOLT CAT, along with technicians Alan Lindow and Vince Jones of Longview, who competed in the Power Systems division.

They participated in several rounds of competition against approximately 400 HOLT CAT peers, showcasing the technical skills and challenges technicians face day-to-day – from demonstrating technical knowledge to hands-on heavy equipment trouble-shooting.

The four went on to compete in a multi-regional competition with other CAT heavy equipment dealers: Riggs, Butler and Warren. The HOLT contestants traveled to Little Rock, Arkansas on April 4 for a four-day competition, where their skills were assessed and measured against other technicians from these Caterpillar dealers.

During their send-off to Little Rock, Corinna Holt Richter, executive vice president and chief administrative officer, and Peter John Holt, executive vice president and general manager, congratulated all the participants and contest winners, saying, “This is a great example of our core value of Excellence: by continually getting better.”

“Besides bragging rights to be the best, this is a fun, competitive way to build morale and represents our focus on games with a purpose – where we can assess the skillset of our technicians at the store, regional and state level, and help us determine focus areas for long-term skills development,” said Shaun Manning, technical training director of HOLT CAT. “As this was the first year that HOLT competed in TECH WARS, we were very excited to see how well our technicians performed, and know they represented HOLT strongly in Little Rock.” HOLT plans to expand the competition in coming years to include its Transport, Ag, Crane and Electric Power divisions.

Although HOLT CAT did not take home the prize this year at the multi-dealer level, the technicians are already preparing for the next competition. Reflecting on this year’s TECH WARS, competitor Autry Adams said, “I had a great time meeting and competing with technicians from other CAT dealers. Overall, it was an incredible experience and I can’t wait for the opportunity to do it again next year.”
Alamo Academies Graduates Inaugural Heavy Equipment Class

Alamo Academies’ (www.alamoacademies.com) newest venture hosted its first graduation class this past May. Thanks to this newly minted Heavy Equipment program – and through hands-on learning in and out of the classroom – Academy students are able to enter the workforce with specific, industry-aligned skills and education.

The Heavy Equipment program, along with four other industry tracks at Alamo Academies, is helping the San Antonio community to address “skills gap” issues plaguing the workforce by providing high-demand, high-tech, highly-skilled talent. Along with Alamo Academies, Mayor Ivy Taylor and many industry leaders were on hand to celebrate these 11 high school seniors and recognize their accomplishments.

The Heavy Equipment Academy senior class graduated in June from the following high schools: East Central High School, Jourdanton High School, Kennedy High School, New Braunfels High School, Sam Houston High School, Somerset High School and Southwest High School. Each of these students has completed 33 hours of college credit, while earning a Marketable Skills Award in Diesel Light/Heavy Truck Technology Mechanic Helper, OSHA certification, and Level I Certificate of Completion with the Alamo Colleges.

Gene Bowman, executive director of Alamo Academies stated, “We are proud of our dedicated students who worked hard to achieve this success. We are especially thankful to our partners, the various industries, the Alamo Colleges and other education and community members who helped build this workforce talent pipeline.”

Along with the Heavy Equipment Academy graduates, more than 100 graduates from the Academies’ programs Aerospace, Advanced Technology and Manufacturing, IT and Security and Health Profession were recognized for their accomplishments in STEM-based areas of study. Students have dedicated their junior and senior years to earn more than 30 hours of college credit and industry certifications – all while completing the rigors of their high school curriculum.

Said Peter John Holt, executive vice president and general manager of HOLT CAT, who was on hand to congratulate the Heavy Equipment Academy students, “These students represent the future of the industry and the future of San Antonio. We at HOLT are proud to have a part in helping sponsor their success.

“Our hope is that many of these graduating seniors will find a fulfilling life ahead of them. We are honored to be a part of their journey.”
An Eagle Pass company is relying on C.W. Machine Worx to provide a solution to containing dust during its mining operations.

Dos Republicas Coal Partnership and Camino Real Fuels, LLC., a subsidiary of North American Coal Corporation, have recently commenced production at a new surface coal mine in Eagle Pass, Texas, and needed an environmentally forward dust suppression plan for its mining operations. It looked to C.W. Machine Worx for the solution.

Having delivered its first load of high-quality coal this past summer, the mine is in the very beginning of the execution phase. To keep dust from drifting outside of designated areas, Dos Republicas needed a mobile solution that would allow suppression to be relocated as mining areas moved. The Environmental and Safety Management teams found the best solution, which was the diesel-powered HAWC (Hi-pressure Air Water Cannon) / Dust Destroyer unit manufactured by C.W. Machine Worx.

The HAWC / Dust Destroyer is a multi-patented, diesel, self-contained dust suppression system. The unit is powered by a Yanmar 80HP Tier 3 diesel engine with a self-contained 55-gallon diesel fuel storage tank. It has full 360° rotation with manual 10° incremental range settings. Also, a hydraulic 35° elevation range on the fan tunnel allows for maximum launch of the very fine water molecules. The unit has a manual clutch, but can be ordered with a fully automatic electric over hydraulic powered clutch PTO. It comes equipped with a central semi-automatic lube system. The HAWC puts out 37,500 CFM of air with the 42HP fan. Water throw is up to 300+ feet with the assistance of a 150PSI booster pump that can be increased with existing wind direction. Water usage ranges from 25 GPM up to 140 GPM and there is a 1,000-foot line of site remote control available. The unit is mounted on a 20-foot dual-axle trailer for portability.

This unit will prove invaluable in knocking down the mining dust residue at the Eagle Pass Mine site, as well as assisting in reducing maintenance costs on their dozer and truck fleet.

The team at Camino Real Fuels reports that it is pleased with the performance of the HAWC / Dust Destroyer and looks forward to incorporating it into daily mining operations.

Source: C.W. Machine Worx

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**TMRA 2016 QUARTERLY MEETINGS**

- **Sept. 7**  Environmental Committee, Task Force Lunch & Meeting
- **Sept. 8**  Lignite, Uranium and Executive Committees
- **Nov. 30**  Environmental Committee, Task Force Lunch & Meeting
- **Dec. 1**  Lignite, Uranium and Executive Committees

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**Oct. 30–Nov. 1 TMRA Annual Meeting**

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**TMRA TEACHER WORKSHOPS**

- **July 10–15**  Three Oaks Mine (Lignite)
- **July 31–Aug. 5**  Corpus Christi (Uranium)

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**NON-TMRA EVENTS**

- **Oct. 6–7**  Surface Mine Reclamation Workshop

*Check www.tmra.com for a full schedule.*
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EDITORIAL CALENDAR

FALL 2016
Education and Careers in Texas Mining
With so many members invested in the positive development of youth in our state, this issue will explore the best internship opportunities and educational pathways into the field for the state’s young miners. We’ll include a special report from our TMRA Education Committee.

Winter 2016
Year in Review
TMRA Committee Chairs will recap the year and take a look ahead. This is a digital report only that will be posted online in December.

Print editions of TXMining will resume in Spring 2017.

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