HDR Transforms Section 404 Permitting

By Matt Tanner and John Wooten, HDR

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 Fort 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 remine 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.
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.

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, it appears questions regarding them are solved for the time being.

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.