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Daily Environment Report

Afternoon Briefing - Your Preview of Today's News

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Looming Chinese Import Ban Creates U.S. Recycling Bottleneck

Posted September 15, 2017, 6:30 A.M. ET

By Adam Allington

It soon could become much harder for recycling centers across the U.S. to turn a profit, and some instead could divert reusable materials to landfills, thanks to a looming Chinese import ban on certain types of recycled materials.

China is by far the biggest importer of U.S. recyclables, but part of that market is about to close: The Chinese Ministry of Environmental Protection (MEP) notified the World Trade Organization in July that it would ban imports of certain types of recycled plastic and fiber, including soda bottles, mixed paper and newsprint.

The announcement bans imports of 24 types of recycled materials including various plastics (PET, PE, PVC and PS), as well as unsorted mixed paper, textiles, and some trace metals. And according to Beijing, starting in January every waste container entering China is to be inspected for contaminated materials.

The news has immediate implications for the domestic recycling supply chain in the U.S., stretching all the way back to the curbside recycling programs that have become popular in cities and towns.

"It could have a negative impact on recycling in general, as the system has relied on China for so long now," said Brent Bell, vice president of recycling for Waste Management, the largest waste-service provider in the U.S. If the Chinese market is no-longer available, some experts question whether U.S. municipal recycling programs can remain viable, or if many of the products now considered "recyclable" will be reclassified as garbage bound for landfills. Other experts, however, say only a short-term disruption is likely.

The Trump administration has pledged to raise concerns with China's government about the import restrictions, Adina Adler, senior director of international relations at the Institute for Scrap Recycling Industries (ISRI), told Bloomberg BNA.

Adler described the potential engagement as “still evolving,” with the hope that China will be open to other methods of meeting its goals to protect the environment.

End of Single-Stream Recycling?

The WTO filing mentions an “entry into force” starting in September, with the full ban likely taking place by the end of the year. In practice, this has given the U.S. industry very little time to adapt, with significant implications being been felt up and down the supply chain for recycled materials.

“There’s already been a lack of renewals in export licensing,” said Marc Forman, president of GP Harmon Recycling, a division of Georgia-Pacific that purchases and sells recycled fiber. “There is lots of uncertainty out there. If you have a contract to export a million pounds of paper this year, and you know it could be 500,000 next year, you’re already having to make tough decisions.”

Scrap industry groups claim that China’s new import quality standards are strict to the point of being essentially unworkable for products such as mixed paper, and polyethylene terephthalate (PET) plastic bottles, both of which are big components of curbside recycling streams.

Chinese rules now state that mixed-paper bales may contain no more than 2 percent of non-recyclable material. But the new standard will drop that limit to 0.3 percent.

“That will cause the mixed-paper market to crash,” said Bill Moore of Moore & Associates, a consultancy for the paper industry.

The largest source of mixed-paper is residentially collected recycling. If those materials aren’t being exported to China, waste collectors worry the U.S. may soon have paper and plastic piling up around the country.

Tough Choices

Without viable markets, recycling centers will be faced with hard choices. They could raise prices to pay for additional labor and sorting equipment. They could require households to sort their own recycling. Or, they could simply send unprofitable materials to the landfill.

“We don’t think that’s something that anyone, including consumers who are dedicated to the practice of recycling, wants to see, us included,” Bell told Bloomberg BNA. The values of plastic, paper, and aluminum have been trending downward for years, prompting many recycling centers to close and putting pressure on the remaining centers to process more waste, with decreasing funds.

In California, a state that prides itself as a leader in protecting the environment, recycling rates for beverage containers have dropped to their lowest point in almost a decade, according to data from the California Department of Resources Recycling and Recovery (CalRecycle).

State figures show more than 500 recycling centers have closed in the past two years, resulting in millions of pounds of plastic, aluminum and glass containers going to landfills.

Once-Booming Market

Every day roughly 3,700 shipping containers full of recyclables are trucked to U.S. ports, loaded onto ships and sent to China. The items in those containers include plastics, metal, paper, cardboard, and textiles, which Chinese manufacturers use as raw materials.

Recyclables are among the largest exported materials by volume to China, according to the Department of Commerce.

The U.S last year exported more than 37 million metric tons of scrap commodities valued at $16.5 billion to 155 countries, said Adler of the Institute for Scrap Recycling Industries. China accounted for almost one-third of that total—about $5.2 billion.

By comparison, the top two export categories to China in 2016 were miscellaneous grain, seeds, and soybeans ($15 billion) and aircraft ($15 billion).

For decades, the market for recycling exports has benefited thanks to the massive U.S.-China trade deficit. With more container ships arriving on U.S. shores then heading the other way, shippers were desperate for anything they could find for the return trip.

"And the thing they chose was scrap materials," Moore told Bloomberg BNA. "Because of discounts the shipping companies offered, it ended up being cheaper to send that stuff to China than to process it here."

For years that arrangement formed the basis of a circular economy in which the U.S.—as well as the EU and other countries—would all ship waste recycling to China, only to have it eventually returned in the form of cheap and affordable finished goods. Over time, however, it also saddled China with the unpleasant reputation as "the world's garbage dump."

Green Fence 2.0

In its WTO filing, the Chinese MEP cited past efforts to clamp down on the quality of recycled imports. Through those measures, "we found that large amounts of dirty wastes or even hazardous wastes are mixed in the solid waste that can be used as raw materials," the filing stated.

"To protect China's environmental interests and people's health," the filing continued, "we urgently adjust the imported solid wastes list, and forbid the import of solid wastes that are highly polluted."

China's newly announced position on recycling imports actually goes back to 2013, and a government plan called "Operation Green Fence." The plan called for a 10-month customs enforcement blitz to weed out imports of unwashed or contaminated scrap materials coming in to China.

While Green Fence may have been successful at cleaning up China's import stream in the short term, trade experts say the impacts were only temporary.

Despite further efforts at enforcement and regulatory tweaks, the biggest factor in pushing through the current ban may have actually been Wang Jiuliang's 2016 documentary "Plastic China." A viral hit across the country, the film focused on China's mostly unregulated garbage and recycling dumps.

In addition to raising awareness about a real pollution problem, the film also galvanized public opinion at the same moment that the Communist Party, lead by Xi Jinping, was promising renewed efforts to clean up China's environment, whatever the cost.

Complex Environmental Impacts

As dirty as the market for exported waste can be, it was also a key factor in creating the economic conditions that fueled China's manufacturing boom.

It was a system that for more than 30 years allowed the Chinese manufacturing economy to grow by leaps and bounds, without having to invest in its own domestic production capacity for raw materials such as cardboard, plastic, and some metals.

"You could really correlate the growth in the scrap market with economic growth," said Adam Minter, author of "Junkyard Planet," a 2013 book on the global trash trade, and a Bloomberg View columnist.

While Minter agrees that no one should fault China for taking steps to clean up its imports, he also points to potential environmental impacts resulting from tougher import restrictions.

"The worst recycling center is still far better than the best open pit mine," said Minter. "China needs raw materials and recycling is the feedstock. So if they're not getting that feedstock from secondary sources, that means drilling more oil wells and cutting down more trees."

Minter also points out that the rules do not amount to a complete ban on scrap exports to China. Likewise, the U.S. still has ready buyers in other countries, such as Canada.

Short-Term Disruption?

Others view the environmental impacts of China's decision as more of a short-term disruption than a fundamental shift in the U.S. recycling economy.

"I don't see the stuff on someone's curb ending up in the trash. There is a home for this recycling somewhere," said Dylan de Thomas, vice president of industry collaboration for The Recycling Partnership, a national recycling nonprofit that receives funding from Coke, Pepsi, and Target.

De Thomas said the recycling market won't collapse as there's simply too much interest in recycling, from both the general public and companies.

"The really large waste and recycling companies have a vested interest in the recycled fiber and plastic markets," he said.

De Thomas points to e-commerce giants such Amazon, with its demand for cardboard and plastic packaging, as one place that may be able to swallow up more domestic recycling capacity.

"If you bale it [recycled paper, plastic, metal], they will come," said de Thomas. "This recycling will ultimately find a home in new products, as long as there is demand for those products."

Yale's Carbon-Neutral Goals May Be Costly, Leave Students Cold

Posted September 15, 2017, 03:43 P.M. ET

By Victoria Graham

Cranking up the A.C. or turning on the heat at Yale University could have costly consequences, so students may want to consider wearing an extra layer of clothing to class.

Many campus buildings will be limiting their temperatures to 68 degrees in the winter to meet the university's goal to be carbon-neutral by 2050. Failure to cut their carbon emissions could cost some departments money.

Yale is the first university in the world to implement a campuswide carbon control program that carries financial implications.

In an effort to fulfill its mission, the university formally launched its program July 1 to monitor and record the carbon emissions for more than 250 campus buildings. Those that record carbon emissions that are greater than the Yale's historic average will have to pay into a university carbon charge pool. Buildings that come in below the average could see extra money from that pool deposited into their operating budgets.

The New Haven, Conn., university set a $40-a-ton-of-carbon price based on the federal government's estimate of the social cost of the pollutant. This estimates the cost, in dollars, a year in long-term damage done by each ton of carbon dioxide emissions, Casey Pickett, director of Yale's Carbon Charge Project, told Bloomberg BNA in an email.

Susan Wells, director of finance and administration at Yale School of Forestry and Environmental Studies, told Bloomberg BNA in a phone interview of the potential financial impact for the school.

"It could be a $34,000 charge if we do very poorly and a $34,000 rebate or credit if we do really, really well in comparison to Yale's other units," she said. Of the school's $50 million annual budget, roughly $300,000 goes for operating expenses.

Each Its Own

Departments at Yale, ranging from the law school to athletics, are participating in the carbon charge program. Each manages its own operations and operating budget and is responsible for everything from energy bills to facility wear and tear. Now they will be factoring in their anticipated carbon emissions when reviewing their finances.

Campus buildings enrolled in the program will receive monthly statements of their carbon dioxide emissions. These will be compared to carbon emissions of Yale's campus as a whole. Departments will be charged for each building it's responsible for if the levels of carbon dioxide emitted is greater than that of the university's.

Not all university buildings are participating in the program's initial rollout due to building size and structure complexities.

"We are not engaging buildings of less than 5,000 square feet this year due to cost/benefit of implementation. And we're not engaging buildings with overly complicated ownership structures because our lack of operation control and, frankly, to whom to send an energy report each presents challenges," said Pickett, who is hopeful to expand to additional buildings in the coming years.

Twice a year, departments will be assessed for their carbon emissions and pay into a pool if their levels are higher than the campus at large. That could amount to thousands of dollars coming from their operating budgets.

If a school receives funding back from the carbon charge pool, the funds can be used at the department's own discretion.

Wells is not optimistic that the School of Forestry and Environmental Sciences will receive a rebate, but if it does she expects it will put the money toward renovating windows in two buildings or give it to the environmental stewardship committee, which works to reduce the school's environmental footprint.

Arch, Peabody Coal Mines Need New Climate Analysis, Court Rules

Posted September 15, 2017, 02:22 P.M. ET

By Tripp Baltz

The Bureau of Land Management must revise its analysis of the climate change impacts of four coal leases in Wyoming's Powder River Basin, a federal appellate court ruled today.

The U.S. Court of Appeals for the Tenth Circuit reversed an earlier court ruling and sided with WildEarth Guardians and the Sierra Club in their challenge of BLM's approval of the leases for four coal tracts. The leases would extend the life of two existing surface mines in northeast Wyoming—Arch Coal's Black Thunder mine and Peabody Energy's North Antelope Rochelle mine.

The two mines account for 19.7 percent of annual U.S. domestic coal production, the court said.

The environmental groups say the BLM failed to comply with the National Environmental Policy Act when it concluded that issuing the leases would not result in higher carbon dioxide emissions in the Powder River Basin. The Sierra Club has received funding from Bloomberg Philanthropies, the charitable organization founded by Michael Bloomberg, the majority owner of Bloomberg L.P., parent of Bloomberg BNA.

The court did not vacate the resulting leases, but remanded the case with instructions to BLM to revise its Environmental Impact Statement and Records of Decision for the lease approvals.

Agreement on Pesticide Registration Bill Remains Elusive

Posted September 15, 2017, 7:30 A.M. ET

By Tiffany Stecker

Negotiations to revive a stalled Senate bill extending the authorization for industry-funding of pesticide reviews appear to be languishing as pesticide makers worry about disruptions to the flow of their products to market.

Democratic Sen. Tom Udall (N.M.) in July placed a hold on the measure (H.R. 1029) in response to fellow Democrats' and environmentalists' concerns about the Environmental Protection Agency's decision under Administrator Scott Pruitt not to ban a major pesticide that may affect child development and to delay two farm worker protection rules.

The current 2003 authorization for the program, set to expire Sept. 30, has been extended through Dec. 8 under an unrelated legislative package President Donald Trump signed this month to provide aid to hurricane victims, raise the debt ceiling, and provide short-term spending to avoid a government shutdown.

So far, discussions to advance the Pesticide Registration Improvement Extension Act of 2017—which also authorizes EPA to collect fees from pesticide makers to speed registration of their products and to evaluate their safety—appear to be treading water.

Although staff in Udall's office are meeting with the Senate Agriculture Committee, the industry's top trade association pushing for the legislation told Bloomberg BNA that there isn't much room for negotiation to appease Udall's concerns. The EPA's recent decisions on pesticides, an industry lobbyist said, cannot be resolved in that bill.

Impasse Crops Up

"We've found ourselves at an impasse, and that's unfortunate," Beau Greenwood, executive vice president of government affairs for CropLife America told Bloomberg BNA. "The only thing we have to negotiate with respect to PRIA is time and money… we've made those concessions."

Greenwood is a member of the PRIA Coalition, an unusual mix of industry representatives and environmental advocates pushing for the bill's passage. Lawmakers in June agreed to shorten the duration of the authorization period from seven to three years to quell concerns from farm worker organizations who objected to continuing funding for the EPA's pesticide office if it delays rules to protect agricultural laborers.

The bill would increase the amount of licensing fee revenue the agency could generate by almost 12 percent . The licensing fees fund between 20 percent and 40 percent of the Office of Pesticide Programs' budget. The bill also would set aside up to $1 million for farm worker safety training. The authorization levels have not been part of the negotiations.

Industry groups and lawmakers say Udall's hold on the bill could stall hundreds of necessary actions at the EPA to put pesticides on the market for farmers, including safety reviews to minimize the products' risks to humans and the environment.

Senate Agriculture Committee Ranking Member Debbie Stabenow (D-Mich.) told Bloomberg BNA that she is eager to pass the bill. Speaking to Udall is "on my list of things to do," she said.

Udall's spokeswoman told Bloomberg BNA that Udall will allow the bill to proceed when he is assured that EPA will implement pesticide law "in a manner that protects worker safety and the public."

"To date, the Pruitt EPA has had a poor track record on pesticide safety and has threatened to roll back worker protections," spokeswoman Jennifer Talhelm said in an email that highlighted a recent EPA decision on a major pesticide widely used on vegetables called chlorpyrifos.

"If the Senate Agriculture Committee and EPA can assure Senator Udall that important worker protections will remain in place and that a reasonable path forward is being pursued on chlorpyrifos, he could release the hold."

EPA's Decisions Stall Bill

The EPA in March rejected a petition to prohibit nearly all uses of the pesticide chlorpyrifos, a chemical made by Dow Chemical that has been linked to neurodevelopmental delays in children exposed in utero. The agency earlier this year also postponed the implementation of two final rules to set a minimum age of 18 for spraying pesticides and to improve training for workers.

Udall, along with Democratic Sens. Ben Cardin (Md.), Richard Blumenthal (Conn.), and Cory Booker (N.J.), sent the Agriculture Committee a letter in July in which they proposed PRIA as an opportunity to discuss those decisions.

Farmworker Justice is a member of the PRIA Coalition. Virginia Ruiz, the organization's director of occupational and environmental health, said she supports the intention behind Udall's hold, but that the organization was satisfied with the compromise to shorten the reauthorization to three years.

If the EPA continues to make decisions that put farmworkers at risk of unsafe pesticide exposure in the next three years, "at that point we will revisit our support for PRIA," Ruiz told Bloomberg BNA.

Brazil's Norte Energia Ordered to Stop Construction of Dam

Posted September 15, 2017, 03:28 P.M. ET

By Michael Kepp

Norte Energia must stop construction of the mammoth Belo Monte Dam until it meets licensing conditions for resettling Amazonians affected by construction of the hydroelectric plant, a federal appeals court ruled.

The government-led consortium of developers failed to comply with licensing conditions for resettling 20,000 families in the nearby city of Altamira, who were displaced by the flooding caused by the dam's upper reservoir, the First Regional Federal Court in Brasilia ruled Sept. 13.

Norte Energia plans to appeal the decision and claims construction can continue.

According to federal prosecutor Felicio Pontes, 3,000 of 6,000 houses that Norte Energia that has built so far do not comply with stipulated licensing conditions, including resettling families less than two kilometers away from their original homes, providing homes based on family size, and building houses with brick.

The ruling from the First Regional Federal Court in Brasilia supported a 2015 lawsuit that Pontes filed in the eastern Amazon state of Para, where the dam is located, asking to suspend the dam's construction license.

The consortium has installed only six of 18 turbines, which account for only one-third of the dam's 11,223-megawatt installed capacity. Turbine installation was expected to be completed by the end of 2019.

The court ruling prevents Norte Energia from installing the rest of its turbines until its construction license conditions have been met, Pontes told Bloomberg BNA.

Norte Energia, which plans to appeal the decision, said in a Sept. 13 statement that because "our operating license replaces our construction license . . . construction work can continue at Belo Monte."

Norte Energia received its construction license in 2011 and its operating license in 2016 from

IBAMA, the licensing arm of the Environment Ministry. But Pontes said due to the two regional court decisions, Norte Energia can neither generate electricity at Belo Monte nor finish installing its turbines, effectively shutting down all dam operations.

The $18.5 billion, 11,233 megawatt Amazon dam would rank third in installed capacity worldwide behind China's 22,000 megawatt Three Gorges Dam and the binational 14,600 megawatt Itaipu Dam on Brazil's border with Paraguay.

Federal Regulator Overrides New York's Denial of Millennium Pipeline

Posted September 15, 2017, 02:23 P.M. ET

By Rebecca Kern

Millennium Pipeline Co.'s proposed 7.8-mile natural gas pipeline in southeast New York state gained a nudge of support from the Federal Energy Regulatory Commission, which overruled the state's denial of water permit rights.

FERC issued a waiver Sept. 15 that overrides an Aug. 30 decision from the New York Department of Environmental Conservation (NYSDEC) that denied water permit rights for the Valley Lateral Project in Orange County, N.Y. The federal regulator said in the waiver that the New York department failed to act on a water permit within the one-year statutory deadline under the Clean Water Act.

"It is near certain that the NYSDEC will appeal this waiver decision to the," U.S. Court of Appeals for the District of Columbia Circuit, analyst James Lucier, a managing director at Capital Alpha, said in Sept. 15 analyst note.

The NYSDEC did not immediately respond to a request for comment.

"This is a positive step forward for what is an important project for New York consumers," Michelle Hook, a Millennium spokeswoman, told Bloomberg BNA.

Millennium now plans to file for a notice to proceed with construction with FERC, Hook said.

The pipeline would supply gas to the CPV Valley Energy Center, a natural-gas electric generation facility under construction in Wawayanda, N.Y., by Competitive Power Ventures Inc.

Weak EPA Boiler Air Pollution Rule Draws Judges' Scrutiny

Posted September 15, 2017, 02:17 P.M. ET

By Abby Smith

Federal appeals court judges are putting the EPA in the hot seat, asking the agency to present technical evidence backing its decision to not set lower carbon monoxide emissions limits for large industrial boilers.

Environmental groups say the carbon monoxide limits—which are intended to reduce toxic pollutants such as formaldehyde—are insufficient to protect health and are inconsistent with the Clean Air Act.

Judges on the U.S. Court of Appeals for the District of Columbia Circuit appeared unable to reconcile the emissions limits set by the EPA with the data the agency presented to justify its decision.

Judge Nina Pillard told Justice Department attorney Norman Rave that there seems to be a "data blip." Rave responded that the EPA determined there was no proven emissions reduction benefit in setting a lower standard, but Pillard and the other judges appeared unconvinced.

"This black box needs an explanation," Pillard said.

Brazil Court Orders Shutdown of Vale Amazon Nickel Operation

Posted September 15, 2017, 12:43 P.M. ET

By R.T. Watson

Vale SA was ordered by a Brazilian court to halt activities at the Onca Puma ferronickel operation to investigate whether indigenous groups in the Amazon region were being harmed by the mine, the Public Prosecutor's Office said.

In a statement on its website, the prosecutor said the mine in southeastern Para state will remain shut as long as it's in breach of environmental-license obligations related to the Xikrin and Kayapo indigenous groups.

Vale owes about 50 million reais ($16 million) in compensation to community members after losing an appeal of a previous court order, prosecutors said.

Rio de Janeiro-based Vale confirmed it has stopped activities at the Onca Puma mine, and plans to appeal the decision, according to a statement Sept. 14 from its press office.

Onca Puma was one of the low-performing assets identified by Vale Chief Executive Officer Fabio Schvartsman for review in 2017. While nickel prices have gained 12 percent this year, they are still down about 60 percent from a peak in early 2011.

The effect of mining in the Amazon on indigenous people has been a hot button issue in recent weeks.

Brazil's government spurred an international outcry with its recent announcement it planned to open an area about the size of Denmark inside the Amazon to future mining exploration. President Michel Temer took to Twitter to defend the measure before a court suspended the decision. The government is currently working on an appeal, according to the press department for the country's mining ministry.

Earlier this week, Brazilian authorities confirmed they are investigating the deaths of people who belong to an isolated indigenous tribe in the western reaches of Amazonas state. Illegal wildcat gold miners are alleged to have killed about 10 people, according to media reports. Police and prosecutors are investigating the veracity of the claims while stating that so far no material proof has been found.

Perry Highlights Need for Oil Reserve in Rebuke of Trump's Plan

Posted September 15, 2017, 11:27 A.M. ET

By Christopher Flavelle

Hurricanes Harvey and Irma demonstrate the importance of keeping the U.S. Strategic Petroleum Reserve, Energy Secretary Rick Perry said, in a not-so-subtle rebuke to President Donald Trump.

"This is a good example of why we need an SPR," Perry said at a press conference Sept. 15. The reserve, run by the federal government, is a stockpile that can hold more than 700 million barrels of crude. Trump's budget proposal this year called for selling half the reserve, saying it was no longer useful in a time of U.S. oil surpluses.

Perry made his disagreement with the president's position clear. "I didn't write that budget," he said at the press conference, held with other federal officials to discuss the state of government assistance to Florida after Hurricane Irma.

After Harvey left refiners in Texas and Louisiana unable to secure crude, Perry's department agreed to deliver 5.3 million barrels from the reserve to them. It was the first such delivery in five years.

"The president brought me in not to agree with him on everything," Perry, the former governor of Texas, said. "He brought me in because of my experience of running the 12th-largest economy in the world for 14 years."

It's appropriate for the government to look at whether the reserve can be run in a "more efficient way," and whether the reserve holds the right amount of oil, Perry said.

"These two storms may change everyone's opinion about," the importance of the SPR, he said. "Our job is to make sure the United States never gets surprised."

—With assistance from Catherine Traywick.

Forget Oil, Water Is New Ticket for Pipeline Growth in Texas

Posted September 15, 2017, 8:14 A.M. ET

By David Wethe and Ryan Collins

The torrent of dirty water coming out of almost every American oil well is the next big bet for a former fund manager for billionaire Paul Allen.

Getting rid of wastewater from onshore wells has become an increasingly costly problem for oil producers as U.S. crude output surged in recent years, especially in the new shale fields from Texas to North Dakota. Drillers typically get about seven barrels of water for every one of oil, and some struggle to deal with the overflow that is mostly sent by truck to disposal sites miles away.

David Capobianco, a former managing director for Allen's Vulcan Capital, is trying to change that by building pipelines to get wastewater out. His newly formed WaterBridge Resources LLC aims to be a water-management company for oilfields. The firm is considering a public share listing within a year to 18 months, taking advantage of a U.S. shale boom that the government expects will boost crude production close to 10 million barrels a day next year.

“Next to profitability and safety, water may well be the next most important topic for an oil company,” said Laura Capper, chief executive officer at EnergyMakers Advisory Group, an industry consultancy in Houston. “It has risen to the forefront over the last five years unlike anything I’ve ever seen.”

To get a sense of just how much water is involved, consider the forecasts for rising oil output in the Permian Basin, the busiest field in Texas and a big beneficiary of increased investment in shale reserves. It currently pumps 2.4 million barrels of oil a day, but production could grow to a peak of as much as 10 million. At the current rate of disposal in the area, that would mean 30 million to 50 million barrels of dirty water every day, enough to fill the Empire State Building eight times a day.

Disposal Cost

Disposal can be expensive, especially with oil prices around $50 a barrel, half the price in 2014. West Texas Intermediate, the U.S. benchmark, was trading down 15 cents at $49.74 a barrel as of 1:19 p.m. Singapore time on Friday.

Most drillers hire oilfield-service companies to get rid of the wastewater. Trucks dump the water into holes dug deep underground that lead to porous formations, thousands of feet below the drinking-water table. In Texas, the service costs about $1.50 to $2.50 a barrel. Capobianco, in an interview, said he can reduce that to roughly $1, once his pipelines are in place.

“We are at a tipping point,” where water is set to join oil and natural gas as a key commodity for the industry’s pipeline companies, said Capobianco, who is also a former board member for the general partner of Plains All American Pipeline LP. “Water is at a very nascent stage. The market hasn’t caught up with the ultimate reality that water will trade the same as any other hydrocarbon.”

If Capobianco takes WaterBridge public, the company would be the first devoted entirely to oilfield-water pipelines to be traded on any major U.S. exchange, according to EnergyMakers.

Explorers are starting to face the fact that their water production is becoming too big to truck away.

But only recently have integrated water-solution systems become economically viable for the industry, as activity picked up this year in the Permian’s Delaware formation in West Texas, according to Colton Bean, associate of midstream research at Tudor Pickering Holt & Co. in Houston.

One big reason: Roads in the rural basin already are jam-packed with trucks shipping in fresh water, sand and equipment to well heads, and taking oil and dirty water away. “There is not a well-developed road network, so ideally as many trucks you can get off the road the better,” Bean said.

Capobianco is chief executive officer for the Houston-based private equity firm Five Point Capital Partners, which funded WaterBridge Resources with $200 million at the start of 2016. Last month, WaterBridge acquired EnWater Solutions LLC for an undisclosed amount, its first acquisition of a water-pipeline company in the Permian Basin. It will be announcing another deal in the next two to four weeks, Capobianco said.

Capper said she's counted roughly 25 companies similar to Capobianco's that are in various stages of development for water pipelines. "It's a market that is developing for very good reason," she said. "It'll be here for the long run."

Wastewater isn't the only goal. After Capobianco builds out a bigger network of disposal pipelines, the next major step will be an integrated system of management that cleans and recycles it for use in future production, he said. In fracking—a technique that helped fuel the U.S. oil boom—water, sand, and chemicals are forced into the ground to loosen oil trapped in layers of shale rock.

The industry's water use isn't without controversy. In Oklahoma, where as many as 20 barrels of water are produced for every barrel of oil, heavy injections of wastewater underground have been blamed for all the earthquakes in the state. Using pipelines might help address that problem, by providing access to areas better suited for disposal.

"We're a whole lot better about producing oil and gas than we used to be," Capper said. "And when you produce more oil and gas, you get more water with it."

In a Twist, Texas Wind Power Can Actually Help Gas Generators

Posted September 15, 2017, 03:41 P.M. ET

By Ryan Collins and Emma Ockerman

A surge of wind power in Texas has made predicting electricity supply more difficult, boosting opportunities for natural gas generators that have been battered by the rise of renewables.

Fluctuating renewable supplies can leave grid operators short of power and create price spikes, a phenomenon that's set to worsen as additional wind and solar hit Texas' grid, William Nelson, an analyst at Bloomberg New Energy Finance, said in a report. That could force grid operators to search for last minute more often, and that's where gas plants that can start up quickly step in.

It's a twist for Texas wind developers, which now account for about a fifth of the state's power mix. While the renewable surge has eaten into the profits of gas generators in recent years, it's now presenting the competition with an opportunity.

The volatility is "a silver lining on a sinking boat," said Nelson. "It sends a clear signal that flexibility is king."

Until the cost of storing wind and solar power in batteries comes down, renewables aren't much help to grid managers when the sun doesn't shine and the wind doesn't blow. Even small factors like ice build up on a turbine's blade can affect output, Dan Woodfin, senior director of system operations for the Electric Reliability Council of Texas, said.

The reliability council is planning a second forecasting service to make "on the fly adjustments," and is working toward producing wind forecasts that update on five-minute intervals, Woodfin said.

In the meantime, more volatility means higher profits for gas generators, which can ramp power output up or down regardless of the weather, Nelson said.

Texas wind farms typically slightly underestimate their daily output, Nelson said. That's because if they under-produce in a given hour, they could be charged as much as $9,000 per megawatt hour to backfill the production.

West Texas turbines are 94 percent accurate when predicting day-ahead hourly output, Nelson said. Still, the margin of error can lead to price spikes when demand surges that gas generators can take advantage of.

"Renewables seem to have been a bit of a problem for the margins in the area," Paul Patterson, analyst at Glenrock Associates LLC, said by phone Sept. 15. "You have a new disruptive technology being deployed."