UNITED STATES DISTRICT COURT
DISTRICT OF NORTH DAKOTA

UNITED STATES OF AMERICA, **v.** **SUMMIT MIDSTREAM PARTNERS, LLC** **Defendant.**	**Case No. _____**

JOINT FACTUAL STATEMENT

The United States of America and the Defendant, Summit Midstream Partners, LLC hereby agree that this Joint Factual Statement is a true and accurate statement of the Defendant's criminal conduct, that it provides a sufficient basis for the Defendant's plea of guilty to the charges contained in the Criminal Information in the above-captioned matter and as set forth in the Plea Agreement signed this same day, and that had this matter proceeded to trial, the United States would have proven the facts set forth in this Joint Factual Statement beyond a reasonable doubt.

Executive Summary

On January 7, 2015, Summit Midstream Partners, LLC and Meadowlark Midstream, LLC (the two closely related corporations are collectively referred to herein as "Summit") reported to federal and state authorities that there had been an unpermitted discharge of oil-contaminated "produced water" from a midstream pipeline that Summit owned and operated. This report, as well as subsequent reports made by Summit, failed to disclose relevant information known about the discharge. In actuality, the spill, which contained oil as well as other pollutants and high levels of salt, started on August 17, 2014, and continued unabated for five months before Summit confirmed it on January 6, 2015. During that time, in excess of 29 million gallons of produced water were spilled into the environment, contaminating the land and more than 30 miles of North Dakota waterways. Summit's failure to discover the pipe rupture and to stop the ongoing discharge was the result of its own negligence.

The pipeline ruptured approximately 178 feet west of Blacktail Creek, a jurisdictional water of the United States subject to various laws including the Federal Water Pollution Control Act (Clean Water Act), the Oil Pollution Act of 1990, and North Dakota state law. Summit failed to immediately report the spill as required by law and provided incomplete and misleading information including in subsequent calls on January 18, and 21, 2015, as well as a certified submission to the U.S. Environmental Protection Agency on September 3, 2015.

The discharge is visible in photographs taken by satellites orbiting the earth. A photograph taken from space on August 28, 2014, shows a crescent-shaped dark patch on the soil at the spill

location curving toward Blacktail Creek. Aerial photographs taken in September, October, and November 2014 also show the same crescent-shaped dark patch at the spill location and discoloration of Blacktail Creek downstream of the spill location with no discoloration upstream. An aerial photograph taken on December 10, 2014, shows the crescent-shaped dark patch, and while Blacktail Creek appears to be covered with ice and/or snow upstream of the spill location, ice and/or snow is not present downstream of the leak location.

As set forth in greater detail below, Defendant admits that it violated the Clean Water Act, as amended by the Oil Pollution Act, in the two ways charged in the Criminal Information.

Count 1: In pleading guilty to Count 1, Defendant Summit admits that between on or about August 16, 2014, through and including on or about January 6, 2015, it caused the discharge of approximately 700,000 barrels of produced water, including harmful quantities of oil, into U.S. waters, that Summit acted negligently, and that Summit's negligence was a proximate cause of the discharge in violation of 33 U.S.C. §§ 1319(c)(1)(A) and 1321(b)(3). Summit's negligence included the design, construction and operation of the Marmon Water Gathering System pipeline, as well as the negligent failure to find and stop the spill after learning of objective signs of a leak. As set forth below, Summit started operations without line balancing or otherwise having a reliable leak detection system in place. Even after it learned of major drops in pressure and volume – objective signs of a leak – Summit negligently continued operations and thus caused millions of additional gallons to be discharged into U.S. waters without learning the cause or pausing operations.

Count 2: In pleading guilty to Count 2, Summit admits that from on or about January 6, 2015, through and including, on or about January 21, 2015, it failed to immediately report the discharge of a harmful quantity of oil into U.S. waters to the United States, that it knew oil had been discharged, and that it acted knowingly, in violation of 33 U.S.C. § 1321(b)(5). As detailed herein, the failure to report the discharge included a knowing failure to provide all relevant information regarding volume, duration, and other aspects of the spill. Summit's reports to federal and state authorities were incomplete and misleading. Summit officials had information about the duration and volume of the spill that were relevant to an emergency response but were not shared. Furthermore, the statements that were made to state and federal authorities were incomplete, misleading, and not responsive to specific requests for information.

Background

Defendant Summit Midstream Partners, LLC was part of a group of interrelated corporate entities that through various subsidiaries owned and operated a midstream pipeline designed to transport produced water from drilling wells to disposal wells. In this instance, both the drilling wells and the disposal wells were owned and operated by the same unrelated company, referred to herein as Company A. Under the terms of a contract, Summit was paid a per barrel fee to transport the produced water from the well pads to the disposal wells. Summit owned and operated the pipeline, not the drilling wells or the disposal wells at either end.

Produced water is a collection of pollutants that are the byproduct of the hydraulic fracturing method of oil exploration and extraction commonly known as "fracking." Fracking involves injecting water, sand and chemicals at high pressure into holes drilled in subterranean rock which causes gas and oil trapped inside the rock to be released. The term fracking refers to how the rock is fractured apart by the high-pressure mixture. The produced water caused by this method of drilling in the Bakken region of North Dakota had a large concentration of saline, as well as oil, radioactive substances and other pollutants, including ammonia, aluminum, arsenic, boron, copper, nickel, selenium, zinc, barium, benzene, and thallium.

Summit's pipeline, known as the Marmon Water Gathering System ("Marmon System"), was located in Williams County, North Dakota, and consisted of approximately 96 miles of underground, interconnected pipeline. It ran from approximately 37 oil and gas drilling well pads ("well pads") to the disposal facility, where the produced water was held in storage tanks and ultimately injected into two underground disposal wells. At both ends of the pipeline, oil was separated from the produced water. Alongside the produced water pipeline, was an underground oil pipeline that transported the oil.

The produced water that accumulated from Company A's oil exploration was transferred into holding tanks located on the well pads, and then transferred to Summit's pipeline via Lease Automatic Custody Transfer (LACT) units for transport to the disposal well sites (or alternatively taken to the disposal wells by tanker truck). The LACT units and the pipeline were owned and operated by Summit Midstream Partners, LLC (Summit) and Meadowlark Midstream Partners, LLC (Meadowlark), two related entities sharing common owners, corporate officers, offices, managers, and employees.

Negligence During Pipeline Installation and Testing

Construction of the Marmon System began in or about October 2013. The pipeline material used in the Marmon System was a thermoplastic pipe, reinforced with high-strength glass fibers embedded in an epoxy matrix, surrounded by an outer thermoplastic layer. The pipeline manufacturer's "Installation Guide," which Summit provided to Company B, a contractor it hired to install the pipeline, recommended that a representative of the manufacturer be present during the installation and testing of the pipeline. However, several portions of the pipeline were installed without a manufacturer's representative on site, including the portion of the pipeline where the spill occurred.

The Installation Guide described the proper way to handle, install, and test the pipe, including but not limited to: (1) that care should be taken during backfilling the pipe, particularly that first foot of cover "should not contain any large rocks, and the pipe should be covered gently, taking care not to allow mechanical equipment to come into contact with the pipe"; (2) that the pipe "will tend to tighten around any bends or restraints and can be damaged, so provision must be made for this"; and (3) that if "soil is frozen, extra care must be taken not to allow frozen lumps to come into contact with the pipe." The Instruction Guide was not closely followed and all of the aforementioned problems were documented in daily reports to Summit by its contractors.

The Installation Guide also recommended that the pipe be tested with water, not gas or air, at 1.2 to 1.5 times the rated pressure of the pipe after construction and before operation. This called for Summit's pipeline, which is rated to 750 pounds per square inch (psi), to be tested at 900 to 1,125 psi. Summit did not follow this guidance and instead pressure-tested the pipeline with nitrogen gas at approximately 700-750 psi. Even so, that testing resulted in numerous blowouts and leaks of the nitrogen gas.

Summit employees and contractors were aware of the blowouts that occurred during pressure testing. Summit's North Dakota Construction Manager ("Construction Manager") at the time emailed a representative of Company B on July 6, 2014:

> We need to discuss what is happening here with the tests. There has been entirely [too] many leaks in different areas on this line to be able to put this problem off on the material being used. From ends blowing off, pipe blowing out, rocks on line, etc. This is a salt water line that we have to feel comfortable with before putting into service.
>
> How many leaks have we had on this section to date, With all of the [pipe] that we have put in so far I have a hard time believing that the [manufacturer of the] pipe is the issue. The [pipe] is pretested to 1.5 times rated pressure before ever being delivered. . . . While there is a chance of some hitting or dinging this pipe in transit, installation is by far the big issue with failures in this product.

Company B's representative responded:

> … I agree it probably is some installation problems. I've been involved the last month on trying to figure out what's going. The ones that concern me is it holds for one to two days at 500 lbs of air and I know of a couple of test that has held at 750 lbs for 4 to 7hrs 45 minutes and blew. I'll get the information together and bring it when we meet tomorrow.

A few days later, Summit's installation inspector raised questions about the number of blowouts and testing at the lower-than recommended testing pressures, questioning Summit's Construction Manager whether the pipe manufacturer would "stand behind the pipe if we have a major blow-out" but had not followed the recommended pressure testing. There is no evidence that testing pressure increased following this email.

It cannot be known with certainty what caused the pipe rupture on August 17, 2014, or whether proper testing before startup would have revealed a weakness, or, whether a weakness in the pipe was the result of negligent installation. What is known, is that the installation was negligent and that the rupture was consistent with negligent installation. The negligent installation had the potential to be a cause or contributing cause to the blow out.

Negligent Design and Operation: No Line Balancing

Pipeline systems conveying hazardous substances have historically used both inlet meters and outlet meters so that the data from each can be assessed to determine whether the volume of substances entering the system at the designated entry points is equal to the volume of substances exiting the system at designated delivery points. This practice is called "line balancing," and is an important method of leak detection.

The original proposal to build the Marmon System for the conveyance of produced water, as presented to Summit's Board of Directors for approval in June 2013, included line balancing, with both inlet meters at the drilling well sites and outlet meters at the exit to the disposal wells. But Summit started operating the pipeline with no outlet meters. Summit had only inlet meters at the LACT units, measuring the amount of produced water entering the pipeline and were the data used to charge Company A for transporting the produced water to the disposal wells. Consequently, because Summit did not install outlet meters, it lacked the ability to conduct line-balancing calculations that would have notified Company A of a leak.

Summit managers, officers, and directors at the time were aware that the Marmon System lacked outlet meters and understood that without them line balancing could not be used to alert them of a leak. For example, on June 10, 2014, Summit's Construction Manager wrote to Summit employees, including Summit's Director of Project Management and Area Operations Manager, acknowledging the absence of outlet meters and noting "we will have to install the water meters on our piping before it gets to" the saltwater disposal ("SWD") facility. On July 11, 2014, a pipeline manager sent an email to senior corporate executives stating in part that "we really don't have a good leak detection system." On that same day, a Summit Vice President at the time wrote an email to other managers indicating that the contract with Company A did not specify which entity was responsible for providing outlet meters, but that he believed "we should have these to balance our system. Maybe the SWD well operator would share this cost with us, but it would be hard to get [Company A] to pony up for this." A few days later, a Summit operator sent an email to Summit's Director of Measurement stating: "[W]e don't account for all of the water yet but that is coming. We do not want to have a leak and not know. We are adding Meters at the [Company A] disposal wells in the near future."

In early July 2014, there was a produced water spill from a pipeline operated by a different company in North Dakota that took a week to discover because that pipeline lacked meters necessary for line balancing. On July 15, 2014, the then President and CEO of Summit wrote an internal email to other high level managers incorrectly stating: "[m]y understanding . . . is we have alarms in place that would have caught pressure drop and volume drop much sooner." Summit's Vice President of Engineering at the time responded to the President and copied other managers on July 28, 2014, alerting them to the absence of outlet meters on the Marmon System and stating "we will have to procure and install these." At the time, Summit's pipeline was already in operation and no additional measures were taken to manage the risk until outlet meters could be installed.

Summit subsequently purchased outlet meters in August 2014, installed them in September, but did not connect power to make them operational until December 24, 2014, and did not read or analyze the data collected by the meters until January 1, 2015. As set forth below, on various dates during this period, Summit employees received notices from Company A about large volumes of produced water that were missing, causing at least one Summit employee to speculate about a leak and whether to shut down the pipeline.

Summit engineers and managers readily conceded to government investigators that it was imprudent to start up the pipeline without line balancing. In pleading guilty to Count 1, Summit admits that regardless of the cause of the pipe rupture, it was negligent because it operated the Marmon System produced water pipeline without an effective leak detection system in place, and continued to operate it without line balancing, and without effective aerial and ground patrols. Defendant further admits that this negligence was a proximate cause of the ongoing and continuous discharge of oil-contaminated waste into Blacktail Creek and U.S. waters.

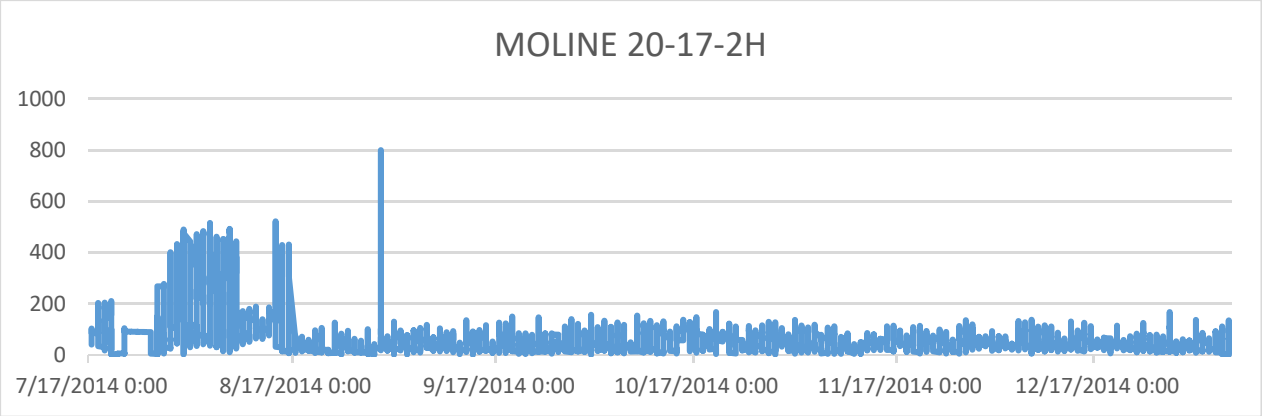
Negligent Operation: Signs of and Search for a Possible Leak

A. Loss of Pressure

While Summit's produced water pipeline lacked outlet meters to account for any loss of volume, it had pressure meters at each of the drilling well pads. The pressure meter at the State/Moline well pad – the well pad closest to the spill location – went into operation on or about July 17, 2014. Over the next month, the pipeline pressure was above 500 psi. On August 17, 2014, there was a sudden and dramatic drop in pressure to less than 100 psi. Thereafter, the pressure largely stayed below 200 psi. The sudden and sustained loss of pressure did not go entirely unnoticed, but it was not addressed, and this negligence was a proximate cause of continued discharges of oil-contaminated produced water into U.S. waters.

On October 14, 2014, Summit's Construction Manager sent an email to other Summit employees about "extreme low pressure" on the Marmon System. He further noted: "I am not too sure we may not have a problem." And he continued: "The ops guys have driven the pipelines looking to see if there are leaks and I currently have people driving the lines as well looking for problems." In a follow-up email on that same day, Summit's Construction Manager wrote to Summit's Facilities Engineer: "Well I hope I am wrong" and added the low pressure on the pipeline "does not seem possible" prompting his colleague to respond: "Not good. We may want to consider shutting down." Summit did not shutdown the pipeline.

The pressure data (in psi) by date is reflected in the diagram below. This data was always available to Summit. It was accessed within a few days of the spill being discovered, but was not shared with federal or state authorities.



B. Volume Discrepancies

Summit had no ability to conduct line balancing on its own. But Company A – which paid Summit to transport the produced water from its drilling wells to its disposal wells – had injection meters at the injection wells where the produced water from the Marmon System was ultimately disposed into the ground. Company A could not perform true line balancing because some of the produced water was stored in holding tanks and some was transported by truck, but it could perform a rough calculation with the data it possessed. In the first such notification on November 4, 2014, Company A informed Summit that 115,000 barrels (4,830,000 gallons) of produced water were missing for the month of October, which is approximately 3,700 barrels (155,400 gallons) per day.

On December 3, 2014, Company A sent an email to two Summit managers asking: "Can you guys help us understand the differences between the volumes from the ledger sheet [inlet meter volumes] and the injection volumes that we are measuring at the SWDs? We've completed pump down tests to test the meters at each of the SWD's is why we are inquiring." The pump down test was used to determine the accuracy of injection well meters so that they could be recalibrated if necessary.

Approximately one week later, on December 10, 2014, not having received a response, Company A emailed the same group, adding Summit's Construction Manager to the chain, noting a discrepancy of approximately 4,900 barrels (205,800 gallons) per day. The Company A Facility Engineer also opined: "[I]f we are confident in the Injection Volume numbers, and also confident on the LACT Pipeline volumes. Then the discrepancy has to be attributed to the pipeline. We either have a leak or water is being diverted/transported to an alternative route. With a discrepancy of close to 5,000 [barrels per day] and no leaks have been identified, I lean toward the later." On December 16, 2014, having received no response again, Company A again emailed the group: "Gents, Any new word on this matter?" At a rate of 4,900 barrels (205,800 gallons) per day, approximately 102,900 barrels (4,321,800) were discharged between December 3, 2014 (when Company A verified the accuracy of its meters by doing the pump down test) and December 24, 2015 (when Summit connected power to its meters).

On December 24, 2014, Summit put the Marmon System outlet meters into service. With operational inlet meters and outlet meters, for the first time, Summit was able to perform line balancing on the Marmon System. But it did not do so immediately. The first time Summit examined data from the newly installed outlet meters was January 1, 2015, when a Summit employee sent photographs of the outlet meters to Summit's Field Operator, Construction Manager, and Area Operations Manager, noting that the outlet meters were operational, and would be read visually on a daily basis until they could be connected to a monitoring system that could do so remotely. Although a comparison of the readings from the newly installed outlet meters to the readings from Summit's inlet meters shows a continuing loss of produced water, there is no evidence that Summit actually compared the readings at this time. There is similarly no evidence that senior management considered shutting down the pipeline.

On January 6, 2015, Company A sent an email to a Summit Vice President of Engineering at the time, providing him with the readings from Summit's inlet and outlet meters for the period December 25, 2014, to January 3, 2015. The readings showed that after Summit's outlet meters were operational, Summit's records showed 67,007 barrels entering the pipeline and 9,177 barrels existing, a difference of 57,830 barrels (2,428,860 gallons) missing from the pipeline over that 10-day period. The pipeline was not shut down immediately upon receipt of Summit receiving this data from Summit's meters.

C. Efforts to Find a Leak

To the extent that Summit had a leak detection method, it was to have employees and contractors drive the right-of-way visually looking for anomalies and to hire a company to conduct routine aerial patrols. The record shows that various employees conducted routine line patrols in August, October, November and December of 2014. Documents show that contractors were asked to specifically look for a leak, but there is no record that the employees and contractors who were asked to search for a leak were provided with any guidance of what to look for or how to conduct the search. There is also no evidence that any of the personnel involved left their vehicles to search.

Summit's aerial patrols were conducted by a contractor. Only routine patrols were conducted and the aerial contractor was not advised that Summit suspected a leak. There is no evidence that Summit was involved in supervising or managing an aerial search for a possible leak. The aerial contractor did not search using imaging such as photography or forward looking infrared radar. Based upon the satellite images of the spill, and visual observations after its discovery, the spill would have been visible from an aircraft on the dates when patrols were conducted in August, September October, November and December, 2014.

Summary of Negligence

At various points in time, Summit had opportunities to discover and stop the leak. Employees were asked about these missed opportunities. A common refrain was that there was too much "noise." They explained that Summit's focus was on rapid expansion, and that there were many different priorities such that environmental compliance was not made a top priority. Summit at the time also lacked a clear assignment of responsibility for managing environmental safety and compliance. In pleading guilty to Count 1, Summit acknowledges that it was negligent to continue

to operate the Marmon System pipeline: (1) without determining the cause of the significant loss of pressure in the pipeline that began on August 17, 2014; (2) without determining the cause of the volume discrepancies being reported by Company A starting on November 4, 2014, and continuing each month; (3) without making operational the outlet meters purchased in August 2014 and installed in September 2014; and (4) without reading the outlet meters that began collecting data on December 24, 2014. Each of these acts of negligence was a proximate cause of the continuing discharge.

Failure to Report

The Clean Water Act, as amended by the Oil Pollution Act of 1990, required Summit to immediately notify the National Response Center ("NRC") of any discharge of a harmful quantity of oil into the navigable waters of the United States. This is a core federal requirement and integrally linked to the federal government's review of more than 25,000 such notifications each year. The information is relayed to federal first responders depending on various factors including severity of the leak. North Dakota law also mandated immediate reporting and further required that Summit share all relevant information.

Although key employees at Summit suspected a leak for some time, as set forth herein, Summit did not find physical evidence to confirm it, nor shut down the pipeline until the afternoon of January 6, 2015. Summit did not notify the federal government's NRC until the following afternoon.

The leak was confirmed on the afternoon of January 6, 2015, when a contractor employed by Company A noticed that Blacktail Creek was unexpectedly flowing where it crossed under Highway 85 while the rest of the landscape was frozen. The high salinity of produced water lowers its freezing point, and the more salt, the lower the freezing point. He called Summit's Pipeline Operator #1, who, upon arrival, tasted the water in the creek and found it to be very salty consistent with a produced water discharge. The two searched in the dark for the source but could not find it. At 5:39 p.m. (MT) on January 6, 2015, a Summit Vice President wrote to Summit's Construction Manager, informing him: "We think there is a leak by State Moline. [Operator #1 is] there now. He tested water in the creek and its brine." At 6:05 pm, Summit's Construction Manager replied in part: "Just don't know how all missed it. Especially [where] they found it." Summit executives and managers were notified by telephone, in-person conversations, and email on January 6, 2015, that it was confirmed that Summit's pipeline had a leak and that the pipeline had been shut down.

At approximately 7:00 a.m. (MT) the following morning, Operator #1 found the exact spill site located approximately three quarters of a mile from the highway crossing where he tasted salt in the creek the night before. He observed a cone-shaped hole in the ground, 5-6 feet deep, filled with water. No water was flowing out of the hole because the pipeline had been shut down the night before, but he saw marks in the soil, indicating that water had flowed from the hole, around a small hill, and down over the ground into Blacktail Creek. The ruptured pipe was located approximately 178 feet from Blacktail Creek. Visible oil was seen and photographed that day on the surface of Blacktail Creek. Operator #1 also observed oil staining on the snow and ice near Blacktail Creek.

That same morning, numerous Summit managers and employees participated in a conference call. Notes of the conversation were taken by Summit's former Environmental Director including:

- [P]otential for leak to have started upon startup
- [L]and area at the leak site may be 4-5 acres contaminated
- ~ 11/27/14 – [Summit's Area Operations Manager and Construction Manager] heard about volumes from [Company A]
- 12/24/14 – our water meter was installed to allow us to meter out inlet/outlet to confirm the liquid loss that we have suspected but not been able to identify
- 12/31/14 – meter is tied into SCADA and we can see the volume discrepancy but can't verify data
- [P]ossible loss is 5,000 – 6,000 bbls/d on leak day?
- 1/6/15 – got a call from [Company A] saying there were discrepancies between shipping and receiving.
- 1/6/15 … [Summit's Pipeline Operator] went out at night to see the area and thought he saw some ground staining and possible unfrozen brine water.
- [T]here is brine/oily water on top of the ice near the site, going to put out booms, and diapers

Before noon on January 7, 2015, Summit engaged at least two contractors to begin to clean up the spill.

Summit called North Dakota authorities at 4:03 p.m. (MT) on January 7, 2015. It reported "an unknown quantity of saltwater brine was released from the pipeline leak. Some of the released saltwater entered the Blacktail creek[.]" State authorities asked if Summit had reported the discharge to the federal NRC as required but it had not done so.

At 4:38 p.m. (MT) on January 7, 2015, Summit called the NRC and reported "an unknown quantity of saltwater" into Blacktail Creek. When asked by the NRC operator what time the incident took place, the Summit caller responded: "I don't know the exact time." The NRC operator said they could use the time it was being reported and Summit's representative said "Sure, let's, let's do 7:00 a.m. today. So January 7th at 7:00 a.m." Summit reported that "The product is saltwater." ("Saltwater" is another term used in the oil and gas industry for produced water.) When asked by the NRC hotline operator to describe if there was any sheen on the water, the Summit representative replied: "Uh, I can't, I don't think there's any sheen on the water…. It's a brine." The notes from the meeting earlier that morning, that the caller had attended, state that Summit had "suspected but been unable to identify" a leak since at least December 24, 2014. Those notes

also stated: "[T]here is brine/oily water on top of the ice near the site, going to put out booms, and diapers." A sheen on the water or oil on the shoreline are legal definitions of a harmful quantity of oil. Summit also stated that it did not "know the quantity" spilled.

In Summit's calls to North Dakota and federal authorities on January 7, 2015, it did not indicate that it had located the spill the day before, or that it had been looking for a possible spill for months. Summit also did not mention that it had received data the previous day that more than 2.4 million barrels were unaccounted for since December 25, 2014, based on Summit's own meters, that it had received other reports of large volumes of missing fluid dating back to October, or that there had been a sustained pressure drop on this line since August 17, 2014.

On January 13, 2015, Summit's former executives and employees updated North Dakota officials and, for the first time, reported a volume. According to Summit, 70,878 barrels were lost from the pipeline from December 25, 2015, to January 6, 2015. This period of time corresponds to the day after Summit's outlet meters were installed to the day the pipeline was shut down. Summit did not inform North Dakota that there was data showing the duration of the spill was longer than that period of time, nor did Summit share that it had data from Company A showing a larger volume may have been discharged.

On January 18, 2015, Summit updated its report to the NRC. In the call to NRC on January 18, 2015, Summit changed the substance spilled from "saltwater" to "produced water with entrained hydrocarbons." In response to questions from the NRC operator, Summit again stated that the spill occurred on January 7th at 7:00 in the morning and that the spill quantity was still unknown. That same day, Summit was sufficiently concerned about the oil content being found in the area of the rupture that it tested the oil pipeline that ran parallel to the produced water pipeline to make sure it was not also leaking.

On January 21, 2015, Summit for the first time reported an estimated volume to the NRC. This report was prompted by an EPA official who requested that Summit provide information regarding the volume released. What to report and how to report it was a subject of discussion between and amongst Summit executives, managers and counsel. Summit's former Environmental Director at the time made the call to the NRC as he was directed and stated: "I want to update the spill quantity." "Can I put potentially 70,000 barrels, cause it's not a definitive number, it's just what we're updating the report with." In making this report, Summit did not qualify the information or state the estimate of 70,000 barrels was based only on 14 days of data, nor did it provide other relevant information at its disposal indicating that the spill had lasted longer than 14 days and involved a larger quantity. Summit's updated written report stated "Potentially 70,000 barrels of produced water and an unknown quantity of hydrocarbons associated with the produced water."

Summit also issued a press release on January 21, 2015, which stated:

> Based on a preliminary review of the [Summit's] metering data, the estimated volume of the produced water released from the ruptured pipeline is approximately 70,000 barrels. Since commencing remediation efforts on January 6, 2015, approximately 65,000 barrels of water have been extracted from Blacktail Creek. It

> is likely that a significant amount of this water was freshwater from the creek and not all produced water. Sampling data indicates that in general, as expected, chloride concentrations have decreased since the release. The produced water also contained entrained hydrocarbons.

Summit provided the U.S. EPA with a written response to a Request for Information regarding the spill. The response was certified on September 3, 2015, by Summit's then Executive Vice President who also served as Chief Compliance Officer and General Counsel. Among other things, Question 21 of the Request for Information asked Summit to describe the quantity of each substance discharged, how those quantities were determined, and all documents relating to Summit's determination. Summit answered, in part:

> Meadowlark preliminarily estimated that approximately 70,000 barrels of produced water might have leaked from the Marmon Pipeline. Meadowlark based the estimate on a comparison of meter data gathered at each LACT unit and data from a meter installed at the inlet to the UIC facility for the period when both sets of meters were operational. Meadowlark relies on this meter data because these were the only two meters owned and operated by Meadowlark. Meadowlark may or may not revise this value upwards or downwards depending on many possible factors, such as meter reliability, human error, evaluation of operations and environmental data and third-party information.

At no time prior to this Plea Agreement did Summit update this statement.

Summit had reason to know that its reports to state and federal government were incomplete and misleading. On January 9, 2015, Summit's then Vice President of Engineering conducted an analysis of the available data, including the recorded history of pipeline pressure, Company A's meter readings, and Summit's more limited data. Based on his review of the data, he found substantial evidence that the spill began between 11:00 p.m. and 12:00 a.m. on August 16-17, 2014, and that more than 700,000 barrels (29.4 million gallons) of fluid had been lost from the pipeline. A day later, this Vice President sent an email with a spreadsheet containing the data and his calculations to Summit executives including the President and Chief Executive Officer, the Executive Vice President who also served as Chief Compliance Officer and General Counsel, and others.

This email and the spreadsheet were withheld from the grand jury and from civil investigators under a claim of privilege. It also was not provided pursuant to the EPA's request for all documents related to determining the volume of the discharge. When the now-former Vice President of Engineering was contacted by criminal prosecutors, it was discovered that he prepared the analysis on his own and that it was not done as part of Summit's legal defense or at the direction of counsel such that it should have been claimed as privileged.

After calculating that the spill was of longer duration and volume, the Vice President told others in the company including the Chief Operating Officer that there was compelling data that the spill started in August and that the total volume could be much higher than what was being reported to the federal and state authorities. The Chief Operating Officer had seen the location of

the burst pipe after the leak was stopped and stated that it did not seem possible that the leak was larger than what was reported. The Vice President expressed concern that what Summit was reporting could result in legal problems. Both corporate officers believed that the report was preliminary and would be updated, though that never occurred. The Vice President's calculations, which were shared at the time with corporate leadership, conflicted with Summit's position after the spill. The Vice President's calculations, however, are consistent with those in this Joint Factual Statement and would have been highly relevant at the time to determining what type of response should be mounted by federal authorities.

North Dakota's federally authorized state program under the Clean Water Act mandates that not only must "[a]ny spill or discharge of waste which causes or is likely to cause pollution of waters of the state … be reported immediately" but also that "[t]he owner, operator, or person responsible for a spill or discharge must notify the department as soon as possible … and provide all relevant information about the spill." Summit did not share the Vice President's spill volume calculations or estimate that the spill started in August to the State of North Dakota or to federal environmental authorities.

In pleading guilty, Defendant Summit admits that it did not immediately report the discharge of oil into U.S. waters on January 6, 2015, and that the failure to report was knowing. Summit also acknowledges in pleading guilty that its statements and omissions were misleading and failed to provide of all of the information in its possession. Defendant further acknowledges it failed to report and forthrightly report the discharge of oil to federal authorities in telephone calls made on January 7, 18, and 21, 2015, even though federal authorities specifically requested information about the volume of the discharge in each call.

Environmental Impact

Criminal charges under the Clean Water Act and Oil Pollution Act of 1990 do not require proof of environmental harm. Nevertheless, as part of its guilty plea, Summit acknowledges that there was environmental harm caused by the spill.

On January 7, 2015, the day the spill was reported, three water samples were taken from Blacktail Creek, which showed chloride levels of 91,971 milligrams per liter (mg/l), 53,983 mg/l, and 79,975 mg/l. A fourth sample taken from the Little Muddy River at its confluence with Blacktail Creek showed chloride levels of 76,976 mg/l. Based on North Dakota Water Quality Standards, the maximum limit for chloride in Blacktail Creek and the Little Muddy River is 250 mg/l.

A study conducted by the U.S. Geological Survey on the environmental impacts of the spill and published in a peer-reviewed scientific journal in 2017, found, among other things:

- Elevated levels of sodium, chloride, bromium, strontium, barium, lithium, ammonia, and hydrocarbons downstream of the spill location, including elevated levels of chlorine and sodium in the Little Muddy River, approximately 22.9 km downstream of the spill location;

- In February 2015, chloride levels measured in Blacktail Creek were up to 72 times higher than the expected natural background level; and

- At least through June 2015, impacts of the spill included reduced fish survival rates (2.5% survival at 7.1 km downstream of the spill location, as compared to 89% at an upstream reference site that was unimpacted by the spill).

In addition to its impacts on surface waters, the spill travelled subsurface through soil and groundwater beneath approximately 60 acres of land, causing extensive contamination to groundwater, including Class I groundwater. Groundwater is classified as Class I if it is highly vulnerable to contamination and is an irreplaceable source of drinking water and/or ecologically vital. The contamination included chloride and hydrocarbon levels above state water quality standards. Groundwater recovery operations are still ongoing, under state oversight. An estimated 2,700 acres or more in and around Blacktail Creek have been impacted by the spill or measures taken to clean up the spill.

Remedial Measures

Under the Oil Pollution Act of 1990, responsible parties are encouraged to initiate (directly or with contractors) and pay for cleanup and remediation. Failure to do so will result in the government undertaking the cleanup and billing the responsible party for the amount expended by the Oil Spill Liability Trust Fund established by Congress.

Summit undertook cleanup and remediation measures for the spill and represents that it has spent more than $50 million, approximately $26 million of which was reimbursed by insurance. Summit's remediation efforts to mitigate the environmental impact of the spill include: removal of contaminated surface water, collection of oil and hydrocarbons from the affected area, removal of contaminated soil, soil and land remediation, and ongoing groundwater monitoring. The cleanup has included the removal of 2 million barrels of surface and groundwater from Blacktail Creek and the surrounding watershed and removal of many tons of contaminated soil. Summit is continuing to monitor and clean the groundwater and anticipates that these efforts will be necessary throughout the period of probation.

Summit no longer has the same owners, leadership, board of directors, or corporate officers that it did at the time of the environmental crimes set forth in the Criminal Information and this Joint Factual Statement. Summit was part of a group of entities that include Summit Midstream Partners, LP (SMLP), a publicly-traded limited partnership. Those who owned the entities at the time of the spill sold their share of the entities, including Summit, to new owners in May 2020. The new ownership purchased Summit knowing of its potential liability related to this matter and have installed new management. SMLP now owns and controls Summit and under the terms of the Plea Agreement will guarantee that funding of all remedial measures and all measures necessary to comply with the law.

In pleading guilty, the current senior management of Summit and SMLP are acknowledging that the facts of this case involve serious criminal conduct. Summit and SMLP accept full responsibility for the violations of federal environmental law set forth herein.

Summit has made its new environmental managers available to the government and provided details regarding the various steps it has made to prevent future leaks and to promptly identify and remedy any future problems. These efforts have involved changes to Summit's corporate structure, management changes, internal reporting mechanisms, and technical improvements. Summit's new management has made books and records available concerning limits on its ability to pay more in civil penalties and criminal fines.

Since acquiring Summit, Summit and SMLP have designated a Chief Compliance Officer who reports on compliance issues to the Board of Directors, which now also includes an Audit Committee of independent directors.

Summit has established a Summit Operations Control Center (SOCC) that continuously monitors all pipelines operated by Summit or Summit-related entities at all times, including the Marmon System. Had the SOCC been operational at the time of the spill, it should have identified the leak and its location as soon as the leak began, in close to real time. Additionally, Summit represents that certain segments of the Marmon System have been replaced with upgraded pipe, and other equipment. Summit also represents that it has enhanced its physical pipeline inspection procedures in North Dakota.

Summit has implemented a standardized incident reporting tool requiring each environmental incident to be reported and tracked through its control center. Summit has also represented that it has provided training for those in the field along with clear reporting protocols and implemented required annual training of its Environmental Management System ("EMS"). A hotline supervised by the Chief Compliance Officer has been established and allows employees and others to anonymously submit telephone, website, and written submissions of legal, compliance, and environmental concerns, or any violation of Summit's Code of Business Conduct and Ethics. The existence of the hotline is a subject of regular training and safety meetings.

Additionally, under the terms of the civil Consent Decree, Summit has made commitments to undertake additional remedial measures, including further improvements to its oversight and compliance structure. Compliance with the remedial measures set forth in the civil Consent Decree, including assessment of their implementation by independent third-party auditors and inspectors when called for by the terms of the civil Consent Decree, is a requirement during the three-year period of probation.

For the United States:

JEAN E. WILLIAMS
Deputy Assistant Attorney General
Environment & Natural Resources Division
U.S. Department of Justice

By: _____
Richard A. Udell
Senior Litigation Counsel
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Stephen J. Foster
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Trial Attorney

NICHOLAS W. CHASE
Acting United States Attorney

By: _____
Gary L. Delorme
Assistant United States Attorney

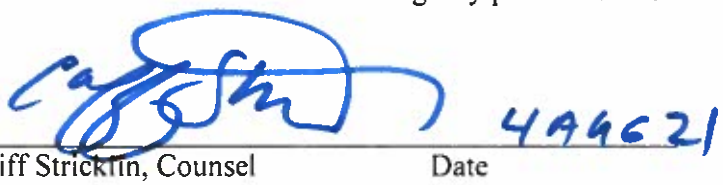
For the Defendant, Summit Midstream Partners, LLC:

As the authorized representative of Defendant Summit Midstream Partners LLC, I have read this Joint Factual Statement and carefully discussed every part of it with criminal defense counsel for Summit Midstream Partners LLC. I hereby stipulate that this above Joint Factual Statement is true and accurate to the best of my knowledge, and that had the matter proceeded to trial, the United States would have proved the same beyond a reasonable doubt.

8-4-2021

James D. Johnston Date
Authorized Representative
Summit Midstream Partners LLC

I am counsel for Summit Midstream Partners LLC. I have carefully discussed every part of this Joint Factual Statement with the authorized representatives of Summit Midstream Partners LLC. To the best of my knowledge this is a true and accurate factual statement, and had the matter proceeded to trial, the United States would have proved the same beyond a reasonable doubt. This statement provides a sufficient factual basis for charges set forth in the Criminal Information and Summit Midstream Partners LLC's guilty pleas as set forth in the Plea Agreement.



4/4/21

Cliff Stricklin, Counsel Date