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RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL & GAS DOCKET NO. 09-0292018

COMPLAINT OF MIKE SMITH AGAINST TARGA MIDSTREAM SERVICES, LLC AND CONOCOPHILLIPS COMPANY REGARDING THE REMEDIATION OF CONTAMINATION, CHICO GAS GATHERING SYSTEM, WISE COUNTY, TEXAS

AMENDED PROPOSAL FOR DECISION

EXAMINERS: Jennifer Cook, Administrative Law Judge

Paul Dubois, P. E., Technical Examiner

(Initial Proposal for Decision) Petar Buva, Technical Examiner (Amended Proposal for Decision)

PROCEDURAL HISTORY:

Hearing Dates - January 10 and May 10-12, 2017

Close of Record - January 5, 2018
Proposal for Decision Issued - April 4, 2018
Conference (Remanded) - May 22, 2018
Post-Conference Hearing - September 10 and

November 10 and November 27, 2018 January 31, 2019

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Record Close - January 31, 201 Amended Proposal for Decision Issued - April 12, 2019

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I. Explanation for Amendment

The initial Proposal for Decision in this case is amended to update the Proposal for Decision to add content reflecting activity in this case after the case was remanded by the Commission to re-open the record at the May 22, 2018 Commission conference. The remand was for the limited purpose of providing specific plans regarding delineation and remediation. The amendment only includes information regarding this limited scope. No changes are made to the initial Proposal for Decision except for providing temporal context when necessary for clarification and to correct typographical errors in the Findings of Fact and Conclusions of Law.

In general, the revisions to reflect the updated information include:

- Adding a section to the Statement of the Case to update the parties' positions and recommendation regarding the remanded issues;
- Adding to the Jurisdiction and Notice section to provide information regarding notice after the initial Proposal for Decision was issued;
- Adding an additional Discussion of Evidence section regarding evidence admitted post-remand;
- Addition a section to the Examiners' Analysis regarding the issues remaining after the remand; and
- Adding to the Recommendation, Proposed Findings of Fact and Proposed Conclusions of Law to provide a revised Examiners' recommendation after evaluating the evidence and issues remaining after the remand.

II. Statement of the Case

Mike Smith ("Complainant") filed a complaint ("Complaint") requesting the Commission order Targa Midstream Services, LLC ("Targa") and/or ConocoPhillips Company ("Conoco") to remediate hydrocarbon contamination Complainant found in a pond on his land ("Smith Property"). Burlington Resources Oil & Gas Company LP sought to intervene as the true party in interest instead of ConocoPhillips Company; without objection, Burlington Resources Oil & Gas Company ("Burlington") was admitted as a party. Issues in this case include (1) which, if any, parties have regulatory responsibility to remediate the pond contamination in compliance with Commission rules and statutes and (2) what, if any, action—such as delineation, assessment and remediation—is required to be performed.

A. Statement of the case regarding this proceeding prior to the Commission's remand (No changes from initial Proposal for Decision)

Complainant asserts Targa and/or Burlington are responsible for remediation of hydrocarbon contamination on the Smith Property. The hydrocarbons at issue were originally discovered near a pond ("Pond Site") on the Smith Property. Burlington has leased the mineral rights (the "Fox Lease") and is the operator of several Fox Lease wells

near the Pond Site. Targa operates gas gathering lines from wells on the Smith Property, one of which is approximately 100 feet from where the hydrocarbons were originally discovered at the Pond Site. Burlington and Targa are the only operators near the pond contamination. Railroad Commission Staff ("Staff") participated and requests the responsible parties be required to do further assessment of the contamination and remediate to regulatory standards if necessary.

Complainant discovered the contamination at issue on Saturday, October 8, 2011, in the southern area of a recreational pond on his property ("Pond Discovery Location"). After he discovered the contamination, he called a representative of Burlington, who told him a Targa representative would meet him at the site. Once at the site, both took a sample. The liquid sample exhibited a phase separation interface. It smelled and appeared to be a hydrocarbon product mixed with water.

After the hydrocarbons in the pond were discovered, around the next day, Targa isolated and tested the pipe in the vicinity of the Pond Site; the pipe would not hold pressure. Consequently, Targa excavated the area to expose the pipe, until it discovered a small hole caused by internal corrosion (the "Pipeline Leak Location"). Targa replaced approximately 60 feet of pipe. The leak in Targa's pipeline was approximately 100-150 feet from the pond contamination. Targa notified Burlington the leak was from Targa's pipeline. Burlington directed Complainant to discuss the matter of his pond to Targa, and that Burlington was not getting involved because Burlington's asset did not cause the pond contamination. Burlington did no independent on-site investigation of the contamination. It concluded it was not the cause, and thus not responsible, by examining its monitoring equipment and determining there was no indication of any leak from a Burlington asset.

Neither Targa nor Burlington reported the contamination to the Commission even though Commission rules require any spill into water must be reported. Neither did an assessment of the contamination to evaluate the extent, possible cause or need for remediation. Each maintains it is not the cause such that it has no regulatory responsibility regarding the pond contamination.

After the initial discovery, Complainant persisted that contamination in his pond needed to be addressed. Complainant mainly pressed Targa and notified the Commission by filing a complaint. Over approximately the next five years, Targa, Complainant and/or Staff conducted approximately a dozen site investigations including sampling events. Observations at the site and the lab results from those sampling events did include observations and results showing hydrocarbons were present in soil and/or water around and between the Pond Discovery Location and the Pipeline Leak location.

Complainant asserts neither Targa nor Burlington has delineated the contamination discovered in Complainant's pond as required by Commission rules. There was and remains an environmental condition requiring a response action, such as further

¹ See 16 Tex. Admin. Code §§ 3.20, 3.91(e)(3).

assessment and remediation. Complainant argues Targa and/or Burlington should have to fund the necessary response actions.

Staff asserts Targa should be responsible for further delineation of the contamination and remediation, if necessary. Staff relies on the following:

- The proximity of the pipeline leak to the pond;
- Targa replaced 60 feet of pipeline around the Pipeline Leak Location;
- The Pipeline Leak Location is upgradient of the contamination in the pond;
- There was evidence of hydrocarbons near the Pipeline Leak Location;
- The area of confirmed hydrocarbon impact includes the pipeline where Targa had a confirmed leak, the area around the Pond Discovery Location and in between:
- A migration pathway of fractured limestone exists between the area of replaced pipe and the contamination in Complainant's pond;
- Targa's gas pipeline can and does include liquids;
- The length of time the pipeline leak persisted is unknown; and
- The chromatographs of fluid samples show a common source of the hydrocarbons in the pond and the Burlington lease production.

Staff asserts the evidence shows the leak from the Targa pipeline caused or contributed to the pond contamination.

Targa maintains further remediation is not necessary and if any additional delineation or remediation is necessary, then Targa believes it should be performed either by Burlington or by the State, using state funds. Targa asserts proof of a causal link between Targa's pipeline release and the contamination in the pond is required for Targa to be held responsible. Targa maintains the required causal link was not proven. Targa relies on the following:

- Any hydrocarbons from the pipeline leak would have migrated the same direction as groundwater flow, which is north and not northeast towards the pond.
- If the Targa pipeline were the source of the pond contamination, then the soil samples and water samples collected near the Pipeline Leak Location would have the highest concentration of hydrocarbon constituents because the highest concentration is always near the source. Consequently, because the highest concentrations of hydrocarbons were near the pond and not near the Pipeline Leak Location, Targa's pipeline leak is not the source of the pond hydrocarbons.
- The sampling results from around the Pipeline Leak Location are below protective levels for applicable contaminants or such contaminants were below detectable levels.
- Targa's pipeline contains gas, not liquids, and no liquids would have dropped out
 of the gas in the short distance from separation to the Pipeline Leak Location.

Burlington asserts there is no evidence Burlington caused the pond contamination and it is not responsible to investigate or remediate contamination it did not cause.

Burlington claims it is not a "responsible person" under the applicable statutes and rules. Burlington maintains it has had no releases on the Smith Property from any of its operations and there is no evidence in the record that Burlington caused the pond contamination. Burlington's expert concludes Burlington's ongoing history of environmental compliance and spill prevention activities establishes there is no reasonable link between Burlington's operations and the alleged hydrocarbon contamination.

In the initial Proposal for Decision, the Administrative Law Judge and Technical Examiner (collectively "Examiners") recommended that the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners further recommended that Targa be ordered to assess and if necessary remediate contamination in accordance with regulatory standards under the direction of Commission staff.

B. Statement of the case regarding issues remaining after the Commission's remand (New section added to PFD)

The initial Proposal for Decision was issued on April 4, 2018, and considered by the Commission at a Commission conference on May 22, 2018. At the conference, the Commission remanded this case for the limited purpose of providing specific plans regarding delineation and remediation, which was to be performed by Targa. The Commission directed the parties to act within 60 days.

After conference, Targa proposed a specific work plan to Staff on July 10, 2018. Staff approved the work plan with additional comments on July 20, 2018. The 60-day deadline from the Commission was July 21, 2018. Targa agreed to comply with Staff's additional comments on July 23, 2018.

In August 2018, Targa performed in accordance with the approved work plan, including sampling surface water, excavating and removing soil from the Pond Site and sampling the soil. Condensate was not observed and sampling results were below detection limits and/or clean-up standards. On or about August 23, 2018, Staff requested additional groundwater testing. Targa performed the requested additional testing on September 13, 2018. The results were below detection limits and/or clean-up standards. On November 27, 2018, Staff issued a letter stating that no further investigation or remediation is necessary.

While Staff and Targa both agree that the site has been remediated in compliance with regulatory standards, Complainant requests that additional remediation be performed.

The Examiners respectfully submit this Amended Proposal for Decision ("PFD"). As in the initial Proposal for Decision, the Examiners find the Commission can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners find that the remediation performed by Targa after the remand, which was

found to be sufficient by Staff, complied with regulatory standards. Because the site has been remediated by Targa in accordance with regulatory standards, the Examiners recommend that neither Targa nor Burlington be ordered to further assess and remediate the Pond Site. The Examiners further recommend the Commission deny Complainant's request for additional relief.

III. Jurisdiction and Notice (New information added to the PFD regarding notice after the initial Proposal for Decision was issued)²

Sections 81.051 and 81.052 of the Texas Natural Resources Code provide the Commission with jurisdiction over all persons owning or engaged in drilling or operating oil or gas wells in Texas and the authority to adopt all necessary rules for governing and regulating persons and their operations under the jurisdiction of the Commission. Section 91.101 of the Texas Natural Resources Code provides the Commission with authority to issue orders to prevent pollution of surface water or subsurface water in the State of Texas.

On November 28, 2016, the Hearings Division of the Commission sent a Notice of Hearing for the Complaint via first-class mail to Complainant, Targa, Burlington and Staff setting a hearing date of January 10, 2017.³ The notice contained (1) a statement of the time, place and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted.⁴ The hearing was held on January 10, 2017, as noticed. The hearing was recessed at the end of the day on January 10 and resumed at the agreed dates of May 10-12, 2017. Consequently, all parties received more than 10 days' notice. Complainant, Targa, Burlington and Staff appeared at the hearing and presented evidence.

On April 4, 2018, the Hearings Division of the Commission sent an initial Proposal for Decision and proposed order to Complainant, Targa, Burlington and Staff. On April 18, 2018, Complainant filed exceptions. On April 19, 2018, Targa and Burlington filed exceptions. On April 27, 2018, Complainant filed a reply to the exceptions. On April 30, 2018, Targa, Burlington and Staff filed replies to the exceptions. On May 15, 2018, the Hearings Division sent a notice to Complainant, Targa, Burlington and Staff notifying the parties that the initial Proposal for Decision was set to be considered by the Commission at the Commission's May 22, 2018 conference. The Commission considered the initial Proposal for Decision on May 22 as noticed. At the conference the Commission remanded the matter for reopening the hearing for the limited purpose of developing a specific plan for assessment and remediation.

² The hearing transcript in this case is referred to as "Tr. Vol. [volume no.] at [pages:lines]." The post-conference hearing in this case is referred to as "9/10/18 Tr. at [pages:lines]" and "11/27/18 Tr. at [pages:lines]." Complainant's exhibits are referred to as "Complainant Ex. [exhibit no(s).]." Targa's exhibits are referred to as "Targa Ex. [exhibit no(s).]." Burlington's exhibits are referred to as "Burlington Ex. [exhibit no(s).]." Staff's exhibits are referred to as "Staff Ex. [exhibit no(s).]." Examiners' exhibits are referred to as "Examiners Ex. [exhibit no(s).]."

³ See Notice of Hearing issued November 28, 2016.

⁴ See Tex. Gov't Code §§ 2001.051, 052; 16 Tex. Admin. Code §§ 1.45, 1.48.

On June 5, 2018, the Examiners issued an order setting a post-conference hearing date of September 10-12, 2018. The order was sent to Complainant, Targa, Burlington and Staff. The post-conference hearing was held on September 10 as noticed. Complainant, Targa, Burlington and Staff appeared at the hearing and participated. There was additional water sampling and analysis to be performed after the September 10 post-conference hearing. On October 26, 2018, Targa filed a letter stating the parties had agreed to continue the post-conference hearing on November 27, 2018. The post-conference hearing resumed on November 27 as agreed. All parties appeared and participated.

IV. Applicable Legal Authority (No changes from initial Proposal for Decision)

At issue in this case is whether Targa and/or Burlington should be ordered to take remedial actions regarding unrefined hydrocarbon contamination discovered on Complainant's property. Following are statutes and rules regarding contamination/pollution and remediation.

Tex. Nat. Res. Code § 91.101 provides in pertinent part:

RULES AND ORDERS.

- (a) To prevent pollution of surface water or subsurface water in the state, the commission shall adopt and enforce rules and orders and may issue permits relating to:
 - (1) the drilling of exploratory wells and oil and gas wells or any purpose in connection with them:
 - (2) the production of oil and gas, including:
 - (A) activities associated with the drilling of injection water source wells which penetrate the base of useable quality water;
 - (B) activities associated with the drilling of cathodic protection holes associated with the cathodic protection of wells and pipelines subject to the jurisdiction of the commission;
 - (C) activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants;
 - (D) activities associated with any underground natural gas storage facility, provided the terms "natural gas" and "storage facility" shall have the meanings set out in Section 91.173, Natural Resources Code;
 - (E) activities associated with any underground hydrocarbon storage facility, provided the terms "hydrocarbons" and "underground hydrocarbon storage facility" shall have the meanings set out in Section 91.201, Natural Resources Code; and
 - (F) activities associated with the storage, handling, reclamation, gathering, transportation, or distribution of oil or gas prior to the refining of such oil or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel;

- (3) the operation, abandonment, and proper plugging of wells subject to the jurisdiction of the commission; and
- (4) the discharge, storage, handling, transportation, reclamation, or disposal of oil and gas waste as defined in Section 91.1011 of this subchapter, or of any other substance or material associated with any operation or activity regulated by the commission under Subdivisions (1), (2), and (3) of this subsection.

Tex. Nat. Res. Code § 91.113 provides in pertinent part:

INVESTIGATION, ASSESSMENT, OR CLEANUP BY COMMISSION.

- (a) If oil and gas wastes or other substances or materials regulated by the commission under Section 91.101 are causing or are likely to cause the pollution of surface or subsurface water, the commission, through its employees or agents, may use money in the oil and gas regulation and cleanup fund to conduct a site investigation or environmental assessment or control or clean up the oil and gas wastes or other substances or materials if:
 - the responsible person has failed or refused to control or clean up the oil and gas wastes or other substances or materials after notice and opportunity for hearing;
 - (2) the responsible person is unknown, cannot be found, or has no assets with which to control or clean up the oil and gas wastes or other substances or materials; or
 - (3) the oil and gas wastes or other substances or materials are causing the pollution of surface or subsurface water.
- (b) For purposes of this section, "responsible person" means any operator or other person required by law, rules adopted by the commission, or a valid order of the commission to control or clean up the oil and gas wastes or other substances or materials.

Tex. Water Code § 26.131 provides in pertinent part:

DUTIES OF RAILROAD COMMISSION.

- (a) The Railroad Commission of Texas is solely responsible for the control and disposition of waste and the abatement and prevention of pollution of surface and subsurface water resulting from:
 - (1) activities associated with the exploration, development, and production of oil or gas or geothermal resources, including:
 - (A) activities associated with the drilling of injection water source wells which penetrate the base of useable quality water;
 - (B) activities associated with the drilling of cathodic protection holes associated with the cathodic protection of wells and pipelines subject to the jurisdiction of the Railroad Commission of Texas;

- (C) activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants;
- (D) activities associated with any underground natural gas storage facility, provided the terms "natural gas" and "storage facility" shall have the meanings set out in Section 91.173, Natural Resources Code;
- (E) activities associated with any underground hydrocarbon storage facility, provided the terms "hydrocarbons" and "underground hydrocarbon storage facility" shall have the meanings set out in Section 91.201, Natural Resources Code; and
- (F) activities associated with the storage, handling, reclamation, gathering, transportation, or distribution of oil or gas prior to the refining of such oil or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel;
- (2) except to the extent the activities are regulated by the Texas Department of Health under Chapter 401, Health and Safety Code, activities associated with uranium exploration consisting of the disturbance of the surface or subsurface for the purpose of or related to determining the location, quantity, or quality of uranium ore; and
- (3) any other activities regulated by the Railroad Commission of Texas pursuant to Section 91.101, Natural Resources Code.

16 Tex. Admin. Code § 3.8(b) ("Statewide Rule 8(b)") states:

No pollution. No person conducting activities subject to regulation by the commission may cause or allow pollution of surface or subsurface water in the state.

16 Tex. Admin. Code § 3.91 ("Statewide Rule 91") states in pertinent part:

Cleanup of Soil Contaminated by a Crude Oil Spill

- (a) Terms. The following words and terms, when used in this section, shall have the following meanings, unless the context clearly indicates otherwise.
 - (1) Free oil--The crude oil that has not been absorbed by the soil and is accessible for removal.
 - (2) Sensitive areas--These areas are defined by the presence of factors, whether one or more, that make an area vulnerable to pollution from crude oil spills. Factors that are characteristic of sensitive areas include the presence of shallow groundwater or pathways for communication with deeper groundwater; proximity to surface water, including lakes, rivers, streams, dry or flowing creeks, irrigation canals, stock tanks, and wetlands; proximity to natural wildlife refuges or parks; or proximity to commercial or residential areas.
 - (3) Hydrocarbon condensate--The light hydrocarbon liquids produced in association with natural gas.

- (b) Scope. These cleanup standards and procedures apply to the cleanup of soil in non-sensitive areas contaminated by crude oil spills from activities associated with the exploration, development, and production, including transportation, of oil or gas or geothermal resources as defined in § 3.8(a)(30) of this title (relating to Water Protection). For the purposes of this section, crude oil does not include hydrocarbon condensate. These standards and procedures do not apply to hydrocarbon condensate spills, crude oil spills in sensitive areas, or crude oil spills that occurred prior to the effective date of this section. Cleanup requirements for hydrocarbon condensate spills and crude oil spills in sensitive areas will be determined on a case-by-case basis. Cleanup requirements for crude oil contamination that occurred wholly or partially prior to the effective date of this section will also be determined on a case-by-case basis. Where cleanup requirements are to be determined on a case-by-case basis, the operator must consult with the appropriate district office on proper cleanup standards and methods, reporting requirements, or other special procedures.
- (c) Requirements for cleanup.
 - (1) Removal of free oil. To minimize the depth of oil penetration, all free oil must be removed immediately for reclamation or disposal.
 - (2) Delineation. Once all free oil has been removed, the area of contamination must be immediately delineated, both vertically and horizontally. For purposes of this paragraph, the area of contamination means the affected area with more than 1.0% by weight total petroleum hydrocarbons.
 - (3) Excavation. At a minimum, all soil containing over 1.0% by weight total petroleum hydrocarbons must be brought to the surface for disposal or remediation.
 - (4) Prevention of stormwater contamination. To prevent stormwater contamination, soil excavated from the spill site containing over 5.0% by weight total petroleum hydrocarbons must immediately be:
 - (A) mixed in place to 5.0% by weight or less total petroleum hydrocarbons; or
 - (B) removed to an approved disposal site; or
 - (C) removed to a secure interim storage location for future remediation or disposal. The secure interim storage location may be on site or off site. The storage location must be designed to prevent pollution from contaminated stormwater runoff. Placing oily soil on plastic and covering it with plastic is one acceptable means to prevent stormwater contamination; however, other methods may be used if adequate to prevent pollution from stormwater runoff.
- (d) Remediation of soil.
 - (1) Final cleanup level. A final cleanup level of 1.0% by weight total petroleum hydrocarbons must be achieved as soon as technically feasible, but not later than one year after the spill incident. The

- operator may select any technically sound method that achieves the final result.
- (2) Requirements for bioremediation. If on-site bioremediation or enhanced bioremediation is chosen as the remediation method, the soil to be bioremediated must be mixed with ambient or other soil to achieve a uniform mixture that is no more than 18 inches in depth and that contains no more than 5.0% by weight total petroleum hydrocarbons.

V. Discussion of Evidence Prior to the Commission's Remand (No changes from initial Proposal for Decision)

Initially, Complainant filed the complaint only against Targa. While the case was pending, Complainant sought to add Burlington, and Burlington was admitted as a second respondent. Additionally, Staff appeared at the hearing and requested to participate and that the responsible parties for the contamination be required to take remedial action in accordance with regulatory standards. Staff was admitted as a party and its request for Commission action is considered as part of this PFD.

A. Background facts

This is a complaint case. Complainant asserts Targa and/or Burlington is responsible for remediation of hydrocarbon contamination on the Smith Property. The hydrocarbons at issue were originally discovered at the Pond Site on the Smith Property. A graphic showing the general area of the pond and surrounding well pads follows.⁵



⁵ This picture is provided as a demonstrative visual general description of the area around the pond and well placement near the pond. Due to weather and construction, the pond has undergone several changes in appearance in this case which are discussed as part of the evidence.

1. The parties, property and assets involved

In addition to Staff, there are three parties in this case: Complainant, Targa and Burlington.

Complainant

Complainant has owned the Smith Property, which is located near County Road 4513 in Wise County, for approximately 15 years. The Smith Property contains a small pond (about one acre in size). The pond is an artificial surface water feature created by an earthen dam being placed across a shallow south-to-north drainageway. The pond receives drainage from lands to the west, south and east. Complainant discovered a release of hydrocarbon contamination at the Pond Site. The contamination is the subject of this case.

Burlington

Burlington is the lessor of the mineral rights on the Smith Property (the Fox Lease) and is the operator of several gas wells near the Pond Site. The Fox Lease is a 380-acre mineral interest lease owned and operated by Burlington. Burlington has 12 producing wells on the Fox Lease. Wells 7 and 12H (the "Fox 7" and "Fox 12H") are geographically the closest two wells to the Pond Site. The Fox 7 and 12H wells are completed in the Newark, East (Barnett Shale) Field. In this area, the Barnett Shale correlative interval is typically going to range from about 7200 feet down to about 8400 feet. The Fox 7 and 12H have various stages of perforated intervals that are going to range from about 7230 to about 8470 feet.

The Fox 7 and 12H share a tank battery located on the Fox 7 well pad, northwest of the pond. The tank battery includes a separator, water tank and oil (condensate) tank for each of the two wells. The tanks are contained within a secondary containment berm. The Fox 12H pad is south of and contiguous to the Fox 7 pad and tank battery.⁸ A graphic identifying Burlington facilities follows.⁹

⁶ Tr. Vol. 1 at 24:12 to 24:21.

⁷ Tr. Vol. 4 at 10:2 to 11:16; Examiners Ex. 2, 3.

⁸ See, e.g., Burlington Ex. 1, 7, 8; see also Tr. Vol. 3 at 33:16 to 37:12; Targa Ex. 15, 31, 36.

⁹ See Burlington Ex. 1 (Alterations such as cropping and scaling were used so that the graphic would better fit within the PFD).



The Fox 7 was originally completed in June of 2005 and the Fox 12H was originally completed in March of 2008. Production from these wells has declined over the years. Currently the Fox 12H produces about 275 to 300 thousand cubic feet ("mcf") of gas a day, 3 to 4 barrels of condensate, and 10 to 15 barrels of water. The Fox 7 produces about 50 mcf gas a day, about one barrel of condensate, and 5 to 6 barrels of water. The production stream from each wellhead is piped via an underground flow line to a separator. The flow lines are buried about two feet below grade. 10

¹⁰ Tr. Vol. 4 at 11:17 to 15:2.

After separation, the separated water goes to the water tank, and the separated condensate goes to the oil tank. The lines between the separators and the tanks—either the water tank or the condensate tank—are referred to as dump lines, and they are above grade. The Fox Lease separators operate at a pressure of about 180 psi to allow the gas to flow into the Targa gathering system, which operates at a pressure of about 175 psi. Cas from the separators is piped through a Burlington meter and then to the Targa sales meter, at which point Targa takes custody of the contents of the pipeline. The Targa sales meter is on the southeast end of the Fox 7 pad. Burlington has a meter upstream of Targa's for its own internal reporting processes.

The condensate tanks hold 300 barrels. Condensate in the tanks is stored until at least 150 barrels are available for transport. A transporter will retrieve a sample from the top of the tank to ensure it meets minimum specifications. The transporter will shut the valves, pull the hoses and leave Burlington a sales ticket on location. Burlington is typically not present when the transportation trucks retrieve the condensate; Burlington representatives call transporters when there is condensate ready for transport and provide the transporter an access code. The Burlington connection point to its facilities is inside the berm. The truck connection point is outside of the berm. 14

Targa

Targa operates a gas gathering pipeline system on the Smith property and surrounding tracts. Targa takes possession of the gas produced from the Fox 7 and 12H wells at its sales meter located on the southeast end of the Fox 7 pad. This sales meter is at the end of a pipeline segment that runs about 1,400 feet to the south-southeast to the next gathering junction. The line comes off the sales meter and then elbows down to below ground and then proceeds towards the southeast. The pipeline was installed in 2005, when the Fox 7 was completed. It is four-inch steel. The original depth was about 36 inches. No elevation surveys were made of the in-place pipe. The original depth was about

The Fox 12H well was drilled in 2008. Prior to the Fox 12H being drilled, the ground surface was raised by the placement of fill to create the Fox 12H well pad. The pipe stayed in the original location, but fill was added on top. Now the pipe is about 8 feet deep in this area. Since it was installed, there was no pressure testing of the line between the 2005 installation and the discovery of the pipeline leak in October 2011.¹⁸

From the Fox Lease sales meter, the pipeline runs about 250 feet to the southeast, then turns to the south-southeast and runs for a total of about 1,400 feet until the first block valve near the Fox Lease Well No. 6. The first segment of the line spatially

¹¹ Tr. Vol. 4 at 85:22 to 86:15)

¹² Tr. Vol 4 at 13:20 to 14:10

¹³ Tr. Vol. 4 at 30:7 to 32:17.

¹⁴ Tr. Vol. 4 at 95:1 to 98:13.

¹⁵ Tr. Vol. 3 at 38:19 to 39:7.

¹⁶ Id.; Examiners Ex. 2, 3.

¹⁷ Tr. Vol. 3 at 108:5-7

¹⁸ Tr. Vol. 3 at 105:15 to 108:8.

converges to the pond as it moves south to the turning point 250 feet from the Fox Lease sales meter. The pipeline distance to the pond ranges from about 150 feet to 65 feet (from north to south), but this distance is variable depending on the water level in the pond. ¹⁹ The surface trace of the pipeline follows surface topography that runs downhill from the Targa meters, then the topography inclines uphill to the south. The topographic low point of this 1,400-foot section of the pipeline is under the northeast corner of the Fox 12H well pad.²⁰

There is no gas compression on the pipeline system between the Fox 7 and 12H and the Waggoner Compressor Station, which is about 10 miles downstream.²¹ Before compression at the Waggoner facility, the gas is scrubbed to remove liquids (condensate and water) that have condensed out of the gas stream due to decreased temperature and pressure.²² Additional processing and removal of natural gas liquids ("NGL") is performed further downstream at the Chico Gas Plant.

According to the gas gathering contract between Burlington and Targa ("Contract"), Targa takes title to the gas and all constituents therein. The Targa sales meter is where the transfer occurs. The Contract further provides Burlington shall not process the gas other than by a conventional separator or separators operating with no internal piping for heat interchange and which operate without any chilling or refrigeration.²³ At the compressor station, Targa has scrubbers and oil tanks. Targa processes the gas and can sell any oil, or condensate, recovered.²⁴ The Contract was recently renewed for an additional 10-year term. Targa is entitled to one-hundred percent of all gas and liquids flowing through the Targa sales meter; transfer of all products that enter the pipeline at the Targa sales meter changes custody there. In exchange for that custody and title transfer, Burlington receives a percentage of the proceeds from sales downstream.²⁵

2. Discovery of hydrocarbon contamination at the Pond Site and the Targa pipeline leak

Complainant visited the Smith Property, including fishing at the pond, most weekends and on holidays. Prior to October 8, 2011, he had never noticed an odor. Around September 13, 2011, while the south area of the pond was dry, he hired someone to excavate and enlarge the dry southern area of the pond and to clean out sediment and debris.²⁶

Complainant discovered the contamination at issue on Saturday, October 8, 2011. He was fishing in his pond with his son when he noticed a strong odor that smelled like diesel. He walked towards the odor. There was a dry section south of the pond, due to

¹⁹ Targa Ex. No. 2, Figure 3; Tr. Vol. 3, 58: 5-6

²⁰ Targa Ex. Nos. 19, 24 & 37; Burlington Ex. No. 26.1

²¹ Tr. Vol. 3 at 39:23 to 42:1.

²² Tr. Vol. 3 at 43:5 to 45:1; Targa Ex. 14.

²³ Burlington Ex. 2; Tr. Vol. 3 at 89:11 to 92:12.

²⁴ Tr. Vol. 3 at 93:10 to 94:6; Burlington Ex. 2.

²⁵ Tr. Vol. 4 at 15:3 to 16:4.

²⁶ Tr. Vol. 1 at 118:24 to 120:11; Tr. Vol. 1 at 131:14 to 132:24; Complainant Ex. 30.

drought conditions, with a wet spot on the ground. He stated the odor appeared to come from the location where the wet spot was, so he took a shovel and started to dig a hole. There was a light yellowish liquid that filled a portion of the hole and stayed at a constant level. Complainant put a stake in the ground to mark where he first observed the contamination (the "Pond Discovery Location"). Currently, the location where Complainant dug and found the liquid is under water and part of the pond. He provided a photograph of the pond approximately a year later, when the area of contamination was under water and there is a sheen on the water at the approximate location where he found the contamination.²⁷

After he discovered the contamination, he called a representative of Burlington, using a contact number he had been provided. Burlington's representative stated there was no Burlington representative available, but a Targa representative could come to the location to meet Complainant.²⁸

Targa representative Mike Burris came to the site on October 9, 2011. According to Complainant, Mr. Burris saw and acknowledged the contamination and stated operations needed to be shut down while the matter was investigated.²⁹ Both Complainant and Mr. Burris took samples of the liquid.³⁰ According to Mr. Burris, the liquid sample exhibited two immiscible phases. To him it appeared to be water and some kind of petroleum product.³¹

Because rain was predicted that night, Targa did place booms around the hole that Mr. Smith had dug so that if it did rain, the booms would catch any runoff. It did rain that night enough that the south end of the pond, where the discovery site was located, was under water the next day.³² Complainant testified it began raining on October 9, 2011, and during the week such that when he returned to the location the next weekend, the area of dry pond where he found the contamination was under water.³³ Mr. Burris informed Burlington of the situation, and Burlington shut-in their Fox 7 and Fox 12H wells. Targa blocked in the gathering line.³⁴

On October 9, 2011, Mr. Smith emailed two Burlington representatives to convey the facts of discovery of the contamination and visit by Mr. Burris. He asked that they keep him updated as to what is being done. Burlington responded that Targa confirmed "the leak is on their pipeline." Burlington further directed Complainant to discuss cleanup efforts with Targa's representatives. Burlington representatives stated it should not be commenting "since it is not our asset." ³⁵

²⁷ Tr. Vol. 1 at 25:9 to 32:7; Staff Ex. 1; Complainant Ex. 2.12.

²⁸ Tr. Vol. 1 at 32:8 to 34:3.

²⁹ Tr. Vol. 1 at 36:2 to 36:22.

³⁰ Tr. Vol. 1 at 38:22 to 39:20; Tr. Vol. 3 at 123:9 to 124:15; Tr. Vol. 3 at 125:7 to 126:22; Targa Ex. 41.

³¹ Tr. Vol. 3 at 127:3 to 128:9.

³² Tr. Vol. 3 at 129:10 to 130:8.

³³ Tr. Vol. 1 at 41:11 to 41:16.

³⁴ Tr. Vol. 3 at 130: 9-21.

³⁵ Staff Ex. 1; Tr. Vol. 1 at 105:1 to 105:6.

After Burlington notified Targa of Complainant's discovered spill, Targa isolated and tested the pipe near the Pond Site; the pipe would not hold pressure. Consequently, Targa excavated the area to expose the pipe, starting at the sales meter and continuing along the pipe until it discovered a small hole caused by internal corrosion. ³⁶ Targa replaced 60 feet of pipe. Targa did not take pictures, soil samples or report the leak to the Commission. ³⁷ The hole in the pipe was approximately 150 feet from the Pond Discovery Location. ³⁸ The release point is to the southwest of the Pond Site on the northeast corner of the Fox 12H pad. ³⁹

Complainant followed up with Mr. Burris on the following Monday and Tuesday. Ultimately, Targa representatives told him Targa found and repaired the leak by replacing a segment of the pipeline. When Complainant asked about possible damage to his pond and fish, Mr. Burris indicated the leak was small, and Complainant should not be concerned.⁴⁰

After the pipeline was replaced, Targa pressure tested the line and it held pressure. In or about June 2014, Targa did a follow-up test. According to the test results, the pipe held pressure.⁴¹

3. Site inspections, sampling and testing results

Following is a chronology of the site visits and sampling events that occurred after the contamination was discovered at the Pond Site.

a. October 8, 2011 – Sampling Event 1: the discovery of contamination at the Pond Site

As noted above, on the day of the discovery of contamination, October 8, 2011, both Complainant and Mr. Burris visited the Pond Site, saw and smelled what appeared to be hydrocarbons and each took a sample of the liquid. Complainant's sample was ultimately tested; the results indicate the sample contained unrefined hydrocarbons.⁴² Mr. Burris did not retain his sample, so it was never tested.

b. October 10, 2011 – Pipeline leak detection inspection

Targa discovered a small hole on the bottom of the pipeline at a depth of about 8 feet. The Pipeline Leak Location is near the northeast corner of the Fox 12H well pad, about 100 feet southwest of the pond. Targa determined the hole was caused by internal corrosion, and about 60 feet of pipe was replaced. Mr. Burris observed gas flowing from the hole in the bottom of the pipeline; he did not observe any evidence of liquid release

³⁶ Tr. Vol. 3 at 134:1 to 135:22.

³⁷ Tr. Vol. 3 at 46:23 to 49:23; Complainant Ex. 5, 6; Targa Ex. 23.

³⁸ Complainant Ex. 9 at 2, 10 at Figure 1; Tr. Vol. 3 at 130:9 to 131:22.

³⁹ Tr. Vol. 4 at 66:15 to 66:21; Burlington Ex. 23.7.

⁴⁰ Tr. Vol. 1 at 40:2 to 41:20.

⁴¹ Tr. Vol. 3 at 56:25 to 58:17; Targa Ex. 7.

⁴² Complainant Ex. 7; Burlington Ex. 17, 23.3.

from the pipeline such as wetness, liquids or an unnatural soil appearance.⁴³ No media samples were collected. After the pipeline was repaired, the excavation was filled in.

 c. December 10, 2011 – Sampling Event 2: Complainant's consultant, Mr. Allen, initial site visit and sampling of pond surface water

After the discovery of the hydrocarbons at the Pond Site, Complainant hired an environmental consulting firm. The consultant assigned was David Allen. Mr. Allen performed most if not all the consulting work for Complainant in this case and testified as Complainant's expert. On December 10, 2011, he collected surface water samples from the Pond Site, but the results of the tested constituents were at a concentration below the laboratory quantitation limits ("non-detect" or "ND").⁴⁴

d. April 19, 2012 – Sampling Event 3: Staff initial inspection with Mr. Allen

On April 10, 2012, Staff was first notified of the Pond Site contamination when Mr. Allen, on behalf of Complainant, contacted the Commission District 09 Office with concerns about an incomplete remediation at the Pond Site. Mr. Allen described what occurred regarding the October 8, 2011 discovery of the contamination. Mr. Allen conveyed that discussions regarding additional remediation had occurred, but Targa indicated it was of the opinion no additional work was required.⁴⁵

After being notified of the possible contamination, on April 19, 2012, Staff inspected the Pond Site with Mr. Allen. Staff obtained soil and water samples from the pond and sites along the pipeline spill affected area.⁴⁶

In a letter dated May 17, 2012, Staff first contacted Targa about the Pond Site contamination and Targa's pipeline leak. Staff notified Targa about Mr. Allen's concerns and Staff's site visit on April 19. In the letter, Staff notified Targa that the Commission has no record of the contamination being reported and that Targa was responsible for a violation of Statewide Rules 8(d)(1) and 91⁴⁷ for failing to report the release. Staff requested (1) a written statement regarding any spill event at the Pond Site during 2011 or 2012 and (2) details as to what repairs and remediation work had been done.⁴⁸ The following day, May 18, 2012, Staff issued a Notice of Intent to Cancel P-4 Certificate of Compliance and to Sever Pipeline or Other Carrier Connection ("Notice of Intent") requiring Targa to resolve the violations of Statewide Rules 8(d)(1) and 91 by June 1, 2012, or the Commission P-4 Certificate of Compliance for the "Mike Smith Property Lease" would be canceled and severed.⁴⁹

⁴³ Tr. Vol. 3 at 138:10 to 139: 12.

⁴⁴ Complainant Ex. 7; Burlington Ex. 23.3.

⁴⁵ Burlington Ex. 23.1.

⁴⁶ *Id.*; Tr. Vol. 1 at 42:1 to 42:19.

⁴⁷ 16 Tex. Admin. Code §§ 3.8(d)(1) and 3.91.

⁴⁸ Complainant Ex. 8; Burlington Ex. 23.1; Tr. Vol. 1 at 44:17 to 45:18.

⁴⁹ Burlington Ex. 23.2.

In a letter dated May 25, 2012, Targa responded to Staff's May 17 letter and the May 18 Notice of Intent. Targa asserts it did not violate any reporting rules because the pipeline leak was from a gas, not liquids, line and Targa has not found any liquid contamination from its gas pipeline on Complainant's property. The letter describes the efforts Targa took regarding the hole discovered in its gas pipeline and reiterated there was no apparent hydrocarbon contamination at the site of the pipeline leak. As a result, Targa concluded the material observed by Complainant at the Pond Site on October 8, 2011, was not a result of a release from Targa's pipeline and Targa is not responsible for reporting or remediating it.⁵⁰

In a letter dated June 22, 2012, from Staff to Targa, Staff notified Targa of the lab results from the sampling thus far obtained October 8, 2011, December 10, 2011 and April 19, 2012. The samples were tested for total petroleum hydrocarbons ("TPH") and Benzene, Toluene, Ethylbenzene and Xylenes ("BTEX")—the presence of any one can be an indicator of possible contamination by oilfield hydrocarbon operations. All testing results were non-detect, except the sample collected by Complainant on October 8 contained elevated TPH levels. Due to the significance of replacing 60 feet of pipeline and the elevated TPH levels of Complainant's October 8 sample, Staff requested Targa take additional action despite the other non-detect sampling results. Specifically, Staff requests a "written plan for the implementation of subsurface soil sampling and analysis for the area lying between the operator's replaced section of the gas line and the Mike Smith water pond."⁵¹

e. August 6, 2012 – Sampling Event 4: Mr. Allen and Mr. Smith take samples near the stake in the pond

On August 6, 2012, Mr. Allen met Complainant at the Pond Site. Drought conditions had lowered the water levels of the pond and Complainant's stake marking the location of initial discovery of contamination at the Pond Site was visible. Prior to August 6, Complainant had constructed an earthen dam segregating the northern portion of the pond from the southern portion where the hydrocarbon contamination was discovered. Mr. Allen collected sediment samples (designated "MSP-1") from below the surface of the pond adjacent to the stake. He also collected surface water samples around the stake (designated MSP-1W).⁵²

Mr. Allen provided his results and assessment in a report dated September 10, 2012 ("Complainant Initial Report"). The lab results for the sediment sample are:

- TPH for MSP-1 was 835 mg/kg⁵³
- Benzene for MSP-1 was 0.291 mg/kg
- Toluene for MSP-1 was 4.360 mg/kg
- Ethylbenzene for MSP-1 was 0.975 mg/kg
- Xylenes for MSP-1 were 17.040 mg/kg

⁵⁰ Complainant Ex. 9; Tr. Vol. 1 at 45:19 to 49:4.

⁵¹ Targa Ex. 1; Burlington Ex. 23.3.

⁵² Complainant Ex. 10.

⁵³ The abbreviation "mg/kg" refers to milligrams per kilogram.

The lab results for the surface water sample are:

- TPH for MSP-1W was 792 mg/l⁵⁴
- Benzene for MSP-1W was ND
- Toluene for MSP-1W was 0.0363 mg/l
- Ethylbenzene for MSP-1W was ND
- Xylenes for MSP-1W were 0.0905 mg/l

Mr. Allen concludes, based on these lab results, that as of August 6, 2012, the contaminants discovered at the Pond Site in October 2012 still affect the pond and adjacent land. He further recommends an "assessment of all contaminant pathways and receptors potentially affected by the release." ⁵⁵

f. August 21, 2012 – Sampling Event 5: Targa takes samples for a limited assessment

Targa hired a consulting firm to perform additional work at Complainant's property, presumably in response to Staff's request for additional work in its June 22, 2012 letter. The consultant performing most if not all work for Targa in this matter was Chris Mitchell, who is Targa's expert witness in this case. On August 21, 2012, Mr. Mitchell visited the site and advanced four soil borings (designated B-1 through B-4) around the vicinity of the pipeline release point on the Targa gas line. B-1 was advanced adjacent to the estimated release point ("Pipeline Release Point"). B-2 was advanced approximately 20 feet northeast of the Pipeline Release Point, between the release point and the pond and almost directly west of the Pond Discovery Location. B-3 was advanced approximately 40 feet from the Pipeline Release Point, and northwest of the Pond Discovery Location. Both B-2 and B-3 are topographically downgradient from the Pipeline Release Point. B-4 was advanced approximately 20 feet southwest of the Pipeline Release Point, on the opposite side of the pipeline from the pond. At the site, petroleum hydrocarbon odors were detected in the soil samples from B-1, B-2 and B-3—the samples collected between the Pipeline Release Point and the Pond Discovery Location. A photoionization detector ("PID") capable of detecting volatile organic compounds ("VOCs") was utilized on the soil borings. The PID readings of the soil borings ranged as follows:

- B-1 range was up to 206 ppm⁵⁶
- B-2 range was up to 37 ppm
- B-3 range was up to 169 ppm
- B-4 range was up to 29 ppm

Soil samples from each boring were collected from the area with the highest PID reading and sent to a lab to be tested for TPH and BTEX.⁵⁷

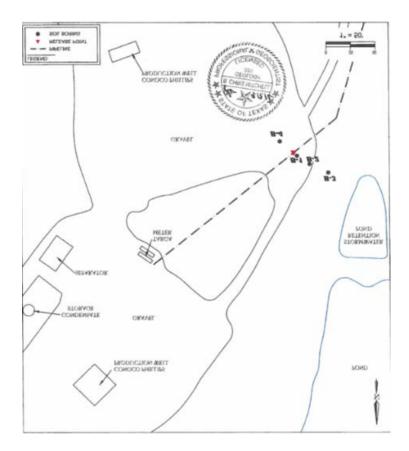
⁵⁴ The abbreviation "mg/l" refers to milligrams per liter.

⁵⁵ Complainant Ex. 10; Tr. Vol. 1 at 49:5 to 50:14.

⁵⁶ The abbreviation "ppm" refers to parts per million.

⁵⁷ Targa Ex. 2; Complainant Ex. 11; Burlington Ex. 23.4; Tr. Vol. 3 at 201:4 to 211:12.

In a *Limited Site Investigation* dated September 17, 2012 ("Targa Initial Report"), Mr. Mitchell provided an analysis and the lab results.⁵⁸ The scope of the report was to evaluate the presence of hydrocarbons in the on-site soil as a result of the Targa pipe release. He provides the following diagram of the area showing where the borings were advanced.⁵⁹



He discusses the lithology of the area. Generally, at the bottom depth of the soil borings there is solid competent limestone. The borings end at the competent limestone because it could not be penetrated by the borings. Right above the competent limestone is an approximately one-foot layer of weathered and fractured limestone. Typically, clay is encountered above the fractured limestone, the depth of which is based on the topography at the soil bearing. For example, B-3 is downgradient of B-1 and B-2, and only has approximately 1 foot of clay from surface and 1 foot of fractured limestone before the solid competent limestone is reached. B-2 is downgradient of B-1 and has approximately 5½ feet of clay from surface and then one foot of fractured limestone. B-1, which was advanced at the Pipeline Release Point, has approximately 10½ feet of clay before the 1 foot of fractured limestone.

The lab results range as follows:

⁵⁸ Targa Ex. 2; Complainant Ex. 11; Burlington Ex. 23.4.

⁵⁹ Targa Ex. 2, Appendix A, Figure 3 (Alterations such as cropping and scaling were used so that the graphic would better fit within the PFD).

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- TPH for B-1 through B-4 ranged from 76.4 mg/kg to 381 mg/kg
- Benzene for B-1 through B-4 ranged from ND to 13.3 µg/kg⁶⁰
- Toluene for B-1 through B-4 ranged from ND to 4,180 µg/kg
- Ethylbenzene for B-1 through B-4 was ND
- Xylenes for B-1 through B-4 ranged from 107 μg/kg to 35,300 μg/kg

In his opinion, the results did not exceed applicable protective concentration levels ("PCLs"). Mr. Mitchell concluded no additional investigation or remediation was warranted.61

Both the Complainant Initial Report and the Targa Initial Report were sent to the Commission. In a letter dated September 28, 2012 from Staff to Targa, and in response to the two reports, Staff requests Targa perform the additional investigative work to assess groundwater conditions, including the placement of permanent groundwater monitoring wells. 62 According to Staff, the objectives of the additional work are as follows:

- 1. Identify the extent of contamination of surface soils;
- 2. Identify the presence, if any, of hydrocarbon contamination of groundwater; and
- 3. Evaluate current conditions of the affected pond and provide a plan to remediate affected media and prevent further impacts to the pond.

Based on the Targa Initial Report, Staff concludes hydrocarbons are present in soils downgradient of the pipeline. Staff notes the hydrocarbon odors were detected in the soil borings and VOCs were detected by the PID. Staff states the TPH results exceeded applicable PCLs in all four borings. Based on the Complainant Initial Report, Staff concludes the pond continues to be impacted from hydrocarbons that may be attributable to the pipeline release. 63

g. November 6, 2012 et al. – Sampling Event 6: Targa initiates groundwater monitoring

Targa again retains Mr. Mitchell to perform another investigation. The dates of onsite activity include: November 6-7, 2012, December 12, 2012, February 12, 2013 and April 18, 2013. The on-site activity from December 12, 2012 through April 18, 2013 predominately consisted of taking groundwater samples from monitoring wells installed in November 2012.

On November 6-7, 2012, Targa installed eight additional soil borings (MW-5⁶⁴ through MW-8 and B-9 through B-12). Hydrocarbon odors were detected in MW-7, B-9. B-10 and B-11. PID ranged from below detection to 1,710 ppm. MW-5 through MW-8 were converted to permanent monitoring wells. One soil sample from each boring, taken

⁶⁰ The abbreviation "µg/kg" refers to micrograms per kilogram.

⁶¹ Targa Ex. 2: Complainant Ex. 11: Burlington Ex. 23.4.

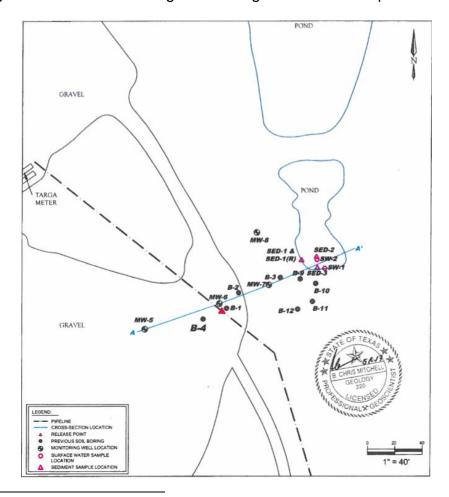
⁶² Complainant Ex. 12; Targa Ex. 3; Burlington Ex. 23.4.

⁶⁴ The "MW" refers to a boring that is ultimately converted to a groundwater monitoring well.

from the zone exhibiting the highest PID rating, olfactory and visual evidence of impairment was sent to a lab for testing. Additionally, one sample was taken from MW-6 at the estimated depth of the Targa pipeline adjacent to the Pipeline Release Point.

Three sediment samples were collected from the pond's shoreline downgradient from the Pipeline Release Point (SED-1 through SED-3). A confirmation sample was taken on December 12, 2012. Two surface water samples (SW-1 and SW-2) were collected from the pond downgradient of the pipeline. On December 12, 2012, groundwater samples were taken from MW-5 through MW-7. On April 18, 2013, a groundwater sample was taken from MW-8; there was insufficient recharge to sample on December 12.65

In an *Environmental Site Investigation* dated May 10, 2013 ("Targa Second Report"), Mr. Mitchell provided an analysis and the lab results.⁶⁶ The scope of the report was to further evaluate the presence of hydrocarbons in the soil, groundwater, sediment and/or surface water as a result of the Targa pipeline release. He provides the following diagram of the area showing where Targa has taken samples.⁶⁷



⁶⁵ Targa Ex. 5; Tr. Vol. 3 at 211:13 to 216:7.

⁶⁶ Targa Ex. 2; Complainant Ex. 11; Burlington Ex. 23.4.

⁶⁷ Targa Ex. 5, Figure 4 of Appendix A (Alterations such as cropping and scaling were used so that the graphic would better fit within the PFD).

The lithology is like the description in the Targa Initial Report. He concludes the competent limestone is the upper portion of the Goodland Limestone formation with a thickness of approximately 90 feet and is considered a confining unit to the upper groundwater bearing zone.

He discusses the hydrology of the area. He states the water table in shallow soils forms the initial groundwater-bearing unit ("GWBU"), to the top of the competent limestone, or Goodland Limestone formation. The Goodland Limestone formation is not typically associated with high yield water wells or the production of beneficial use groundwater. No major or minor aquifers are listed near the site by the Texas Water Development Board. Gauging events on February 12, 2013 were used to evaluate the estimated groundwater flow. Phase separated hydrocarbons ("PSH") were not detected during the gauging events. Based on the gauging events and the groundwater elevations associated with each of the monitoring wells, he estimates the groundwater flow direction as being to the north at an average hydraulic gradient of 0.0535 ft/ft.

The lab results for the soil samples range as follows:

- TPH for MW-5 through B-12 ranged from ND to 1,760 mg/kg
- Benzene for MW-5 through B-12 was ND
- Toluene for MW-5 through B-12 ranged from ND to 0.404 mg/kg
- Ethylbenzene for MW-5 through B-12 was ND
- Xylenes for MW-5 through B-12 ranged from ND to 5.86 mg/kg

The lab results for the groundwater samples range as follows:

- TPH for MW-5 through MW-8 was ND
- Benzene for MW-5 through MW-8 ranged from ND to 0.0043 mg/l
- Toluene for MW-5 through MW-8 ranged from ND to 0.0051 mg/l
- Ethylbenzene for MW-5 through MW-8 was ND
- Xylenes for MW-5 through MW-8 ranged from ND to 0.0238 mg/l

The lab results for the sediment samples range as follows:

- TPH for SED-1 through SED-3 ranged from ND to 119 mg/kg
- Benzene for SED-1 through SED-3 was ND
- Toluene for SED-1 through SED-3 ranged from ND to 0.007 mg/kg
- Ethylbenzene for SED-1 through SED-3 was ND
- Xylenes for SED-1 through SED-3 ranged from ND to 11.7 mg/kg
- Xylenes for SED-1R (resampling of SED-1 due to the opinion that the 11.7 mg/kg result was inconsistent with other data points) were 0.0624 mg/kg

The lab results for the surface water samples range as follows:

- TPH for SW-1 and SW-2 ranged from ND to 1.5 mg/l
- Benzene for SW-1 and SW-2 was ND
- Toluene for SW-1 and SW-2 was ND
- Ethylbenzene for SW-1 and SW-2 was ND
- Xylenes for SW-1 and SW-2 ranged from ND to 0.0082 mg/l

He concludes that based on the direction of groundwater flow and the distribution of concentrations in soil, groundwater and sediment, the petroleum hydrocarbon constituents identified in the pond did not originate from the Targa natural gas gathering pipeline. He further opines that no additional investigation or response actions are warranted.⁶⁸

h. December 17, 2012 – Sampling Event 7: Complainant expert's site investigation

On December 17, 2012, Mr. Allen returned to the Pond Site for additional sampling. He and Mr. Smith heard Targa had sampling results of ND (from Sampling Event 7 starting in November 2012). The stake identifying the Pond Discovery Location was visible. He collected surface water (MSP-2 SW), soil (MSP-2 Soil) and sediment (MSP-2 Sed) samples near the stake, which were sent to a lab for testing.⁶⁹

In a letter dated January 14, 2013 regarding *Additional assessment of Soil, Sediment and Surface Water* (the "Complainant Second Report"), Mr. Allen provides lab results and an analysis from his December 17, 2012 Pond Site visit. The lab results for the soil sample are as follows:

- TPH for MSP-2 Soil was 3,731.0 mg/kg
- Benzene for MSP-2 Soil was 1.540 mg/kg
- Toluene for MSP-2 Soil was 23.200 mg/kg
- Ethylbenzene for MSP-2 Soil was 4.410 mg/kg
- Xylenes for MSP-2 Soil were 80.300 mg/kg

The lab results for the sediment samples are as follows:

- TPH for MSP-2 Sed was 683.0 mg/kg
- Benzene for MSP-2 Sed was 0.0358 mg/kg
- Toluene for MSP-2 Sed was ND
- Ethylbenzene for MSP-2 Sed was 0.0386 mg/kg
- Xylenes for MSP-2 Sed were 1.055 mg/kg

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⁶⁸ Targa Ex. 5.

⁶⁹ Complainant Ex. 13; Tr. Vol. 1 at 144:19 to 145:16.

The lab results for the surface water sample are as follows:

- TPH for MSP-2 SW was ND
- Benzene for MSP-2 SW was ND
- Toluene for MSP-2 SW was ND
- Ethylbenzene for MSP-2 SW was ND
- Xylenes for MSP-2 SW were 0.0268 mg/l

Mr. Allen concludes that as of December 17, 2012, the pond is contaminated with petroleum hydrocarbon constituents attributed to the release from Targa's pipeline. He relies on the soil and sediment sample results. He opines contamination is entering the pond from the soil beneath the pond, most probably via fractures, seams or channels in the underlying limestone. He states the decrease in contaminant concentrations in the surface water is attributed to the continuing drought conditions and the fact that released hydrocarbons are held in unsaturated soil.⁷⁰

i. December 17, 2012 – Sampling Event 8: Targa groundwater monitoring sampling event

On September 5, 2013, Mr. Mitchell, on behalf of Targa, visited the site to collect surface water samples and groundwater samples from MW-5 through MW-8. He was unable to collect surface water samples for lack of water; Complainant had recently drained the pond. The groundwater samples were sent to a lab for testing.⁷¹

In a report dated October 31, 2013 (the "Targa Third Report"), he provides the lab results. The lab results for the groundwater samples are as follows:

- Benzene for MW-7 was 22.9 μg/l
- Xylenes for MW-8 were 35.4 μg/l
- TPH for MW-8 was 1.0 mg/l

The remaining sampling results for TPH and BTEX were ND. Mr. Mitchell concludes Targa should request regulatory closure and that the monitoring wells should be plugged and abandoned, relying on his opinion that no results were above PCL limits. To later dated November 11, 2013 from Targa to Staff, Targa submits the Targa Third Report and requests Staff approve a "No Further Action" status for the complaint against Targa initiated by Complainant.

In a letter dated November 22, 2013 from Staff to Targa, Staff requests Targa excavate the repaired section of the pipeline to investigate whether contamination remains at the point of release.⁷⁴ In a letter dated December 12, 2013 from Targa to Staff, Targa informs Staff it does not intend to excavate the area around the Pipeline Release

⁷³ *Id*.

⁷⁰ Complainant Ex. 13; Tr. Vol. 1 at 50:20 to 54:11.

⁷¹ Targa Ex. 6.

⁷² *Id*.

⁷⁴ Complainant Ex. 18; Burlington Ex. 23.7; Tr. Vol. 1 at 56:20 to 58:2.

Point.⁷⁵ On May 28, 2014, Targa performs a pressure test on the pipeline; the results show no current leak exists.⁷⁶ In a letter dated June 23, 2014, Targa notifies Staff of the pressure test.⁷⁷

In a letter dated August 12, 2014 from Staff to Targa, based on observations and sampling events indicating the presence of hydrocarbon contamination, Staff requests Targa assess and remediate the hydrocarbons at the Pond Site, which may include the removal of affected pond water, sediment and soil. In the letter it states that on September 5, 2013, a Commission inspector noted strong hydrocarbon odors and the presence of groundwater mixed with possible condensate at the Pond Discovery Location; the area around the Pond Discovery Location had been recently drained. The letter notes there were no odors or visible indications of hydrocarbon contamination on a July 17, 2014 inspection, but explains the pond was full of rainwater obscuring the Pond Discovery Location.⁷⁸ In a letter dated August 27, 2014 from Targa to Staff, Targa states it is not the source of the pond contamination and it is not going to remediate.⁷⁹

j. November 11, 12, 21 and 24, 2014 – Sampling Event 9: Staff trench and sampling event

In response to Targa's decision not to remediate, Staff used state funds to conduct its own investigation regarding the source of the contamination in the pond. On November 11 and 12, 2014, Staff excavated several trenches, beginning from the pond toward locations upslope and where Targa previously installed borings and wells. Water with a hydrocarbon sheen was observed in the excavation in the pond. Staff observed water and a light hydrocarbon liquid accumulating in one of the trenches near MW-7. Targa was informed and came and took pictures. Staff collected water and soil samples.⁸⁰

On November 21, 2014, Staff dewaters one of the trenches. After dewatering, Staff collected a sample of phase-separated hydrocarbon liquid seeping from the western wall of the trench—the western wall is the Targa pipeline side of the excavation. Targa was present for part of this activity. ⁸¹ On November 24, Staff took a sample from one of the Burlington condensate storage tanks from the tank battery for the Fox 7 and 12H. ⁸² Staff was not able to get a sample from the Targa gathering line, presumably due to an insufficient volume of liquids in the gas gathering line. Staff sent the hydrocarbon sample from the pond and the condensate sample from the storage tank to a lab for comparison testing. Staff obtained chromatographs comparing the two samples; they look similar. To demonstrate the similarity, an excerpt follows. ⁸³

⁷⁵ Burlington Ex. 23.7.

⁷⁶ Targa Ex. 7; Burlington Ex. 23.7.

⁷⁷ Targa Ex. 7.

⁷⁸ Complainant Ex. 19; Burlington Ex. 23.7; Tr. Vol. 1 at 58:3 to 59:20.

⁷⁹ Targa Ex. 8; Burlington Ex. 23.8.

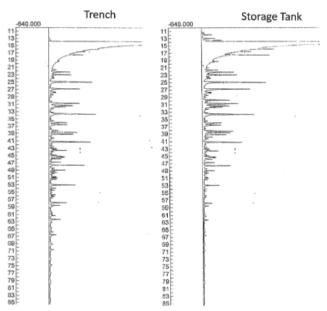
⁸⁰ Targa Ex. 10, 11; Tr. Vol. 1 at 59:21 to 60:18; Tr. Vol. 1 at 60:23 to 64:13, 147:18 to 148:11; Tr. Vol. 2 at 113:10 to 116:2

⁸¹ Complainant Ex. 26; Targa Ex. 11; Burlington Ex. 23.11.

⁸² Complainant Ex. 23; Targa Ex. 12; Burlington Ex. 23.12.

⁸³ Id. (Alterations such as cropping and scaling were used so that the graphic would better fit within the PFD).

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k. November 21, 2014 – Sampling Event 10: Targa groundwater monitoring event

On November 21, 2014, the same day Staff obtains the condensate sample from the Burlington storage tank, Targa takes groundwater samples. PSH was not observed. In a *Groundwater Monitoring Report* by Mr. Mitchell dated May 5, 2015, the lab results were provided. The lab results for the groundwater samples are as follows:

- Benzene for MW-7 was 6.9 μg/l
- Ethylbenzene for MW-7 was 1.1 µg/l
- Xylenes for MW-7 were 16.0 µg/l
- Benzene for MW-8 was 4.4 μg/l
- Ethylbenzene for MW-8 was 1.4 μg/l
- Xylenes for MW-8 were 12.0 μg/l

The remaining sampling results for TPH and BTEX were ND. Mr. Mitchell again concludes Targa should request regulatory closure.⁸⁴

In a letter dated January 16, 2015 addressed to the Commission's Hearings Division and copied to Targa and Complainant, Staff provides the chromatographs and states it is prepared to refer this matter to enforcement to obtain an order requiring Targa to remediate the Pond Site. ⁸⁵ In a response letter dated January 29, 2015, Targa states it is not the source of contamination in the pond and Burlington is more likely the source. ⁸⁶

⁸⁵ Complainant Ex. 23; Targa Ex. 12; Burlington Ex. 23.12.

⁸⁴ Targa Ex. 16.

⁸⁶ Targa Ex. 13.

I. August 2016 – Sampling Event 11: Targa excavation event

In August 2016, Targa conducted excavation activities near the Pipeline Release Point and the repaired pipeline; Targa excavated along the pipeline horizontally 5 feet on each side of the Pipeline Release Point and vertically to the competent limestone. PSH was not observed. Staff took two sample of the groundwater that had recharged into the excavation for TPH and BTEX. All were ND.⁸⁷

m. September 28, 2016 – Sampling Event 12: Complainant trenching and sampling event

On September 28, 2016, Mr. Allen, on behalf of Complainant, returned to the Pond Site to conduct trenching to further delineate the contamination and to conduct groundwater sampling. The trenching occurred southwest of MW-7 and MW-8 and northeast of the Targa excavation and advanced approximately 45 feet. Three soil grab samples (EX-1" through EX-3) were collected, as well as a grab sample of the groundwater accumulating in the trench (EXW). He also took groundwater samples from MW-5, MW-7 and MW-8. The lab results are as follows:

- TPH for EXW was 10.8 mg/l
- Benzene for EXW was 0.00408 mg/l
- Ethylbenzene for EXW was 0.00759 mg/l
- Xylenes for EXW were 0.0916 mg/l
- TPH for EX-1 through EX-3 ranged from 125 to 258 mg/kg
- Benzene for EX-1 through EX-3 ranged from 0.00127 to 0.0113 mg/kg
- Toluene for EX-1 through EX-3 ranged from 0.00202 to 0.00488 mg/kg
- Ethylbenzene for EX-1 through EX-3 ranged from 0.0212 to 0.0746 mg/kg
- Xylenes for EX-1 through EX-3 ranged from 0.202 to 2.34 mg/kg

In a report dated January 4, 2017, Mr. Allen concludes additional assessment of delineation of the pond contamination should be performed and affected soil should be remediated. Mr. Allen rejects Mr. Mitchell's assertion that groundwater flow is north. He opines that contaminant flow in this stratified, non-isotropic aquifer is unknown and that shallow groundwater typically follows the topographic gradient, which is east-northeast at the contaminated area between Targa's pipeline and the pond.⁸⁸

Complainant still regularly fishes in the pond and has noticed no sign of damage to the fish or fish population. He also did not mention any damage to vegetation. He testified the grass is green, the vegetation looks good and he and his son still catch fish. ⁸⁹ They do not eat the fish. ⁹⁰ Below are graphics showing the proximity of the sampling points in the area.

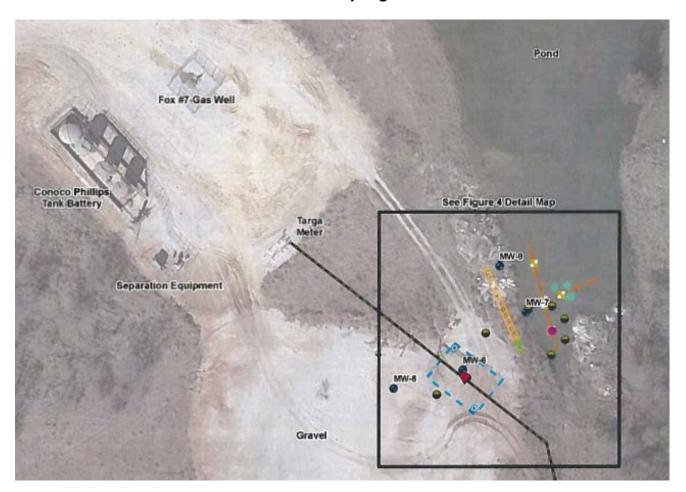
⁸⁷ Targa Ex. 19 at 5, 20; Tr. Vol. 3 at 71:14 to 73:22.

⁸⁸ Complainant Ex. 29; Tr. Vol. 1 at 64:14 to 65:21, 154:3 to 155:19.

⁸⁹ Tr. Vol. 1 at 120:12 to 121:12, 130:24 to 131:13.

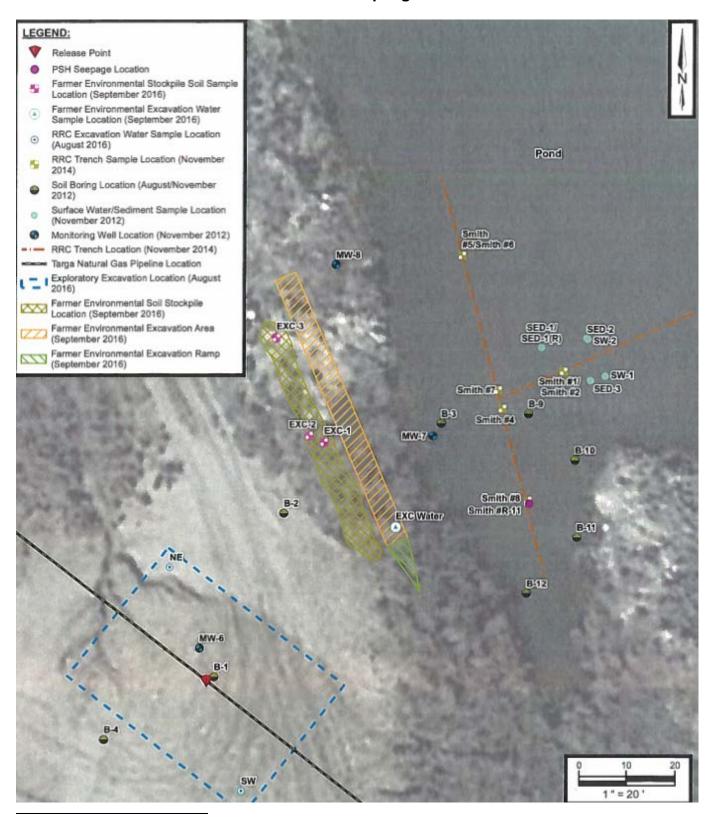
⁹⁰ Tr. Vol. 1 at 136:3 to 136:9.

Wide View of Sampling Area 91



⁹¹ Targa Ex. 19, Attachment A, Figure 3 (excerpt) (Alterations such as cropping and scaling were used so that the graphic would better fit within the PFD).

Zoomed in View of Sampling Area 92



⁹² Targa Ex. 30 (excerpt) (Alterations such as cropping and scaling were used so that the graphic would better fit within the PFD).

B. Summary of Complainant's Position

Complainant asserts neither Targa nor Burlington has delineated the contamination discovered in Complainant's pond as required by Commission rules. There was and remains an environmental condition requiring a response action, such as further assessment and remediation. Complainant argues Targa and/or Burlington should have to fund the necessary response actions. ⁹³

Complainant's expert, Mr. Allen, believes the source of contamination is from the Targa gathering line and from the pipeline leak.⁹⁴ Mr. Allen characterizes the comparison tests performed by Commission staff of a sample from a Burlington tank battery and from the area of contamination as practically identical.⁹⁵

He opined natural gas could have leaked out of the line through the hole and condensed outside the line to form a liquid. He thinks it is more likely there was condensate in the line. He testified it is possible for condensate to get into a gas line and accumulate in a low spot in the line. This moisture in the line can cause corrosion. He notes in the incident report by Targa, the stated reason for the leak is corrosion. He

Regarding migration, he testified that looking at a topographic map from the Fox 12 well pad to the center of the pond, migration is from upgradient to downgradient. The pond is downgradient from where the pipeline leak occurred. Shallow groundwater typically follows the topographic gradient. In this case it would be east-northeast, and the Pond Discovery Location is northeast of the Pipeline Leak Location. He stated because the hydrocarbons were under limestone, they were coming from subsoil and not being dumped on the surface and the hydrocarbons had to migrate from somewhere subsurface. He testified underground releases will migrate along the path of least resistance. He testified in this case, there is weathered limestone and fractured limestone. The water is going to flow in a fracture or it's going to flow in an area of higher permeability and it's not going to flow in areas that are occupied by flags of limestone.

He discussed his opinion about the migration path of the hydrocarbons found in the Smith pond. He thinks it most likely the hydrocarbons traveled through a layer of weathered limestone. He said there is a layer of soil, then weathered limestone and then more solid non-degraded limestone. The weathered limestone has fissures that act as a conduit for the hydrocarbons to migrate. He surmises the hydrocarbons migrate through the fissures downgradient. The water table fluctuates with rain and seasonal events. When the water level rises, the water picks up the hydrocarbons and moves them downgradient. Then, he testified, also it is probably going to tend to migrate in fractures in weathered zones of the limestone, because the limestone is not uniform. The fractures

⁹³ Complainant Mike Smith's Initial Post-Hearing Statement filed July 31, 2017.

⁹⁴ Tr. Vol. 1 at 146:16 to 146:23.

⁹⁵ Tr. Vol. 1 at 147:18 to 148:20.

⁹⁶ Tr. Vol. 1 at 150:11 to 150:19.

⁹⁷ Tr. Vol. 1 at 151:14 to 153:8; Complainant Ex. 3.

⁹⁸ Tr. Vol. 1 at 156:6 to 156:20.

⁹⁹ Tr. Vol. 1 at 155:20 to 156:5.

¹⁰⁰ Tr. Vol. 1 at 199:10 to 200:10.

act as transport mechanisms for that contamination. The pond is downgradient from the tank battery and the pipeline.¹⁰¹

Mr. Allen testified he believed there is evidence of a link between Targa and the contamination in the pond. The locations of soil borings that were advanced August 21, 2012, the first assessment performed by Targa, encountered refusal on the rock, did not reach groundwater and all detected concentrations of petroleum hydrocarbons. This indicates contamination. 102

He testified when he performed his trenching activities, he found elevated concentrations of hydrocarbons with PID, but as he moved toward the south those concentrations decreased. He excavated MW-7 north toward MW-8 and found consistent elevated PID readings in the excavation from between MW-7 and MW-8.¹⁰³

He testified the location of the highest concentrations of a release depends on the time of the release versus the time of the assessment. It is not always the case that the concentrations are highest at their release point because of contaminant fate and transport over time. Concentrations are going to degrade faster near to the source than they are in whatever direction the substance is migrating.¹⁰⁴

He observed the fractures in the limestone and some areas are more highly weathered than others, but overall the limestone is fractured.¹⁰⁵

He testified the only known potential sources of the contamination at the location are the existing wells, the battery and the pipeline. He testified the source of the contamination could have possibly come from the well or tank battery, but he thought that was less likely. He noted there had been a leak from one of Burlington's storage tanks approximately 250 to 300 feet from the pond. The Burlington tank battery is roughly twice the distance from the pipeline to the pond. He contamination at the location are the existing wells, the source of the contamination could have possibly come from the well or tank battery, but he thought that was less likely.

C. Summary of Staff's Position

Staff asserts Targa should be responsible for further delineation of the contamination and if necessary, remediation. Staff relies on the following:

- The proximity of the pipeline leak to the pond;
- Targa replaced 60 feet of pipeline around the Pipeline Leak Location;
- The Pipeline Leak Location is upgradient of the contamination in the pond;

¹⁰¹ Tr. Vol. 2 at 35:25 to 37:2.

¹⁰² Tr. Vol. 1 at 185:14 to 191:12.

¹⁰³ Tr. Vol. 1 at 157:6 to 160:18.

¹⁰⁴ Tr. Vol. 2 at 50:11 to 51:2.

¹⁰⁵ Tr. Vol. 2 at 52:4 to 52:10.

¹⁰⁶ Tr. Vol. 1 at 209:18 to 209:23.

¹⁰⁷ Tr. Vol. 1 at 153:17 to 153:22.

¹⁰⁸ Tr. Vol. 2 at 23:10 to 24:2.

- There was evidence of hydrocarbons in the vicinity of the Pipeline Leak Location;
- The area of confirmed hydrocarbon impact includes the pipeline where Targa had a confirmed leak, the area around the Pond Discovery Location and in between;
- A migration pathway of fractured limestone exists between the area of replaced pipe and the contamination in Complainant's pond;
- Targa's gas pipeline can and does include liquids;
- The length of time the pipeline leak persisted is unknown; and
- The chromatographs of fluid samples show a common source of the hydrocarbons in the pond and the Burlington lease production.

Staff asserts the evidence shows the leak from the Targa pipeline caused or contributed to the pond contamination. 109

Staff alleges corrosion was a common problem on the Fox Lease. 110 There are other instances of Targa leaks noticed by Burlington, also due to internal corrosion. 111

Staff disagrees with Targa's assertion that any hydrocarbons from the pipeline release would have migrated north, and not in the northeasterly direction toward the pond. Staff asserts gravity caused the fluids to travel through the fractures to the downgradient pond. There was approximately 175 pounds of pressure in the pipe, it was eight-feet deep, near the fractures, it had not been pressure tested since construction in 2005 and it was likely that fluids collected in that low section of the pipeline over time. 113

Staff's witness was Peter Pope. Mr. Pope is the manager of the Site Remediation Section ("Site Remediation") of the Oil and Gas Division. He has worked at the Commission since 2001.¹¹⁴

According to Mr. Pope, the Smith Property site is an operator cleanup site. He stated it is unusual in that some state-managed funds have been used to do some assessment. In a majority of operator cleanup sites, the operator agrees as to what needs to be done and the project moves forward. In this case, an agreement was not reached. Most of the communications Site Remediation has had regarding the Smith Property cleanup is with Targa. Site Remediation asked Targa to remediate the site. Targa refused to do it and requested a hearing. 115

Mr. Pope evaluated the initial assessment done by Targa. The assessment showed the occurrence of hydrocarbons in soil beneath the Targa pipeline where Targa

¹⁰⁹ Railroad Commission Staff's Closing Statement filed August 15, 2017; Tr. Vol. 2 at 116:3 to 116:17; Tr. Vol. 2 at 117:11 to 117:16.

¹¹⁰ Railroad Commission Staff's Reply to Closing Statements filed September 5, 2017; Vol 3 at 148:11 to 149:22.

¹¹¹ Burlington Ex. 18, 19; see also Complainant Ex. 3.

¹¹² Tr. Vol. 2 at 166:19 to 166:21; Railroad Commission Staff's Reply to Closing Statements filed September 5, 2017.

¹¹³ Tr. Vol. 3 at 169:3 to 169:14, 153:7 to 153:10, 147:14 to 148:10, 140:22 to 140:25, 147:14 to 148:10.

¹¹⁴ Tr. Vol. 2 at 101:8 to 102:13.

¹¹⁵ Tr. Vol. 2 at 102:14 to 104:3.

had identified the release location and downslope from the pipeline. Targa also identified hydrocarbons in groundwater downslope from the pipeline. At the time the monitor wells were installed, after the first sampling event, hydrocarbons were detected in MW-7, which is downslope from the pipeline. Also, there was a detection of toluene in MW-6.¹¹⁶

Mr. Pope disagrees with Targa's reliance on groundwater flow to explain the distribution of hydrocarbons in the ground. The first phase of the investigation, the soil in and around the soil borings was dry. There was not groundwater. Groundwater was deeper. The soil boring identified fractured limestone. In his opinion, fractures mean migration pathways. Regarding the pathway from the source—the source being the pipeline leak—the hydrocarbon liquids will migrate through the vadose zone before reaching groundwater. He opined there are other things that can influence a distribution besides just groundwater flow.¹¹⁷

In his opinion, it is more likely than not the pipeline is the source of contamination in the pond. There was a known leak in a pipeline that is located within the footprint of hydrocarbon impacts. There are product samples from the pond trench and from a tank at the production facility that show it is condensate coming from the same source.¹¹⁸

From Staff's point of view, there are two pieces of information that need to be further evaluated before regulatory closure. Staff maintains further delineation of the impacted hydrocarbon footprint needs to be performed since it is not yet defined. Additionally, there is also evidence of hydrocarbon liquids in the ground near the pond and commingled with groundwater. Those need to be addressed. Those conditions either need to be remediated or controlled. Based on what is discovered from the delineation and assessment, a determination can be made as to whether there needs to be further remediation or whether the contamination can be controlled. Regarding delineation, he testified a clean well or data point is when the groundwater is not affected and the soils are not affected; that determines a delineation point. 121

The reason Staff did not continue trenching to determine the source and delineate the hydrocarbons is because the hydrocarbon fingerprinting analysis eliminated the possibility that there was some other kind of waste dumped into the pond and allowed Staff to focus on the production. With that information, Staff decided to pursue the operator. In this case, Staff chose to pursue Targa. 122

D. Summary of Targa's Position

Targa maintains further remediation is not necessary and if any additional delineation or remediation is necessary, then Targa believes it should be performed either

¹¹⁶ Tr. Vol. 2 at 108:1 to 113:8.

¹¹⁷ Tr. Vol. 2 at 119:16 to 121:4.

¹¹⁸ Tr. Vol. 2 at 122:3 to 122:25, 211:21 to 211:23.

¹¹⁹ Tr. Vol. 2 at 123:6 to 123:22.

¹²⁰ Tr. Vol. 2 at 123:24 to 124:12.

¹²¹ Tr. Vol. 2 at 129:6 to 132:24.

¹²² Tr. Vol. 2 at 191:16 to 192:7.

by Burlington or by the State, using state funds. Targa asserts proof of a causal link between Targa's pipeline release and the contamination in the pond is required for Targa to be held responsible. Targa maintains the required causal link was not proven. 123

Targa notes all facilities prior to the Targa sales meter belong to Burlington. If the separator is operating properly, all condensate is removed before it enters Targa's portion of the pipeline. Targa further notes it is in Burlington's best interest to remove all condensate, because Burlington retains 100% of all condensate separated and piped to the condensate storage tank. Mr. Dean, Burlington's witness, is unware of any problems with the separator. ¹²⁴

When Targa replaced the portion of the pipeline with the hole, there was no apparent hydrocarbon contamination near the pipeline leak. 125

Targa maintains the groundwater flows north, such that contamination would not travel northeasterly in the direction of the Pond Discovery Location. Targa asserts sampling results from around the Pipeline Release Point are predominately ND and below applicable PCLs. Even though MW-7 did exceed PCLs in the past, it has attenuated to ND over time. ¹²⁶

Targa claims in a release, the highest concentration of hydrocarbons will remain near the source and decrease as you move away from the source. Because the highest concentrations were near the Pond Discovery Location and there were low concentrations near the Pipeline Leak Location, the hole in the pipeline could not have caused the contamination in the pond. ¹²⁷

Targa's first witness was Mr. David McQuade. He is employed by Targa as the Senior Director of Environmental Health and Safety. He is familiar with a release from Targa's pipeline on Mr. Smith's property in 2011. 129

He testified there could be some hydrocarbon condensate that does fall out into the line after separation when pressure drops and/or temperatures cool sufficiently. He testified he would not expect much of that to occur on the Smith Property, only a few hundred yards from the separator. 130

Targa's next witness was Mike Burris. Mr. Burris is the Field Operation Supervisor for the North Texas area for Targa, which includes the Smith Property. ¹³¹ Mr. Burris has been working in the oil and gas industry for 43 years and around pipelines for 16 of those

¹²³ Targa's Closing Statement filed July 31, 2017.

¹²⁴ *ld*

¹²⁵ Id

¹²⁶ Id.; Targa's Reply in Support of Closing Statement filed September 15, 2017.

¹²⁷ Id

¹²⁸ Tr. Vol. 3 at 29:22 to 31:6; Targa Ex. 22.

¹²⁹ Tr. Vol. 3 at 32:16 to 32:24.

¹³⁰ Tr. Vol. 3 at 42:2 to 43:4.

¹³¹ Tr. Vol. 3 at 121:6 to 121:22.

years.¹³² He discussed his involvement with the Smith property. He was present when the pipeline leak was discovered. He stated during the excavation the soil did not have any wet moisture or any accumulation of any liquid. The one hole is the only one he found. He decided to put in about 60 feet of pipe, so he excavated out far enough on both ends past 60 feet to have room for the welders to work. He did not see any evidence of any liquids that were dripping or flowing out of the hole in the pipe and no indication that soils that had been impacted by condensate around the leak or below the leak. Targa dug eight feet to the pipeline and continued to dig a couple of feet below it. Water was recharging in on the west bank of the excavation trench. The water did not appear to be impacted by condensate.¹³³

Mr. Burris acknowledged once he found the leak, he felt it would be the source of what was in the pond. In the context of addressing the hydrocarbons found at the pond, he told Burlington he found the leak on Targa's pipeline. 134

Targa's next witness was Mr. Chris Mitchell. 135 He is a geologist and does environmental consulting. He is a state-licensed geoscientist and has been working on remediation of property damage from spills and determining the source of contamination for approximately 21 years. 136 He was retained by Targa in this case to provide investigation and testing. The initial scope was evaluating the presence around the Targa pipeline, and then evaluating if that pipeline release location was the potential source of the impact to Mr. Smith that identified it in his pond. It is his opinion Targa is not the source of the hydrocarbon contamination found in Mr. Smith's pond and the trench dug by Staff. 137

In a summary report dated November 7, 2016, he concludes Targa did not contribute to the hydrocarbons observed at Complainant's pond. He opined the highest concentration of hydrocarbons was at the surface water impoundment. There were only trace levels of hydrocarbons detected around the Pipeline Release Point. He testified groundwater at the site flows generally in a northerly direction. His findings are that no additional assessments are warranted, and lab result concentrations and the direction of groundwater flow show Targa is not the source of the pond contamination.

He opines any hydrocarbon contamination from the Pipeline Release Point would migrate north on top of the groundwater. For example, because MW-6 is located near the Pipeline Release Point and MW-7 is located northeast of MW-6, any contamination detected at MW-7 would not be from the Targa pipeline leak because groundwater does not flow in an easterly direction toward MW-7. Consequently, he opines the benzene detected in samples from MW-7 came from a source other than the Targa pipeline.¹³⁸

¹³² Tr. Vol. 3 at 122:5 to 122:17.

¹³³ Tr. Vol. 3 at 138:16 to 141:13.

¹³⁴ Tr. Vol. 3 at 194:7 to 194:24.

¹³⁵ Tr. Vol. 3 at 196:13 to 196:20.

¹³⁶ Tr. Vol. 3 at 197:1 to 198:9; Targa Ex. 21.

¹³⁷ Tr. Vol. 3 at 198:10 to 198:23.

¹³⁸ Tr. Vol. 3 at 225:16 to 228:14.

He testified it is reasonable to assume somebody dumped field condensate in the pond. However, he acknowledges the contamination in the pond has never been delineated. He noted he has seen pictures of workover rigs at Burlington facilities in the area, which is an indication work was performed on a production well. 140

He agrees there are liquids entrained in the gas stream in the pipe.¹⁴¹ He testified the liquid found in the pond could have come from the Targa pipe even though it is a gas pipeline. He said it is likely the pipeline accumulated liquids over the years.¹⁴² If there had been accumulated liquids in the pipe and the leak had occurred, those accumulated liquids could have migrated beyond the source of the leak. He acknowledged if accumulated liquids came out of the pipe months ago they might not be around the location of the leak because they would have migrated towards the path of least resistance.¹⁴³

In his experience, the highest concentration will be at the leak site and then disperse outward from migration. In every case he has worked on, the release site, the leak site, always had the highest concentrations and then it moves out from there. 144

E. Summary of Burlington's Position

Burlington asserts there is no evidence Burlington caused the pond contamination and it is not responsible to investigate or remediate contamination it did not cause. Burlington claims it is not a "responsible person" under the applicable statutes and rules. Burlington maintains it has had no releases on the Smith Property from any of its operation and there is no evidence in the record Burlington caused the pond contamination.¹⁴⁵

Burlington's first witness was William "Chad" Dean. He is employed by Burlington as the project supervisor for the Barnett Shale. He is responsible for any maintenance, upkeep and construction of any of the assets in and around the leases that Burlington operates in the Barnett Shale. The Burlington 380-acre Fox Lease on the Smith Property falls within his responsibility. He has been employed by Burlington for 17 years. He was the production foreman in this area from 2007 to 2011, so he was responsible for this asset as the production foreman at the time of the discovery of contamination in Complainant's pond. He has been employed by Burlington for the discovery of contamination in Complainant's pond.

He described the automated monitoring equipment Burlington uses. Burlington has installed electronic automated systems such that personnel can monitor a well's

¹³⁹ Tr. Vol. 3 at 268:24 to 269:17.

¹⁴⁰ Tr. Vol. 3 at 269:18 to 273:3.

¹⁴¹ Tr. Vol. 3 at 281:18 to 281:22.

¹⁴² Tr. Vol. 3 at 169:3 to 169:14; 174:2 to 174:24.

¹⁴³ Tr. Vol. 3 at 174:2 to 174:24.

¹⁴⁴ Tr. Vol. 3 at 188:5 to 189:2.

¹⁴⁵ ConocoPhillips Company and Burlington Resources Oil & Gas Company LP's Closing Statement filed July 31, 2017.

¹⁴⁶ Tr. Vol. 4 at 6:11 to 6:17.

¹⁴⁷ Tr. Vol. 4 at 7:4 to 9:25.

¹⁴⁸ Tr. Vol. 4 at 65:16 to 66:2.

production and a well's trend remotely from a computer. If there is something Burlington would monitor on location, Burlington has installed devices necessary to monitor it with an internet connection. Burlington also has the ability through that process to shut-in a well remotely if a failure is detected.¹⁴⁹

On October 8, 2011, a Burlington representative received a call from Complainant at approximately 3:50 p.m. There were no onsite operations at that time. Burlington was monitoring the Fox Lease offsite. Burlington monitors the Fox Lease remotely, including the following operational parameters: both surface and production casing pressures, tubing pressures, separator pressure and temperature, production volumes through Burlington's meter, flow rate, pressure differential across the orifice valve and the temperature of the gas. Regarding production tanks, Burlington can monitor remotely a top level and an interface level—the level of interface of condensate on top and then water or basic sediment and waste at the bottom. After reviewing the Fox Lease remote monitoring data, the Burlington representative monitoring the Fox Lease determined Burlington did not have any issues that could cause the contamination in the pond. The determination was made the same day the contamination was discovered, October 8, 2011.¹⁵⁰

On Monday, October 10, Mr. Dean did go to the location. He physically examined Burlington's operating equipment to make sure that it was all functioning and intact. He concluded there was no indication of a Burlington spill or release that could have contributed to what was found at the Pond Site.¹⁵¹

Mr. Dean testified if a spill is on a Burlington lease and the cause is unknown, if it is on or near a Burlington well pad, Burlington will generally rectify the matter. In his experience, there have been instances in the past where, for example, sometimes unknown outside parties will dispose or spill waste on a Burlington location, and Burlington rectifies it. It is Burlington's procedure that if there are spills on or near its pad sites, Burlington cleans them up. If the cause of a spill is unknown, Burlington would still assert it is not regulatorily responsible for it. 152 He testified the pond contamination is less than one-hundred feet from Burlington's well pad. 153

Mr. Dean has taken samples from gas streams at meters before, for quality assurance purposes, and even with fully functioning separators it is a common experience to observe liquids that have dropped out of the gas stream. He testified he has first-hand knowledge and experience that, with the high British thermal unit ("Btu") content of this gas, there will be a dropout of liquids naturally within the pipeline between any point. In a gathering system or a flowline, there will be dropout of liquids. Regarding this gas

¹⁴⁹ Tr. Vol. 4 at 54:7 to 55:5.

¹⁵⁰ Tr. Vol. 4 at 105:20 to 108:13.

¹⁵¹ Tr. Vol. 4 at 122:3 to 122:19.

¹⁵² Tr. Vol. 4 at 127:18 to 128:22.

¹⁵³ Tr. Vol. 4 at 129:9 to 129:20.

¹⁵⁴ Tr. Vol. 4 at 32:18 to 33:11.

content, it has a 1300 Btu gas content on average. At the Fox Lease there is no dehydration, no compression and no heat treatment.¹⁵⁵

He testified Burlington sometimes encounters tanks that have been operational for a while, but which do develop leaks. To protect the surface and subsurface from leaks, Burlington installs tank berms around its tanks. In this case the tank berm is manufactured with metal walls, not earthen dikes or earthen berms. It is a metal berm sitting directly on top of the surface. And then subsequently there is a liner underneath the production tanks that is tied into the walls of the berm. He provided documentation from the manufacturer of the berm that is in place at the Fox 7 and 12H. He testified the liner at the Fox 7 and 12H has never failed. 156

Talking specifically about releases of fluid prior to October 2011 on the Fox Lease, Mr. Dean is not aware of any incident that Burlington had that required a report to be made to a public agency. 157

Burlington provides access to the Fox Lease to its transportation service companies. Burlington allows them to access the property through the lease entrance just south of the battery. It is behind a gate that is locked, and Burlington gives the transportation company the access code to it. They do not come to a location unless Burlington notifies them they are needed.¹⁵⁸

Burlington's expert witness was Deborah "Debbie" Moore. She attended Texas A&M University, where she received a bachelor's degree in environmental design. Then she got her master's degree at Tulane University in environmental engineering. She offers environmental, including remediation, consulting services. She has experience assisting Texas oil and gas producers in assessing, delineating and remediating releases from oil and gas wells or facilities.

Her primary scope has been to determine whether any Burlington facility or operation was contributing to the hydrocarbons at the pond. In addition to reviewing all the documentation provided by all the parties of litigation, she reviewed aerial imagery over time since Burlington's ownership of the facilities and development of that area; and did online queries for regulatory documents that would have given her an indication there was an issue. She reviewed internal documentation from Burlington about any releases. Mr. Dean showed her the facilities and explained the automation and what they do, which she opines is above and beyond regulatory requirements for the prevention of these type of events. In addition to that, she confirmed information received from other parties as being accurate. The province of the data she reviewed indicates Burlington's

¹⁵⁵ Tr. Vol. 4 at 46:23 to 49:11.

¹⁵⁶ Tr. Vol. 4 at 37:6 to 41:16; see also Burlington Ex. 10.

¹⁵⁷ Tr. Vol. 4 at 53:6 to 54:6.

¹⁵⁸ Tr. Vol. 4 at 140:16 to 141:9.

¹⁵⁹ Tr. Vol. 4 at 148:20 to 150:8.

operations are a potential source of the hydrocarbons found in the pond. 160 She did not do her own sampling. 161

She looked at the infrastructure and the Burlington facilities about how they were designed and constructed. She gave attention to the spill prevention measures at the tank battery regarding adequate capacity and impermeability with the liners to make sure that they have proper containment of any potential releases. She reviewed the spill history of any releases that had taken place. She testified she was impressed with the response time to releases through Burlington's automated inventory control and the documentation of corrective actions and of near misses to prevent reoccurrence. She relies on the infrastructure and the controls and the lack of connection to the release through the spill history. Infrastructure includes the well design, the casing integrity testing and the facility construction. 162 163

In the report she wrote, she reviewed documentation and concludes:

- 1. Burlington has not caused the alleged hydrocarbon contamination; and
- 2. Burlington's established and ongoing history of environmental compliance and spill prevention activities establishes there is no reasonable link between Burlington's operations and the alleged hydrocarbon contamination. 164

She agrees with Staff that additional delineation is needed regarding the contamination in the pond. She believes there is sufficient data currently that more likely than not Targa is the cause of the contamination in the pond. She believes there is sufficient data currently that more likely than not Targa is the cause of the contamination in the pond.

VI. Discussion of Evidence After the Commission's Remand (New section added to PFD)

In the initial Proposal for Decision, the Examiners recommended the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners recommended the Commission order Targa to take those steps necessary to bring the site into compliance with regulatory remediation standards.

At the May 22, 2018 Commission conference, the Commission unanimously voted to remand the case back to the Examiners for the limited purpose of specifying a plan for assessment and remediation within 60 days. At the conference, the Commission indicated that the only issue to be addressed was specific plans for Targa to remediate

¹⁶⁰ Tr. Vol. 4 at 150:9 to 150:14.

¹⁶¹ Tr. Vol. 4 at 164:20 to 166:7.

¹⁶² Tr. Vol. 4 at 154:22 to 156:5.

¹⁶³ Tr. Vol. 4 at 169:15 to 170:10; Burlington Ex. 26.2.

¹⁶⁴ Burlington Ex. 13 at 2.

¹⁶⁵ Tr. Vol. 4 at 175:24 to 177:3, 180:8 to 181:4, 227:1 to 227:9.

¹⁶⁶ Tr. Vol. 4 at 223:14 to 224:22.

¹⁶⁷ See, e.g., R.R. Comm'n of Tex., Minutes of Formal Commission Actions (May 22, 2018) https://www.rrc.state.tx.us/media/46531/05-22-18-minutes.pdf.

the Pond Site.¹⁶⁸ Within 60 days of the Commission conference, Targa developed a plan that was approved by Staff. Targa performed assessment and remediation in accordance with that plan. Staff and Targa are in agreement that the Pond Site is in compliance with regulatory clean-up standards and no further delineation or remediation is necessary.

After the conference meeting, there was a post-conference hearing on September 10 to address Targa's efforts to comply with the Commission's directive. Specifically, after the conference, Targa took the following actions:

- July 10, 2018 Targa's submitting a Supplemental Site Investigation Plan ("Work Plan") to Staff;¹⁶⁹
- July 20, 2018 Staff approves Targa's Work Plan with comments;¹⁷⁰
- July 23, 2018 Targa agrees to comply with Staff comments to Targa's Work Plan:¹⁷¹
- July 27, 2018 Targa samples surface water; results are below detection limits and/or clean-up standards; 172
- August 1-3, 2018 Targa excavates and removes soil from the Smith pond; Targa samples soil from the excavation sidewalls and floor; results are below detection limits and/or clean-up standards;¹⁷³
 - Commission Staff witness, Mr. Pope, stated that during excavation, seepage of condensate liquids was not observed.¹⁷⁴
 - o Mr. Smith's expert, Mr. Allen, was present when Targa conducted the excavation sampling. Mr. Allen did not object to the location where the samples were taken, the soil sampling itself, or to the place where Targa stopped excavating.¹⁷⁵ Mr. Allen did not take any samples.¹⁷⁶
- August 13, 2018 Commission Staff approves termination of the excavation activities.¹⁷⁷ Mr. Smith and Mr. Allen did not object to the cessation of the excavation activities during the August 1-3, 2018 excavation;¹⁷⁸

¹⁶⁹ Targa Ex. 45.

¹⁶⁸ *Id*.

¹⁷⁰ Targa Ex. 46.

¹⁷¹ Targa Ex. 47.

¹⁷² Targa Ex. 50, 54.

¹⁷³ Targa Ex. 52, 53, 54, 63.

¹⁷⁴ Targa Ex. 63.

¹⁷⁵ Vol. 5 at 57.

¹⁷⁶ *Id*.

¹⁷⁷ Targa Ex. 53.

¹⁷⁸ Vol. 5 at 41.

Then, on August 20, 2018, Targa filed a status report, which included a Supplemental Environmental Site Investigation Report ("Supplemental Report") prepared by Mr. Mitchell, Targa's expert in this case. 179

On August 23, 2018, Staff agrees that the results from the soil sampling are below detection limits and/or clean-up standards. Staff asks for additional information regarding the test results and asks Targa to conduct additional groundwater testing. On September 5, 2018, Targa answers Staff's questions.

At the time of the September 10 post-conference hearing, Staff had requested and Targa had agreed to conduct additional groundwater testing that had not yet been performed. The post-conference hearing was recessed and resumed November 27, 2018, to allow evidence regarding the additional groundwater testing. At the November 27 hearing, Targa presented evidence of the following:

- September 13, 2018 Targa tests groundwater; results are below detection limits and/or clean-up standards; 183
- September 26, 2018 Staff requests additional information; 184
- October 10, 2018 Targa answers Staff's questions;¹⁸⁵
- October 19, 2018 Staff requests additional information; 186
- October 30, 2018 Targa answers Staff's questions;¹⁸⁷ and,
- November 27, 2018 Staff issues letter stating that "no further remediation or investigation is necessary . . ." and asking Targa to plug the monitor wells.¹⁸⁸

In sum, after the additional sampling, Targa and Staff agreed that no further remediation was warranted. However, Complainant did not agree and requests that Targa be ordered to conduct additional activities. Specifically, Complainant requests more sampling in the area around the trench Complainant's representative excavated in 2016.¹⁸⁹

Both Staff and Targa's expert witnesses testified that the monitoring wells in the area were adequate to test and determine if there was contamination at the area of the trench. Specifically, MW-7 is in the area of the trench, and the 2018 sampling results from MW-7 are below clean-up standards. Both Staff and Targa's experts also testified that the

¹⁸⁰ Targa Ex. 63.

¹⁸² Targa Ex. 67.

¹⁷⁹ Targa Ex. 54.

¹⁸¹ *Id*.

¹⁸³ Targa Ex. 68.

¹⁸⁴ Targa Ex. 69.

¹⁸⁵ Targa Ex. 70. ¹⁸⁶ Targa Ex. 71.

¹⁸⁷ Targa Ex. 72.

¹⁸⁸ Targa Ex. 73.

¹⁸⁹ 11/27/18 Tr. at 67:16 to 69:20.

sample taken in the trench in 2016 was a grab sample and not from a monitoring well, so it is not representative of groundwater. MW-7 adheres to groundwater monitoring protocol and is designed to provide samples representative of groundwater. ¹⁹⁰

Targa requests that the Examiners recommend dismissal of this case.¹⁹¹ In the alternative, Targa requests that the Examiners issue a revised Proposal for Decision ("PFD") finding that: (a) the petroleum hydrocarbon constituents previously identified at the Smith pond did not originate from the Targa natural gas gathering pipeline, and likely originated from a source in the vicinity of the pond (*i.e.*, illegal dumping or waste); and (b) no additional investigation or response actions are warranted at the Smith property.

Burlington requests that it be dismissed and that Complainant's request for additional relief be denied.

Staff requests that Complainant's request for additional relief be denied. Staff requests that the Examiners issue a revised Proposal for Decision only adding information relevant to the limited scope of the Commission's remand, and not changing other findings and conclusions.

VII. Examiners' Analysis of Issues Prior to the Remand (No change from initial Proposal for Decision)

An issue in this case is whether Targa and/or Burlington have a regulatory responsibility to act regarding hydrocarbon contamination initially discovered in and near Complainant's pond. The Examiners recommend the Commission order Targa to take those steps necessary to bring the site into compliance with regulatory remediation standards.

Burlington and Targa each argue it is not responsible to remediate the contamination in the pond because it did not cause that contamination. Applicable statutes and rules provide that the Commission determines who is a "responsible person" required to remediate contamination caused by activities the Commission regulates. The Examiners find that, according to applicable statutes and rules, a responsible person is not limited to the person who caused the contamination. Based on the evidence in this case, the Examiners find both Burlington and Targa qualify as a "responsible person" for the pond contamination such that the Commission could require either or both to complete any remediation necessary to comply with regulatory standards. The Examiners recommend, based on the evidence, the Commission order Targa to complete the delineation and assessment of the hydrocarbon contamination at issue, which encompasses the contamination at the Pond Site and Pipeline Release Point, under the direction of Commission Staff. After the delineation and assessment, if additional remediation is necessary to achieve compliance with Commission regulations, the

¹⁹⁰ See 11/27/18 Tr. at 49-52: 62-66.

¹⁹¹ If the Examiners dismiss the docket, the Complainant would not be deprived of the right to appeal the dismissal to the Commission. "Any dismissal order entered by the Hearings Director is subject to review by an appeal to the Commissioners. The appeal shall follow the same requirements set forth in §1.38(e) of this title (relating to Interim Rulings and Appeals of Interim Rulings)." 16 Tex. Admin. Code 1.23(f)(2).

Examiners further recommend Targa be ordered to perform any necessary additional remediation.

A. Analysis of applicable legal standard for determining persons responsible for remediation to Commission regulatory standards

The Commission is the state agency solely responsible for the control and disposition of waste and the abatement and prevention of pollution of surface and subsurface water resulting from activities within its jurisdiction. The Commission has the authority and the responsibility to enter orders to prevent pollution of surface water or subsurface water in the state related to matters and activities within its jurisdiction, such as the production of oil and gas. According to the Texas Natural Resources Code and Commission rules, a "responsible person" is required to control or clean up oil and gas materials causing or likely to cause pollution of surface or subsurface water.

The Natural Resources Code defines "responsible person" as:

any operator or other person required by law, rules adopted by the commission, or a valid order of the commission to control or clean up the oil and gas wastes or other substances or materials. 195

Both Targa and Burlington maintain that to be a "responsible person" who has a regulatory obligation to address pollution, the person must have caused the pollution. In other words, they argue, only those persons who cause the pollution can be held responsible by the Commission. The Examiners disagree.

When construing a statute, the primary objective is to ascertain legislative intent. 196 As stated by the Texas Supreme Court:

When construing a statute, our primary objective is to ascertain and give effect to the Legislature's intent. Tex. Gov't Code § 312.005; see Texas Dept. of Protective and Regulatory Services v. Mega Child Care, 145 S.W.3d 170, 176 (Tex.2004). To discern that intent, we begin with the statute's words. Tex. Gov't Code § 312.003; see Texas Dept. of Transp. v. City of Sunset Valley, 146 S.W.3d 637, 642 (Tex.2004). If a statute uses a term with a particular meaning or assigns a particular meaning to a term, we are bound by the statutory usage. Texas Dep't of Transp. v. Needham, 82 S.W.3d 314, 318 (Tex.2002). Undefined terms in a statute are typically given their ordinary meaning, but if a different or more precise definition is apparent from the term's use in the context of the statute, we apply that meaning. In re Hall, 286 S.W.3d 925, 928–29 (Tex.2009). And if a statute is unambiguous, we adopt the interpretation supported by its plain

¹⁹² Tex. Water Code § 26.131(a).

¹⁹³ See Tex. Nat. Res. Code § 91.101(a).

¹⁹⁴ See Tex. Nat. Res. Code § 91.113; see also 16 Tex. Admin. Code §§ 3.8(b), 3.91.

¹⁹⁵ Tex. Nat. Res. Code § 91.113.

¹⁹⁶ TGS-NOPEC Geophysical Co. v. Combs, 340 S.W.3d 432, 439 (Tex. 2011).

language unless such an interpretation would lead to absurd results. Mega Child Care, 145 S.W.3d at 177. We further consider statutes as a whole rather than their isolated provisions. City of Sunset Valley, 146 S.W.3d at 642. We presume that the Legislature chooses a statute's language with care, including each word chosen for a purpose, while purposefully omitting words not chosen. *In re M.N.*, 262 S.W.3d 799, 802 (Tex.2008). 197

Accordingly, the words chosen, and words omitted, are presumed to be chosen with care and purpose. The definition of responsible person fails to contain the word "cause" or any form of it. Yet the definition expressly includes and begins with the words "any operator." This use of the word "operator" indicates an intent that evaluating operators with a nexus to the pollution is an important consideration in determining responsible persons. The absence of the use of the word "cause" suggests causation may not be a limiting consideration.

Commission rules also indicate causation is not an absolute requirement. For example, Commission rules prohibit persons conducting regulated activities from causing or *allowing* pollution of water in the state. 198 The definition of "allow" is not the same as the definition of cause and includes "permit" and "to fail to restrain or prevent." The definition of disposal also encompasses "cause" or "allow" and is otherwise worded more broadly than limiting those who dispose to be just those who cause disposal. The definition in its entirety states:

To dispose--To engage in any act of disposal subject to regulation by the commission including, but not limited to, conducting, draining, discharging, emitting, throwing, releasing, depositing, burying, landfarming, or allowing to seep, or to cause or allow any such act of disposal.²⁰⁰

This indicates the Commission does not limit who it holds responsible for pollution to those who necessarily cause pollution.

In addition to the Natural Resources Code, Commission rules indicate regulated operators, particularly where the pollution occurs, is a significant factor in determining responsible persons. For example, in reporting requirements, the rules require operators to report spills, some immediately, without a requirement that the operator first determine it caused the spill. Statewide Rule 20(a)²⁰¹ states, in pertinent part:

Notification of Fire Breaks, Leaks, or Blow-outs (a) General requirements.

(1) Operators shall give immediate notice of a fire, leak, spill, or break to the appropriate commission district office by telephone or telegraph. Such

¹⁹⁸ 16 Tex. Admin. Code § 3.8(b).

¹⁹⁹ See, e.g., "allow" at Merriam-Webster.com (March 2, 2018), https://www.merriam-webster.com/dictionary/allow.

²⁰⁰ 16 Tex. Admin. Code § 3.8(b).

²⁰¹ 16 Tex. Admin. Code § 3.20.

notice shall be followed by a letter giving the full description of the event, and it shall include the volume of crude oil, gas, geothermal resources, other well liquids, or associated products lost.

(2) All operators of any oil wells, gas wells, geothermal wells, pipelines receiving tanks, storage tanks, or receiving and storage receptacles into which crude oil, gas, or geothermal resources are produced, received, stored, or through which oil, gas, or geothermal resources are piped or transported, shall immediately notify the commission by letter, giving full details concerning all fires which occur at oil wells, gas wells, geothermal wells, tanks, or receptacles owned, operated, or controlled by them or on their property In all such reports of fires, breaks, leaks, or escapes, or other accidents of this nature, the location of the well, tank, receptacle, or line break shall be given by county, survey, and property, so that the exact location thereof can be readily located on the ground. Such report shall likewise specify what steps have been taken or are in progress to remedy the situation reported.

Accordingly, "operators" are required to notify the Commission of spills. There is no mention of a requirement the operator must have caused the spill. 202 Because the reports are required to contain a description of actions to remedy the spill, 203 it appears the operators who are responsible for reporting may also be held responsible for remediation. While there is no clarification of which operators are required to report spills, the next subsection of Statewide Rule 20 regarding the reporting of fires states operators must report "all fires which occur at oil wells, gas wells, geothermal wells, tanks, or receptacles owned, operated, or controlled by them or on their property." An operator is required to report fires that occur at facilities or property owned, operated or controlled by them, regardless of cause. At least in the case of fires, in assessing an operator's responsibility to report, and consequently remediate, the Commission considers ownership and operations of facilities and property where the fire occurs.

Statewide Rule 91, which is the Commission rule regarding clean up requirements of contamination, does refer to "operators" as the persons responsible for remediation. Rule 91 does not contain the word "cause" or other similar limiting language and expressly states the scope of the cleanup requirements applies to spills "from activities associated with the exploration, development, and production, including transportation, of oil or gas or geothermal resources." Phe rule only provides specific standards for crude oil spill cleanups, clarifying that for condensate spills or spills in sensitive areas (such as proximity to surface water or areas with shallow groundwater), the "operator" must consult with the district office on proper cleanup standards. Phenomena of the content of the condensate spills or spills in sensitive areas (such as proximity to surface water or areas with shallow groundwater), the "operator" must consult with the

²⁰⁴ 16 Tex. Admin. Code § 3.20(b).

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²⁰² 16 Tex. Admin. Code § 3.20(a).

²⁰³ Id

²⁰⁵ See, e.g., 16 Tex. Admin. Code § 3.91(b), (d)(1).

²⁰⁶ 16 Tex. Admin. Code § 3.91(b).

²⁰⁷ *Id*.

Additionally, the Commission requires operators to certify compliance for each property on which its wells are located. This certificate of compliance "certifies responsibility for regulatory compliance." Generally, operators have and exercise operational control over the Commission-recognized leases they operate. They decide where to produce hydrocarbons, taking into consideration the infrastructure of the area. They make the operational decisions, choose and negotiate the contracts they enter into with gatherers and transporters, and otherwise oversee and exercise control of operations. Operators are a beneficiary of the operations they control. These are factors the Commission does and can consider in evaluating responsible persons. On a policy note, this interpretation is consistent with the focus being on channeling resources to assessing and remediating the pollution instead of utilizing large amounts of resources to evaluate who is the cause. This is a case in point. Over five years and extensive resources have been spent in this case, not to remediate, but to establish cause—or lack thereof. Moreover, neither operator investigated the cause of the pond contamination; both examined their facilities, and each concluded it was not the cause.

This interpretation of Commission rules and statutes is consistent with other similar statutory schemes involving environmental protection from pollution, which do not limit persons responsible for contamination to only persons who cause the contamination. Chapter 26 of the Texas Water Code contains provisions designed to protect the quality of the state's water and minimize pollution of it.²¹⁰ Generally, it authorizes the Texas Commission on Environmental Quality to administer the provisions in chapter 26.²¹¹ However, it does provide the Commission with exclusive jurisdiction to prohibit and abate pollution of state water resulting from activities within the Commission's jurisdiction.²¹² Chapter 26 contains a general prohibition of discharges of pollution into state waters.²¹³ Discharge is defined as:

"To discharge" includes to deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.²¹⁴

Similar to the Commission rules discussed above, in the regulatory scheme governed by chapter 26, the persons responsible for discharges of pollution are not limited to only those who cause the pollution. Dischargers include persons that allow, permit or suffer a discharge.

In the Texas Solid Waste Disposal Act, persons responsible for solid waste are not limited to only persons who cause solid waste contamination and can include current and prior owners and operators of the solid waste facility, regardless of cause.²¹⁵ Similarly,

²⁰⁸ 16 Tex. Admin. Code § 3.58(a)(1).

²⁰⁹ Id

²¹⁰ See, e.g., Tex. Water Code §§ 26.011, 26.121.

²¹¹ See, e.g., Tex. Water Code §§ 26.001(2) and (4), 26.011.

²¹² Tex. Water Code § 26.131(a).

²¹³ Tex. Water Code § 26.121(a).

²¹⁴ Tex. Water Code § 26.001(20).

²¹⁵ Tex. Health & Safety Code § 361.271(a); see also 30 Tex. Admin. Code § 330.15(c) (provides a person may not "cause, suffer, allow or permit" the unauthorized disposal of municipal solid waste).

according to the Texas Oil Spill Prevention and Response Act of 1991, a "person responsible" for an unauthorized oil spill can include the owner or operator of the vessel from which the discharge emanates or any other person who "causes, allows, or permits an unauthorized discharge of oil." In all these instances, persons who may be held with regulatory responsibility for contamination are not limited to only those who cause the contamination.

Because Commission rules and statutes do not contain language limiting those responsible for remediation to those who cause the contamination and, in fact, do contain language indicating factors other than cause can be considered, the Examiners do not agree the Commission must find Targa and/or Burlington caused the contamination before the Commission can hold them responsible for compliance with regulatory remediation standards.

B. The Examiners find Targa is a responsible person for assessment and remedial action necessary to bring the site into compliance with regulatory standards.

Targa claims there is insufficient evidence it caused the hydrocarbon contamination in the pond such that it cannot be held responsible for remediation of that contamination. Targa maintains the lab results from the sampling it conducted demonstrates the Targa pipeline leak did not cause the pond contamination. Targa relies on the following:

- Any hydrocarbons from the pipeline leak would have migrated the same direction as groundwater flow, which is north and not northeast towards the pond.
- If the Targa pipeline were the source of the pond contamination, then the soil samples and water samples collected near the Pipeline Leak Location would have the highest concentration of hydrocarbon constituents because the highest concentration is always near the source. Consequently, because the highest concentrations of hydrocarbons were near the pond and not near the Pipeline Leak Location, Targa's pipeline leak is not the source of the pond hydrocarbons.
- The sampling results from around the Pipeline Leak Location are below protective levels and ND.
- Targa's pipeline contains gas, not liquids, and no liquids would have dropped out
 of the gas in the short distance from separation to the Pipeline Leak Location.

The Examiners are not persuaded by Targa's claims. The Examiners recommend finding Targa is more likely than not the cause of the hydrocarbon contamination in the pond. Targa is an operator within the jurisdiction of the Commission and the hydrocarbon contamination is a result of activities under the Commission's jurisdiction. The Examiners recommend the Commission find that Targa is a responsible person with regulatory responsibility to assess and remediate if necessary the hydrocarbon contamination at the Pond Site, including the area around the Pipeline Release Point.

²¹⁶ Tex. Nat. Res. Code §§ 40.003(20), 40.101(a).

There is a known release point on the pipeline; a hole was discovered in the Targa pipeline. The pipeline was about six years old at the time. When the hole was formed by corrosion is not known. The hole was on the bottom of the pipe at a depth of about 8 feet, just above the top of the underlying limestone. The leak occurred at or very near to the lowest point on the 1,400-foot segment between the Targa sales meter on the Fox 7 pad and the block valve near the Fox 6H well to the south. Hydrocarbon liquids (condensate) and water may condense from the gas stream in the pipeline. Any condensate that may form in this 1,400-foot segment of pipe would drain to and accumulate at the low point, which is at or near the leak location. The presence of static liquids in the low point in the pipe would increase the risk of corrosion. Once the hole formed, accumulated condensate would have been expelled into the substrate first, as the pipeline operates at a pressure of 175 psi; the gas would push the water out of the hole in the bottom of the pipe. Then, the pipe would leak gas. A positive migration pathway exists between the pipeline leak location and the pond. The lab results of the sampling events indicate the existence of hydrocarbons between the pipeline leak and the pond contamination. Even though some results may have diminished over time, the Examiners find the presence of hydrocarbons in the area between the pipe leak and the pond contamination is consistent with the pipeline leak being the cause of the pond contamination.

The Examiners are not persuaded that any contamination from the pipeline migrated north and not northeast toward the pond, as claimed by Targa. While Targa's expert concludes that the groundwater flow is north in the area of contamination and any pipeline released contaminants would flow with the groundwater, Targa's expert failed to provide the analysis and underlying methodology relied on. Also, no peer-reviewed information or underlying studies or authorities were provided. In this area, the groundwater at issue is near the surface because of the layer of confining competent limestone. There was no discussion as to how or whether the following impact the migration path of any release: weather, gravity, the fractured limestone, the shallowness of the confined subsurface area or other factors. There was no explanation as to why Targa's expert relies solely on groundwater flow. There was also minimal discussion of how Targa calculated groundwater flow. The calculation was not provided, and the accuracy and methodology were substantially not discussed. Also, no peer-reviewed information, underlying studies or authorities were provided.

In contrast, both Complainant's expert and Staff's expert testified that it was not as simplistic in that factors other than groundwater flow need to be considered. The consensus of all experts in this case appears to be that the released contaminants will migrate in a path of least resistance. Both Complainant and Staff's experts discussed that the fractured limestone was an important consideration, as well as gravity. Additionally, the contamination seems to concentrate near the fractured limestone and in the downgradient pond, supporting the notion that gravity and the fractured limestone are factors affecting the migration of contaminants.

In evaluating the reliability of an expert's opinion, particularly scientific testimony, factors considered are the principles, research and methodology underlying the

conclusions.²¹⁷ In determining whether expert testimony is reliable, the factors the Texas Supreme Court set out in *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549, 557 (Tex.1995), should be considered in addition to the expert's experience, knowledge, and training.²¹⁸ These *Robinson* factors include, but are not limited to:

- (1) the extent to which the theory has been or can be tested;
- (2) the extent to which the technique relies upon the subjective interpretation of the expert;
- (3) whether the theory has been subjected to peer review and/or publication;
- (4) the technique's potential rate of error;
- (5) whether the underlying theory or technique has been generally accepted as valid by the relevant scientific community; and
- (6) the non-judicial uses which have been made of the theory or technique.²

The Examiners conclude Targa did not provide sufficient supporting evidence of the reliability of the opinion that any release from the Targa pipeline would have migrated north and not towards the Pond Site. This issue involves scientific and studied concepts. The Examiners found Targa's lack of evidence of underlying studies, publication, peer-reviewed information and the other *Robinson* factors problematic.

For similar reasons the Examiners conclude that Targa did not provide sufficient supporting evidence of the reliability of the opinion that the highest concentration of contaminants is always going to be near the source, even years after the release and after the contaminants have migrated. The only evidence Targa offered in support of this opinion is that it has always been the case in Targa's expert's experience. The Examiners found the lack of evidence regarding the *Robinson* factors on this point problematic. In contrast, Complainant and Staff's experts testified that it is not necessarily so that the highest concentration of contaminants will be at the release source. They explain that the length of time since the release and the migration of contaminants away from the source are also factors. In this case, the release ended in October 2011, and could have begun any time after 2005. Sampling near the release point did not start until August 21, 2012—nearly a year after the release ended.

The Examiners are not persuaded that no condensate would collect in Targa's pipeline after separation. There was testimony that it is not uncommon for liquids to drop out of a gas pipeline. There is limited separation capability at the wellheads, as dictated by the Contract. Before compression, Targa processes the gas stream through a scrubber to eliminate liquids. The pipeline leak was in a low area of the pipeline where liquids could accumulate. The leak was caused by internal corrosion, which could have been the result of the accumulation of liquids.

²¹⁷ Mack Trucks, Inc. v. Tamez, 206 S.W.3d 572, 578 (Tex. 2006)

²¹⁸ *Transcon. Ins. Co. v. Crump*, 330 S.W.3d 211, 215–16 (Tex. 2010) (referencing *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 726–27 (Tex.1998) which deemed expert testimony based on just experience, knowledge and training unreliable when "there is simply too great an analytical gap between the data and the opinion proffered").

The only known release in proximity to the pond is the Targa pipeline release, which was discovered within approximately 48 hours of the discovery of the contamination in the pond. The area of the pipeline release is approximately 100-150 feet from the contamination in the pond. The hydrocarbons found in the pond match the hydrocarbons from the Fox 7 and 12H, which are the source of the hydrocarbons carried in Targa's pipeline. According to PID, olfactory, sampling results and other information, hydrocarbons were detected around the pipeline release point, between the pipeline release point and at the Pond Site. The Examiners find Targa is the likely source of the contamination in the pond. The Examiners further find Targa is a responsible person under applicable remediation statutes and rules such that the Commission can require them to remediate the pipeline release, including the area of contamination at the Pond Site.

C. The Examiners find Burlington is a responsible person such that it could be held responsible for remedial action necessary to bring the site into compliance with regulatory standards.

Burlington is the Commission operator of record of the Commission designated lease where the contamination occurred. Burlington exercises operational control over the hydrocarbon production on the Fox Lease and benefits from such operations. The hydrocarbon contamination is consistent with the unrefined hydrocarbons produced on the Fox Lease. Commission rules and statutes indicate the operator is a responsible party for regulatory compliance. Burlington had a regulatory responsibility to assess and if necessary remediate the contamination. Burlington also had a responsibility to determine if it was a reportable release. Burlington cannot avoid its regulatory responsibility by concluding it did not cause the contamination and cannot fail to investigate the cause and extent of the contamination. If Burlington is not the cause of such contamination, Burlington may have a civil court case against third parties for damages—such as transporters, persons that it contracts with, etc.—who do cause it. A primary regulatory concern, as expressed in the language of the rules and statues, is prompt remedial action regarding releases and pollution. Commission rules require immediate removal of free liquids and immediate delineation by the operator.²¹⁹ In the preamble to Statewide Rule 91, it states:

"immediate" is intended to mean that action will be initiated at the time of discovery without delay. 220

²¹⁹ See, e.g., 16 Tex. Admin. Code § 3.91(b) (requiring free oil to be "removed immediately" and the area of contamination "must be immediately delineated"); 18 Tex. Reg. 6835, 6835 (1993) (adopting 16 Tex. Admin. Code § 3.91) (stating "response activities must be initiated by the operator immediately"); 16 Tex. Admin. Code § 3.91(b), (d)(1), (e)(2) (refers to the operator as the person responsible for cleanup standards); see also 18 Tex. Reg. 6835, 6835 (1993) (adopting 16 Tex. Admin. Code § 3.91) (stating condensate spills provide a greater hazard to surface and subsurface water than crude oil spills because they exhibit a greater mobility in the subsurface due to their lighter density, higher solubility and greater proportion of benzene; spills in sensitive areas may require more stringent measures than provided in Statewide Rule 91 because they are more vulnerable to pollution); Examiners Ex. 1 (Commission field guide for condensate spills requiring at least as stringent cleanup measures as provided in Statewide Rule 91).

²²⁰ 18 Tex. Reg. 6835, 6835 (1993) (adopting 16 Tex. Admin. Code § 3.91).

In this case, no one performed the necessary response actions and instead engaged in a dispute over who caused the contamination, which has lasted, so far, over seven years. This is inconsistent with the regulatory mandate requiring immediate action.

D. The Examiners recommend Targa be ordered to take those steps necessary to bring the site into compliance with regulatory standards.

Even though the Examiners conclude both Targa and Burlington are responsible persons in this case, the Examiners recommend that Targa (and not Burlington) be ordered to take action necessary regarding the contamination to achieve regulatory compliance.

As discussed above, the Examiners find that more likely than not Targa is the cause of the contamination. While this PFD has emphasized cause is not the only consideration, when cause is known, it is a significant factor. Moreover, Targa initially took responsibility for the pond contamination and exercised control over remediation efforts. The correspondence and evidence in the record is that Targa representatives initially notified Burlington and Complainant that the contamination was a result of the Targa pipeline leak. There is no indication Targa communicated to Burlington that Targa believed it was not responsible until well into this dispute. In this case, Staff asks that Targa be the responsible party required to comply with regulatory standards.

The parties acknowledge the pond hydrocarbon contamination has not been delineated as required by the regulations. Neither Targa nor Burlington investigated or evaluated the pond contamination. The rules require assessment and then, remediation if necessary.

Statewide Rule 91 provides remediation standards for crude oil contamination in non-sensitive areas. Cleanup requirements for condensate spills or spills in sensitive areas are determined on a case-by-case basis.²²¹ This case involves a condensate spill. Due to the proximity to the contamination to surface and groundwater, the Examiners further agree with Staff that it involves a spill in a sensitive area.²²²

These areas are defined by the presence of factors, whether one or more, that make an area vulnerable to pollution from crude oil spills. Factors that are characteristic of sensitive areas include the presence of shallow groundwater or pathways for communication with deeper groundwater; proximity to surface water, including lakes, rivers, streams, dry or flowing creeks, irrigation canals, stock tanks, and wetlands; proximity to natural wildlife refuges or parks; or proximity to commercial or residential areas.

²²¹ 16 Tex. Admin. Code § 3.91(b); 18 Tex. Reg. 6835, 6835 (1993) (adopting 16 Tex. Admin. Code § 3.91) (in discussing basis for case-by-case determination, stating (1) condensate spills provide a greater hazard to surface and subsurface water than crude oil spills because they exhibit a greater mobility in the subsurface due to their lighter density, higher solubility and greater proportion of benzene; (2) spills in sensitive areas may require more stringent measures than provided in Statewide Rule 91 because they are more vulnerable to pollution; and (3) these types of spill cleanups need to be tailored to the specific site and will be more protective to the environment than the requirements in Statewide Rule 91).

²²² According to Rule 91, the provision discussing the meaning of sensitive areas states:

Statewide Rule 91 states:

Where cleanup requirements are to be determined on a case-by-case basis, the operator must consult with the appropriate district office on proper cleanup standards and methods, reporting requirements, or other special procedures.²²³

Cleanup measures required for condensate spills and spills in sensitive areas are determined on a case-by-case basis because they pose greater risks.²²⁴

The Examiners recommend the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners recommend the Commission order Targa to take those steps necessary to bring the site into compliance with regulatory remediation standards.

VIII. Examiners' Analysis of the Issues Remanded (New section added to PFD)

The Examiners find Staff and Targa's position compelling and recommend the Commission deny Complainant's request for additional relief.

The Examiners did not find Complainant's request for additional sampling and/or remediation meritorious. After the remediation, the sampling appears reasonably designed to detect additional contamination, and the results were below clean-up standards.

While Targa argues there is no live controversy, Complainant still claims additional action by Targa is warranted. Thus, a live controversy exists. Consequently, dismissal of this case based on mootness is not appropriate.

Targa also requests that the prior recommended findings by the Examiners be revised to state that Targa is not responsible for the contamination. At the May 22 Commission conference, the Commission remanded this matter back for the limited purpose of determining what specific remediation steps were necessary and for Targa to perform them. Reevaluation of the prior findings as to the cause of the contamination or the responsible parties is beyond the scope of the remand.

¹⁶ Tex. Admin. Code § 3.91(a)(2); see also 18 Tex. Reg. 6835, 6835 (1993) (adopting 16 Tex. Admin. Code § 3.91) (providing that initial determination of whether contamination is in a sensitive area is by Commission staff with the operator and final determination is made by the commission).

223 Tex. Admin. Code § 3.91(b).

²²⁴ See 18 Tex. Reg. 6835, 6835 (1993) (adopting 16 Tex. Admin. Code § 3.91) (stating condensate spills provide a greater hazard to surface and subsurface water than crude oil spills because they exhibit a greater mobility in the subsurface due to their lighter density, higher solubility and greater proportion of benzene; spills in sensitive areas may require more stringent measures than provided in Statewide Rule 91 because they are more vulnerable to pollution); see also Examiners Ex. 1 (The Commission's Field Guide for the Assessment and Cleanup of Soil and Groundwater Contaminated with Condensate from a Spill Incident).

Because the site has been remediated by Targa in accordance with regulatory standards, the Examiners recommend that neither Targa nor Burlington be ordered to further assess and remediate at the Pond Site. Additionally, the Examiners recommend the Commission deny Complainant's request for additional relief. The Examiners recommend the following changes to the proposed findings of fact and conclusions of law contained in the initial Proposal for Decision (additions are underlined and deletions are in strikethrough text)

Proposed changes to Findings of Fact

- 1. Mike Smith ("Complainant") filed a complaint ("Complaint") requesting the Commission order Targa Midstream Services, LLC ("Targa") and/or ConocoPhillips Company ("Conoco") to remediate hydrocarbon contamination Complainant initial discovered in the vicinity of a pond ("Pond Site") on his land ("Smith Property"). Complainant has owned the Smith Property, which is located near County Road 4513 in Wise County, for approximately 15 years.
- Initially, Complainant filed the complaint only against Targa. While the case was pending, Complainantt sought to add Conoco, and Conoco was admitted as a second respondent. Additionally, Staff appeared at the hearing and requested to participate and that the responsible parties for the contamination be required to take remedial action in accordance with regulatory standards. Staff was admitted as a party.
- 3. Burlington Resources Oil & Gas Company LP ("Burlington") is the current Commission record operator of the Commission lease at issue in this case and has been for all relevant time periods. Burlington sought to intervene as the true party in interest instead of Conoco; without objection, Burlington was admitted as a party.
- 4. On November 28, 2016, the Commission sent a Notice of Hearing setting a hearing date of January 10, 2017. The notice contained (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved and (4) a short and plain statement of the matters asserted. The hearing was held on January 10, 2017, as noticed. Complainant, Targa and Staff appeared and participated. Conoco appeared. The hearing was recessed at the end of the day on January 10 and resumed at agreed dates of May 10-12, 2017. All parties received more than 10 days' notice of the hearing. On the hearing dates May 10-12, Complainant, Targa, Staff, Conoco and Burlington appeared and participated.
- 5. Complainant's pond is an artificial surface water feature created by an earthen dam being placed across a shallow south-to-north drainageway. The pond receives drainage from lands to the west, south and east. Complainant discovered a release of hydrocarbon contamination at the Pond Site.

- 6. Burlington is the lessor of the mineral rights on the Smith Property (the "Fox Lease") and is the operator of several gas wells near the Pond Site. The Fox Lease is a 380-acre mineral interest lease owned and operated by Burlington. Burlington has 12 producing wells on the Fox Lease. Wells 7 and 12H (the "Fox 7" and "Fox 12H") are geographically the closest two wells to the Pond Site.
- 7. Targa operates the gas gathering lines from wells on the Fox Lease, including the Fox 7 and Fox 12H and has been the operator of these pipelines for all relevant time periods. The gas is piped to a gas gathering line, which is owned by Burlington prior to a Targa sales meter, and ownership and operations transfers to Targa at the meter. This sales meter is at the end of a pipeline segment that runs about 1,400 feet to the south-southeast to the next gathering junction. The line comes off the sales meter and then elbows down to below ground and then proceeds towards the southeast. The pipeline was installed in 2005, when the Fox 7 was completed. It is four-inch steel. The original depth was about 36 inches. No elevation surveys were made of the in-place pipe.
- 8. The Fox 12H well was drilled in 2008. Prior to the Fox 12H being drilled, the ground surface was raised by the placement of fill to create the Fox 12H well pad. The pipe stayed in the original location, but fill was added on top. Now the pipe is about 8 feet deep in this area. Since it was installed, there was no pressure testing of the line between the 2005 installation and the discovery of the pipeline leak in October 2011.
- 9. From the Fox Lease sales meter, the pipeline runs about 250 feet to the southeast, then turns to the south-southeast and runs for a total of about 1,400 feet until the first block valve near the Fox Lease Well No. 6. The first segment of the line spatially converges to the pond as it moves south to the turning point 250 feet from the Fox Lease sales meter. The pipeline distance to the pond ranges from about 150 feet to 65 feet (from north to south), but this distance is variable depending on the water level in the pond. The surface trace of the pipeline follows surface topography that runs downhill from the Targa meters then the topography inclines uphill to the south. The topographic low point of this 1,400-foot section of the pipeline is under the northeast corner of the Fox 12H well pad.
- 10. There is no gas compression on the pipeline system between the Fox 7 and 12H and the Waggoner Compressor Station, which is about 10 miles downstream. Before compression at the Waggoner facility, the gas is scrubbed to remove liquids (condensate and water) that have condensed out of the gas stream due to decreased temperature and pressure. Additional processing and removal of natural gas liquids ("NGL") is performed further downstream at the Chico Gas Plant.
- 11. According to the gas gathering contract between Burlington and Targa ("Contract"), Targa takes title to the gas and all constituents therein. The Targa

sales meter is where the transfer occurs. The Contract further provides Burlington shall not process the gas other than by a conventional separator or separators operating with no internal piping for heat interchange and which operate without any chilling or refrigeration. At the compressor station, Targa has scrubbers and oil tanks. Targa processes the gas and can sell any oil, or condensate, recovered. Targa is titled to one-hundred percent of all gas and liquids flowing through the Targa sales meter; transfer of all products that enter the pipeline at the Targa sales meter changes custody there. In exchange for that custody and title transfer, Burlington receives a percentage of the proceeds from sales downstream.

- 12. Complainant discovered hydrocarbon contamination on Saturday, October 8, 2011. He was fishing in his pond when he noticed a strong odor that smelled like diesel. There was a dry section south of the pond, due to drought conditions, with a wet spot on the ground. The odor appeared to come from the location where the wet spot was, so he dug a hole at the wet spot. There was a light yellowish liquid that filled a portion of the hole and stayed at a constant level. Complainant put a stake in the ground to mark where he first observed the contamination (the "Pond Discovery Location"). Currently, the location where Complainant dug and found the liquid is under water and part of the pond.
- 13. Complainant visited the Smith Property, including fishing at the pond, most weekends and on holidays. Prior to October 8, 2011, he had never noticed an odor. Around September 13, 2011, while the south area of the pond was dry, a person he hired excavated and enlarged the dry southern area of the pond.
- 14. After he discovered the contamination, Complainant called a representative of Burlington, who told him there was no Burlington representative available to go to the location, but a Targa representative was available to meet with him.
- 15. A Targa representative, Mike Burris, came to the site on October 9, 2011. The Targa representative saw and acknowledged the contamination. Both Complainant and Mr. Burris took samples of the liquid. According to Mr. Burris, the liquid sample exhibited two immiscible phases. Mr. Burris stated it appeared to be water and some kind of petroleum product.
- 16. Because it was supposed to rain that night, Targa did place booms around the hole that Mr. Smith had dug so that if it did rain, the booms would catch any runoff. It did rain that night enough that the south end of the pond, where the discovery site was located, was under water.
- 17. On October 9, 2011, Mr. Smith emailed two Burlington representatives to convey the facts of discovery of the contamination and visit by Mr. Burris. He asked that they keep him updated as to what is being done. Burlington responded that Targa confirmed "the leak is on their pipeline." Burlington further directed Complainant to discuss clean-up efforts with Targa's representatives. Burlington's representative stated that Burlington should not be commenting "since it is not our asset."

- 18. After Burlington notified Targa of Complainant's discovered spill, Targa isolated and tested the pipe in the vicinity of the Pond Site; the pipe would not hold pressure. Consequently, Targa excavated the area to expose the pipe, starting at the sales meter and continuing along the pipe until it discovered a small hole caused by corrosion. Targa replaced 60 feet of pipe. The hole in the pipe was approximately 150 feet from the Pond Discovery Location. The release point is to the southwest of the Pond Site on the northeast corner of the Fox 12H pad.
- 19. After the pipeline was replaced, Targa pressure tested the line and it held pressure. In or about June 2014, Targa did a follow-up test. According to the test results, the pipe held pressure.
- 20. After the discovery of the hydrocarbons in the pond and the leak in Targa's pipeline, the parties conducted various site inspections and sampling events over an approximately five-year period.

a. October 8, 2011 - Sampling Event 1: the discovery of contamination at the Pond Site

On the day of the discovery of contamination, October 8, 2011, both Complainant and Targa's representative visited the Pond Site, saw and smelled what appeared to be hydrocarbons and each took a sample of the liquid. Complainant's sample was ultimately tested; the results indicate that the sample contained unrefined hydrocarbons. The sample was tested for total petroleum hydrocarbons ("TPH") and Benzene, Toluene, Ethylbenzene and Xylenes ("BTEX"). The sample collected by Complainant contained elevated TPH levels. Targa's representative did not retain his sample, so it was never tested.

b. October 10, 2011 - Pipeline leak detection inspection

Targa discovered a small hole on the bottom of the pipeline at a depth of about 8 feet. The Pipeline Leak Location is near the northeast corner of the Fox 12H well pad, about 100 feet southwest of the pond. Targa determined the hole was caused by internal corrosion, and about 60 feet of pipe was replaced. Mr. Burris observed gas flowing from the hole in the bottom of the pipeline.

c. December 10, 2011 – Sampling Event 2: Complainant's consultant, Mr. Allen, initial site visit and sampling of pond surface water

After the discovery of the hydrocarbons at the Pond Site, Complainant hired an environmental consulting firm. The consultant assigned is David Allen. On December 10, 2011, Mr. Allen collected surface water samples from the Pond Site, but the results of the tested constituents were at a concentration below the laboratory quantitation limits ("non-detect" or "ND").

d. April 19, 2012 – Sampling Event 3: Staff initial inspection with Mr. Allen

After being notified of the possible contamination, on April 19, 2012, Staff inspected the Pond Site. Staff obtained soil and water samples from the pond and sights along the pipeline spill affected area. The testing results were ND.

e. August 6, 2012 – Sampling Event 4: Mr. Allen samples near the stake in the pond

On August 6, 2012, Mr. Allen collected sediment samples (designated MSP-1) from below the surface of the pond adjacent to the stake. He also collected surface water samples around the stake (designated MSP-1W). The lab results for the sediment sample are:

- TPH for MSP-1 was 835 mg/kg
- Benzene for MSP-1 was 0.291 mg/kg
- Toluene for MSP-1 was 4.360 mg/kg
- Ethylbenzene for MSP-1 was 0.975 mg/kg
- Xylenes for MSP-1 were 17.040 mg/kg

The lab results for the surface water sample are:

- TPH for MSP-1W was 792 mg/l
- Benzene for MSP-1W was ND
- Toluene for MSP-1W was 0.0363 mg/l
- Ethylbenzene for MSP-1W was ND
- Xylenes for MSP-1W were 0.0905 mg/l

f. August 21, 2012 – Sampling Event 5: Targa takes samples for a limited assessment

Targa hired a consulting firm to perform additional work at Complainant's property. The consultant assigned was Chris Mitchell. On August 21, 2012, Mr. Mitchell visited the site and advanced four soil borings (designated B-1 through B-4) around the vicinity of the pipeline release point on the Targa gas line. B-1 was advanced adjacent to the estimated release point ("Pipeline Release Point"). B-2 was advanced approximately 20 feet northeast of the Pipeline Release Point, between the release point and the pond and almost directly west of the Pond Discovery Location. B-3 was advanced approximately 40 feet from the Pipeline Release Point, and northwest of the Pond Discovery Location. Both B-2 and B-3 are topographically downgradient from the Pipeline Release Point. B-4 was advanced approximately 20 feet southwest of the Pipeline Release Point, on the opposite side of the pipeline from the pond. At the site, petroleum hydrocarbon odors were detected in the soil samples from B-1, B-2 and B-3—the samples collected between the Pipeline Release Point and the Pond Discovery Location. A photoionization detector ("PID") capable of detecting volatile organic compounds

("VOCs") was utilized on the soil borings. The PID readings of the soil borings ranged as follows:

- B-1 range was up to 206 ppm
- B-2 range was up to 37 ppm
- B-3 range was up to 169 ppm
- B-4 range was up to 29 ppm

Soil samples from each boring were collected from the area with the highest PID reading and sent to a lab to be tested for TPH and BTEX. The lab results range as follows:

- TPH for B-1 through B-4 ranged from 76.4 mg/kg to 381 mg/kg
- Benzene for B-1 through B-4 ranged from ND to 13.3 μg/kg
- Toluene for B-1 through B-4 ranged from ND to 4,180 μg/kg
- Ethylbenzene for B-1 through B-4 was ND
- Xylenes for B-1 through B-4 ranged from 107 μg/kg to 35,300 μg/kg

g. November 6, 2012 et al. – Sampling Event 6: Targa initiates groundwater monitoring

Mr. Mitchell performs another investigation including on-site activity on the following dates: November 6-7, 2012, December 12, 2012, February 12, 2013 and April 18, 2013. The on-site activity from December 12, 2012 through April 18, 2013 predominately consisted of taking groundwater monitor samples from monitoring wells installed November 2012.

On November 6-7, 2012, Targa installed eight additional soil borings: MW-5 through MW-8 and B-9 through B-12. Hydrocarbon odors were detected in MW-7, B-9, B-10 and B-11. PID ranged from below detection to 1,710 ppm. MW-5 through MW-8 were converted to permanent monitoring wells. One sample from each boring, taken from the zone exhibiting the highest PID rating, olfactory or visual evidence of impairment, was sent to a lab for testing. Additionally, one sample was taken from MW-6 at the estimated depth of the Targa pipeline adjacent to the Pipeline Release Point.

Sediment samples were collected from the pond's shoreline downgradient from the Pipeline Release Point (SED1 through SED-3). Surface water samples (SW-1 and SW-2) were collected from the pond downgradient of the pipeline. Groundwater samples were taken from MW-5 through MW-8. The lab results for the soil samples range as follows:

- TPH for MW-5 through B-12 ranged from ND to 1,760 mg/kg
- Benzene for MW-5 through B-12 were ND
- Toluene for MW-5 through B-12 ranged from ND to 0.404 mg/kg

- Ethylbenzene for MW-5 through B-12 were ND
- Xylenes for MW-5 through B-12 ranged from ND to 5.86 mg/kg

The lab results for the groundwater samples range as follows:

- TPH for MW-5 through MW-8 was ND
- Benzene for MW-5 through MW-8 ranged from ND to 0.0043 mg/l
- Toluene for MW-5 through MW-8 ranged from ND to 0.0051 mg/l
- Ethylbenzene for MW-5 through MW-8 was ND
- Xylenes for MW-5 through MW-8 ranged from ND to 0.0238 mg/l

The lab results for the sediment samples range as follows:

- TPH for SED-1 through SED-3 ranged from ND to 119 mg/kg
- Benzene for SED-1 through SED-3 was ND
- Toluene for SED-1 through SED-3 ranged from ND to 0.007 mg/kg
- Ethylbenzene for SED-1 through SED-3 was ND
- Xylenes for SED-1 through SED-3 ranged from ND to 11.7 mg/kg
- Xylenes for SED-1R (resampling of SED-1 due to the opinion that the 11.7 mg/kg result was inconsistent with other data points) were 0.0624 mg/kg

The lab results for the surface water samples range as follows:

- TPH for SW-1 and SW-2 ranged from ND to 1.5 mg/l
- Benzene for SW-1 and SW-2 was ND
- Toluene for SW-1 and SW-2 was ND
- Ethylbenzene for SW-1 and SW-2 was ND
- Xylenes for SW-1 and SW-2 ranged from ND to 0.0082 mg/l

h. December 17, 2012 – Sampling Event 7: Complainant expert's site investigation

On December 17, 2012, Mr. Allen returned to the Pond Site for additional sampling. The stake identifying the Pond Discovery Location was visible. He collected surface water (MSP-2 SW), soil (MSP-2 Soil) and sediment (MSP-2 Sed) samples in the vicinity of the stake, which were sent to a lab for testing. The lab results for the soil sample are as follows:

- TPH for MSP-2 Soil was 3,731.0 mg/kg
- Benzene for MSP-2 Soil was 1.540 mg/kg
- Toluene for MSP-2 Soil was 23.200 mg/kg
- Ethylbenzene for MSP-2 Soil was 4.410 mg/kg
- Xylenes for MSP-2 Soil were 80.300 mg/kg

The lab results for the sediment samples are as follows:

- TPH for MSP-2 Sed was 683.0 mg/kg
- Benzene for MSP-2 Sed was 0.0358 mg/kg
- Toluene for MSP-2 Sed was ND
- Ethylbenzene for MSP-2 Sed was 0.0386 mg/kg
- Xylenes for MSP-2 Sed were 1.055 mg/kg

The lab results for the surface water sample are as follows:

- TPH for MSP-2 SW was ND
- Benzene for MSP-2 SW was ND
- Toluene for MSP-2 SW was ND
- Ethylbenzene for MSP-2 SW was ND
- Xylenes for MSP-2 SW were 0.0268 mg/l

i. December 17, 2012 – Sampling Event 8: Targa groundwater monitoring sampling event

On September 5, 2013, Mr. Mitchell, on behalf of Targa, visited the site to collect surface water samples and groundwater samples from MW-5 through MW-8. The lab results for the groundwater samples are as follows:

- Benzene for MW-7 was 22.9 µg/l
- Xylenes for MW-8 were 35.4 μg/l
- TPH for MW-8 was 1.0 mg/l

The remaining sampling results for TPH and BTEX were ND.

j. November 11, 12, 21 and 24, 2014 – Sampling Event 9: Staff trench and sampling event

On November 11 and 12, 2014, Staff excavated several trenches beginning from the pond toward locations upslope and where Targa previously installed borings and wells. Water with a hydrocarbon sheen was observed in the excavation in the pond. Staff observed water and a light hydrocarbon liquid accumulating in one of the trenches near MW-7. Staff collected water and soil samples.

On November 21, 2014, Staff dewaters one of the trenches. After dewatering, Staff collected sample of PSH liquid seeping from the western wall of the trench—the western wall is the Targa pipeline side of the excavation. On November 24, Staff took a sample from one of the Burlington condensate storage tanks from the tank battery for the Fox 7 and 12H. Staff obtained chromatographs comparing the two samples: they are practically identical.

k. November 21, 2014 – Sampling Event 10: Targa groundwater monitoring event

On November 21, 2014, Targa takes groundwater samples. PSH was not observed. The lab results for the groundwater samples are as follows:

- Benzene for MW-7 was 6.9 μg/l
- Ethylbenzene for MW-7 was 1.1 μg/l
- Xylene for MW-7 was 16.0 μg/l
- Benzene for MW-8 was 4.4 μg/l
- Ethylbenzene for MW-8 was 1.4 μg/l
- Xylene for MW-8 was 12.0 μg/l

The remaining sampling results for TPH and BTEX were ND.

August 2016 – Sampling Event 11: Targa excavation event

In August 2016, Targa conducted excavation activities in the vicinity of the Pipeline Release Point; Targa excavated along the pipeline horizontally 5 feet on each side of the Pipeline Release Point and vertically to competent limestone. PSH was not observed. Staff took two samples of the groundwater that had recharged into the excavation for TPH and BTEX. All were ND.

m. September 28, 2016 – Sampling Event 12: Complainant trenching and sampling event

On September 28, 2016, Mr. Allen, on behalf of Complainant, returned to the Pond Site to conduct trenching to further delineate the contamination and to conduct groundwater sampling. The trenching occurred southwest of MW-7and MW-8 and northeast of the Targa excavation and advanced approximately 45 feet. Three soil grab samples (EX-1 through EX-3) were collected, as well as a grab sample of the groundwater accumulating in the trench (EXW). He also took groundwater samples from MW-5, MW-7 and MW-8. The lab results are as follows:

- TPH for EXW was 10.8 mg/l
- Benzene for EXW was 0.00408 mg/l
- Ethylbenzene for EXW was 0.00759 mg/l
- Xylenes for EXW were 0.0916 mg/l
- TPH for EX-1 through EX-3 ranged from 125 to 258 mg/kg
- Benzene for EX-1 through EX-3 ranged from 0.00127 to 0.0113 mg/kg
- Toluene for EX-1 through EX-3 ranged from 0.00202 to 0.00488 mg/kg
- Ethylbenzene for EX-1 through EX-3 ranged from 0.0212 to 0.0746 mg/kg
- Xylenes for EX-1 through EX-3 ranged from 0.202 to 2.34 mg/kg

- 21. On September 5, 2013, a Commission inspector noted strong hydrocarbon odors and the presence of groundwater mixed with possible condensate at the Pond Discovery Location; the area around the Pond Discovery Location had been recently drained. There were no odors or visible indications of hydrocarbon contamination on a July 17, 2014 inspection, but the pond was full of rainwater obscuring the Pond Discovery Location.
- 22. Generally, the lithology of the area is that clay is encountered at surface to different depths based on the topography. Below the clay is an approximately one-foot layer of weathered and fractured limestone. Below that is competent limestone.
- 23. Based on the observations and information gathered during the sampling events—including visual observations, hydrocarbon odor detection, PID readings and the sampling results—after the discovery of the pond contamination and the pipeline leak, hydrocarbons have been detected in and near the pond, near the pipeline leak location and the soil and groundwater in the area in between.
- 24. Condensate can occur in a gas pipeline such as Targa's. Condensate can get into a gas line and accumulate in a low spot in the line. This moisture in the line can cause corrosion.
- 25. The reason for the leak in the Targa pipeline is internal corrosion.
- 26. The pond is downgradient from where the pipeline leak occurred.
- 27. Shallow groundwater can follow the topographic gradient. In this case it would be east-northeast, and the Pond Discovery Location is northeast of the Pipeline Leak Location.
- 28. Hydrocarbons were found in the weathered limestone. The hydrocarbons appear to have come from subsurface and not from being dumped on the surface. The hydrocarbons had to migrate from somewhere subsurface. Underground releases will migrate along the path of least resistance. In this case, there is weathered limestone and fractured limestone directly under the soil surface layer. The hydrocarbons appear to have flowed downgradient in the fractures of the weathered limestone.
- 29. It is not always the case that the concentrations of hydrocarbons are highest at their release point because of contaminant fate and transport over time.
- 30. <u>Prior to the issuance of the initial Proposal for Decision on April 4, 2018, t</u>There hads been no removal of free hydrocarbons from the vicinity of the Pond Site.
- 31. Regarding delineation, a clean well or data point is when the groundwater is not affected, and the soils are not affected.

- 32. <u>Prior to the issuance of the initial Proposal for Decision on April 4, 2018, , t</u>There hads been no delineation of the area of contamination in the vicinity of the Pond Site.
- 33. As of April 4, 2018, further delineation of the impacted hydrocarbon footprint neededs to be performed since it <u>iwas</u> not yet defined.
- 34. The Pond Site <u>iwas</u> contaminated with petroleum hydrocarbon constituents attributed to the release from Targa's pipeline.
- 35. In addition, the following factors indicate the leak from the Targa pipeline caused the pond contamination:
 - The proximity of the pipeline leak to the pond:
 - Targa replaced 60 feet of pipeline around the Pipeline Leak Location;
 - The Pipeline Leak Location is upgradient of the contamination in the pond
 - There was evidence of hydrocarbons near the Pipeline Leak Location;
 - The area of confirmed hydrocarbon impact includes the pipeline where Targa had a confirmed leak, the area around the Pond Discovery Location and in between;
 - A migration pathway of fractured limestone exists between the area of replaced pipe and the contamination in Complainant's pond;
 - Targa's gas pipeline can and does include liquids;
 - There was a known leak in a pipeline that is located within the footprint of hydrocarbon impacts;
 - The length of time the pipeline leak persisted is unknown; and
 - The chromatographs of fluid samples show a common source of the hydrocarbons in the pond and the Burlington lease production.
- 36. The contamination enter<u>ed</u>s the pond from the soil beneath the pond, most probably via fractures, seams or channels in the underlying limestone.
- 37. The leak in Targa's pipeline likely caused the hydrocarbon contamination at the Pond Site.
- 38. Targa is the Commission gatherer of record for the gas from the Fox 7 and Fox 12H and has been for the Fox 7 since 2006 and the Fox 12H since 2008.
- 39. Targa is a responsible person for compliance with regulatory cleanup standards regarding the contamination in the vicinity of the Pond Site.
- 40. Burlington is the Commission operator of record for the Fox Lease and has been the operator of the Fox 7 since 2005 and the Fox 12H since 2008.
- 41. The pond hydrocarbon contamination at issue <u>iwas</u> on the Fox Lease property.

- 42. The source of the hydrocarbon contamination at the Pond Site is the same as the hydrocarbon production from the Fox Lease.
- 43. Burlington is a responsible person for compliance with regulatory cleanup standards regarding the contamination in the vicinity of the Pond Site.
- 44. On April 4, 2018, the Hearings Division of the Commission sent an initial Proposal for Decision and proposed order to Complainant, Targa, Burlington and Staff. The initial Proposal for Decision recommended the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners recommended the Commission order Targa to take those steps necessary to bring the site into compliance with regulatory remediation standards.
- 45. On April 18, 2018, Complainant filed exceptions. On April 19, 2018, Targa and Burlington filed exceptions. On April 27, 2018, Complainant filed a reply to the exceptions. On April 30, 2018, Targa, Burlington and Staff filed replies to the exceptions.
- 46. On May 15, 2018, the Hearings Division sent a notice to Complainant, Targa, Burlington and Staff notifying the parties that the initial Proposal for Decision was set to be considered by the Commission at the Commission's May 22, 2018 conference.
- 47. At a May 22, 2018 Commission conference, the Commission considered the initial Proposal for Decision. At the conference, the Commission remanded the case to reopen the hearing for the limited purpose of specifying a plan for assessment and remediation of the Pond Site. At the conference meeting, the Commission indicated that the only issue to be addressed was specific plans for Targa to remediate contamination at the Pond Site. The Commission directed the parties to develop a specific plan within 60 days.
- 48. On June 5, 2018, the Examiners issued an order setting a post-conference hearing date of September 10-12, 2018. The order was sent to Complainant, Targa, Burlington and Staff. The post-conference hearing was held on September 10 as noticed. Complainant, Targa, Burlington and Staff appeared at the hearing and participated. There was additional water sampling and analysis to be performed after the September 10 post-conference hearing. On October 26, 2018, Targa filed a letter stating the parties had agreed to continue the post-conference hearing on November 27, 2018. The post-conference hearing resumed on November 27 as agreed. All parties appeared and participated.
- 49. <u>Pursuant to the Commission's direction, Targa submitted its Supplemental Site Investigation Plan ("Work Plan") to Commission Staff on July 10, 2018.</u>
- 50. Commission Staff approved Targa's Work Plan, with comments, on July 20, 2018.

- 51. On July 23, 2018, Targa agreed to comply with Staff's comments to Targa's Work Plan.
- 52. On July 27, 2018, in accordance with Section 1(C) of the Work Plan, Targa's consultant, Ensolum, LLC., collected surface water samples from Mr. Smith's water impoundment in the immediate vicinity of the RRC trenches. The results were below detection limits and/or clean-up standards.
- 53. On August 1-3, 2018, Targa excavates and removes soil from Complainant's pond; and samples soil from the excavation sidewalls and floor. The results are below detection limits and/or clean-up standards.
 - a. On August 1, 2018, based on the absence of constituent concentrations in the surface water samples above the National Pollution Discharge Elimination System benchmark parameters, the Commission Class 1 and 2 GW Impacted Groundwater Delineation and Remediation Limits, and/or the Texas Commission on Environmental Quality Aquatic Life and Human Health surface water risk-based exposure limits, Targa's consultant, Ensolum, LLC., discharged the pond water over the earthen dam to the northern portion of the pond, in accordance with Section 1(C) of the Work Plan. During the discharge of pond water, no sheen or other visual indication of the presence of petroleum hydrocarbon contact water was observed. In order to improve the efficiency in dewatering, an estimated 110 barrels of ponded water were recovered from the floor of the Commission trench and transported off-site for disposal in accordance with state and federal regulations. In addition, more than 100 game fish (large-mouth bass, crappie, catfish, bluegill, and other sunfish) observed in the ponded water around the Commission trenches during water removal were collected utilizing a net or similar methodology and immediately released to the northern portion of the pond.
 - b. On August 2-3, 2018, in accordance with the requirements of Section 1(C) of the Work Plan, excavation activities began at the location where PSH was historically observed in the RRC trench south of monitoring well MW-7. The excavation proceeded based on the visual, olfactory, or PIO evidence of impairment. The excavation was evaluated and terminated based on the absence of PSH and visual, olfactory, and significant PIO evidence of impairment. The excavated soils were transported to the Targa Denton Station in accordance with the minor permit issued by RRC District 9.
 - c. PSH was not encountered during the performance of the supplemental site investigation activities. A dark brown silty clay seam, appearing to exhibit "oilfield waste staining and odor," according to Commission Staff, was observed just below the tan weathered limestone interface with the overlying dark brown silty clay, approximately 5 feet above the top of the gray limestone, along the western limit of the excavation, to the south of monitoring well MW-7. The silty

<u>clay seam was excavated during the performance of the exploratory excavation</u> activities.

- d. <u>Subsequent to the completion of excavation activities, ten discrete soil samples were collected from the excavation sidewalls based on the results of field screening the excavation utilizing a PIO capable of detecting volatile organic compounds.</u>
 - TPH of the soil samples ranged from below sample detection limits ("SDLs") to 514 mg/Kg
 - Benzene in the soil samples was below SDLs; 16.1ug/Kg for the silty clay seam
 - Toluene in the soil samples was below SDLs
 - Ethylbenzene for the soil samples ranged from below SDLs to 13.3 ug/Kg
 - Xylenes in the soil samples ranged from below laboratory RLs to 346 ug/Kg
- e. <u>Commission Staff witness, Mr. Peter Pope, stated that during excavation, seepage of condensate liquids was not observed.</u>
- f. Complainant's expert, Mr. Allen, was present when Targa conducted the excavation sampling. Mr. Allen did not object to the location where the samples were taken, the soil sampling itself, or to the place where Targa stopped excavating. Mr. Allen did not take any samples.
- 54. The results of the testing of the water samples taken in July 2018 and the soil samples taken during the August 1-3, 2018 excavation activities revealed that there were no samples that tested above Commission Class 1 and 2 Soil-to-Groundwater Protection Limits for Delineation and Remediation.
- 55. On August 13, 2018, Staff approves termination of the excavation activities.
 - a. Targa petitioned Commission Staff for approval to terminate the excavation in accordance with Section 1(B) Investigation of the Work Plan and proceed with Site Restoration in accordance with Section 1(D) of the Work Pan. Commission Staff issued its approval of Targa's request to proceed with Site Restoration on August 13, 2018, stating that:

Per the work plan, the excavation may be terminated based on the results of confirmation sampling. The results of confirmation sampling reveal concentrations in excavation sidewall samples that are either below detection limits and/or below the critical PCLs identified in the RRC's July 20, 2018 comment letter. No further indications of liquid condensate were observed during the excavation. Based on this information, RRC staff do not object to Targa moving forward with site restoration as described in the work plan, Section I D. We look forward to receiving a report, per Section I E.

- 56. On August 20, 2018, Targa files a Status Report, which included a Supplemental Environmental Site Investigation Report ("Supplemental Report") prepared by Mr. Mitchell, Targa's expert in this case. The Supplemental Report recommends no further remediation activities.
 - a. The only samples obtained on Mr. Smith's property since the remand were gathered by Targa. The samples were analyzed by Mr. Mitchell in the Supplemental Report. The Supplemental Report includes the conclusions that "[b]ased on the absence of PSH and/or chemical of concern concentrations above the RRC Class 1 and 2 Soil-to-Groundwater Protection Limits for Delineation and Remediation during the performance of Supplemental Site Investigation activities and the results of historical assessment activities, no additional investigation or response actions are warranted at the Site."
 - b. The Supplemental Report provides the following information regarding the samples reviewed in the report:

Total petroleum hydrocarbons: The excavation confirmation soil samples exhibited TPH concentrations ranging from below the laboratory [sample detection limits ("SDLs")] to 514 mg/Kg, which are below the RRC Protection Limit for Delineation and Remediation of 7,200 mg/Kg.

Benzene: The excavation confirmation soil samples did not exhibit benzene concentrations above the laboratory SDLs, which are below the RRC Protection Limit for Delineation and Remediation of 26 ug/Kg. The soil sample (8218-ES-1) collected from the silty clay seam to the south of monitoring well MW-7 exhibited a benzene concentration of 16.1 ug/Kg, which is below the RRC Delineation and Remediation Limit of 26 ug/Kg. In addition, the soil from the dark brown silty clay seam was excavated and transported off-site with the balance of excavated soil.

Toluene: The excavation confirmation soil samples did not exhibit toluene concentrations above the laboratory SDLs, which are below the RRC Protection Limit for Delineation and Remediation of 8,200 ug/Kg.

Ethylbenzene: The excavation confirmation soil samples exhibited ethylbenzene concentrations ranging from below the laboratory SDLs to 13.3 ug/Kg, which are below the RRC Protection Limit for Delineation and Remediation of 7,600 ug/Kg.

Xylene: The excavation confirmation soil samples exhibited xylenes concentrations ranging from below the laboratory RLs to 346 ug/Kg, which are below the RRC Protection Limit for

<u>Delineation and Remediation of 120,000 ug/Kg.</u>

- 57. On August 23, 2018, Staff asks for additional information regarding the test results and asks Targa to conduct additional groundwater testing.
- 58. On or about September 5, 2018, Targa answers Staff's questions and agreed to conduct additional groundwater testing.
- 59. On September 13, 2018, Targa performs the additional testing of groundwater; results are below detection limits and/or clean-up standards.
 - a. Targa conducted additional groundwater sampling and conducted site restoration on September 13, 2018, in accordance with Section 1(D) of the Work Plan. The groundwater sampling was conducted at the request of Commission Staff. The laboratory analysis of the groundwater samples collected from monitoring wells MW-5, MW-7, and MW-8 during the September 13, 2018 sampling event did not exhibit TPH and/or BTEX concentrations above the RRC Class 1 or 2 Impacted Groundwater Delineation and Remediation Limit.
 - b. On that same day, Targa also completed all of the site restoration work requested by Mr. Smith as evidenced by an email from Staff to Targa and the testimony of Mr. McQuade at the September 10, 2018 hearing.
- 60. <u>Targa provided its response to Commission Staff's comments in the form of its Status Report and Supplemental Site Investigation Addendum that included the following conclusion by Mr. Mitchell:</u>

The laboratory analysis of the groundwater samples collected from monitoring wells MW-5, MW-7 and MW-8 during the September 13, 2018 sampling event did not exhibit TPH and/or BTEX concentrations above the RRC Class 1 or 2 Impacted Groundwater Delineation and Remediation Limit.

- 61. On September 26, 2018, Staff provided its response and comments to Targa's Status Report and Supplemental Site Investigation Addendum. Staff's response included several requests for additional information.
- 62. <u>Targa submitted its Response to Commission Staff's September 26 letter that included Mr. Mitchell's Supplemental Site Investigation report that responded to Staff's questions and comments.</u>
- 63. <u>Commission Staff provided a letter clarifying one of its requests regarding tabulated field parameters and requesting an updated response from Targa.</u>
- 64. <u>Targa filed its response to Staff's letter and provided the requested additional information on October 30, 2018.</u>

- 65. On November 27, 2018, Commission Staff sent a letter to Mr. McQuade stating, among other things, that "[b]ased on field observations and the results of soil confirmation sampling during excavation activities on August 2, 2018, and subsequent groundwater sampling performed September 13, 2018, RRC staff has determined that no further remediation or investigation is necessary related to the contamination previously identified beneath and near the pond on Mr. Smith's property."
- 66. On November 27, 2018, Staff issues a letter stating that "[b]ased on field observations and the results of soil confirmation sampling during excavation activities on August 2, 2018, and subsequent groundwater sampling performed September 13, 2018, RRC staff has determined that no further remediation or investigation is necessary related to the contamination previously identified beneath and near the pond on Mr. Smith's property." Staff asks Targa to plug the monitor wells.
- 67. <u>Prior to the Commission remand on May 22, 2018</u>, delineation, assessment and if necessary, remediation of the contamination at the Pond Site needed to be performed, which should include:
 - 1. Identification of the extent of contamination of surface soils;
 - 2. Identification of the presence, if any, of hydrocarbon contamination of groundwater;
 - 3. Removal of any free hydrocarbons;
 - 4. Evaluation of current conditions of the affected pond and development of a plan to remediate affected media and prevent further impacts to the pond; and
 - 5. Implementation of a plan to remediate approved by Staff.
- 68. There is Prior to the Commission remand, there was evidence of hydrocarbon liquids in the ground near the pond and commingled with groundwater which needs needed to be addressed.
- 69. The hydrocarbon contamination at the Pond Site is was from condensate produced on the Fox Lease.
- 70. The hydrocarbon contamination at the Pond Site is was in close proximity to surface water of the pond and shallow groundwater.
- 71. The hydrocarbon contamination at the Pond Site is was in a sensitive area.
- 72. After the Commission remand on May 22, 2018, Targa timely remediated the contamination at the Pond Site in accordance with regulatory standards under the direction of Staff.

Proposed Changes to Conclusions of Law

- 1. Proper notice of hearing was timely issued to appropriate persons entitled to notice. See, e.g., Tex. Gov't Code §§ 2001.051, .052; 16 Tex. Admin. Code §§ 1.42, 1.45.
- 2. The Commission has jurisdiction in this case. See, e.g., Tex. Nat. Res. Code §§ 81.051, 91.101; Tex. Water Code § 26.131.
- 3. Targa is a responsible person for regulatory cleanup of the contamination in the vicinity of the Pond Site and the Pipeline Release Point.
- 4. Burlington is a responsible person for regulatory cleanup of the contamination in the vicinity of the Pond Site.
- 5. <u>Prior to the Commission remand on May 22, 2018, The contamination at the Pond Site has had</u> not been assessed, delineated or remediated in accordance with Commission regulatory requirements.
- 6. <u>Prior to the Commission remand on May 22, 2018, The Fox Lease is was not in compliance with regulatory cleanup requirements.</u>
 - Targa should be required to assess and, if necessary, remediate the contamination in the vicinity of the Pond Site, including the Pipeline Release Point, in compliance with Commission regulatory standards, with consultation and approval of Commission staff.
- 7. The hydrocarbon contamination at the Pond Site consists consisted of condensate.
- 8. The hydrocarbon contamination at the Pond Site is was in a sensitive area.
- 9. The cleanup standard for the hydrocarbon contamination at the Pond Site is to be determined on a case-by-case basis in consultation with Commission staff. 16 Tex. Admin. Code § 3.91(b).
- 10. After the Commission remand, Targa remediated the contamination in the vicinity of the Pond Site, including the Pipeline Release Point, in compliance with Commission regulatory standards, with consultation and approval of Commission staff.
- 11. <u>Targa should not be required to further assess or remediate in the vicinity of the Pond Site.</u>
- 12. Complainant's request for additional relief should be denied.

IX. Recommendation, Proposed Findings of Fact and Proposed Conclusions of Law

Based on the record in this case and evidence presented, the Examiners recommend the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners recommend the Commission find that after the Commission remand, Targa timely remediated the contamination at the Pond Site in accordance with regulatory standards under the direction of Staff. The Examiners recommend that neither Targa nor Burlington be ordered to further assess and remediate the contamination at the Pond Site. The Examiners recommend the Commission deny Complainant's request for additional relief. Below are the recommended findings of facts and conclusions of law, reflecting the proposed changes, which were in strikeout and underline in the prior section above.

Findings of Fact

- 1. Mike Smith ("Complainant") filed a complaint ("Complaint") requesting the Commission order Targa Midstream Services, LLC ("Targa") and/or ConocoPhillips Company ("Conoco") to remediate hydrocarbon contamination Complainant initial discovered in the vicinity of a pond ("Pond Site") on his land ("Smith Property"). Complainant has owned the Smith Property, which is located near County Road 4513 in Wise County, for approximately 15 years.
- 2. Initially, Complainant filed the complaint only against Targa. While the case was pending, Complainant sought to add Conoco, and Conoco was admitted as a second respondent. Additionally, Staff appeared at the hearing and requested to participate and that the responsible parties for the contamination be required to take remedial action in accordance with regulatory standards. Staff was admitted as a party.
- 3. Burlington Resources Oil & Gas Company LP ("Burlington") is the current Commission record operator of the Commission lease at issue in this case and has been for all relevant time periods. Burlington sought to intervene as the true party in interest instead of Conoco; without objection, Burlington was admitted as a party.
- 4. On November 28, 2016, the Commission sent a Notice of Hearing setting a hearing date of January 10, 2017. The notice contained (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved and (4) a short and plain statement of the matters asserted. The hearing was held on January 10, 2017, as noticed. Complainant, Targa and Staff appeared and participated. Conoco appeared. The hearing was recessed at the end of the day on January 10 and resumed at agreed dates of May 10-12, 2017. All parties received more than 10 days' notice of the hearing. On the

hearing dates May 10-12, Complainant, Targa, Staff, Conoco and Burlington appeared and participated.

- 5. Complainant's pond is an artificial surface water feature created by an earthen dam being placed across a shallow south-to-north drainageway. The pond receives drainage from lands to the west, south and east. Complainant discovered a release of hydrocarbon contamination at the Pond Site.
- 6. Burlington is the lessor of the mineral rights on the Smith Property (the "Fox Lease") and is the operator of several gas wells near the Pond Site. The Fox Lease is a 380-acre mineral interest lease owned and operated by Burlington. Burlington has 12 producing wells on the Fox Lease. Wells 7 and 12H (the "Fox 7" and "Fox 12H") are geographically the closest two wells to the Pond Site.
- 7. Targa operates the gas gathering lines from wells on the Fox Lease, including the Fox 7 and Fox 12H and has been the operator of these pipelines for all relevant time periods. The gas is piped to a gas gathering line, which is owned by Burlington prior to a Targa sales meter, and ownership and operations transfers to Targa at the meter. This sales meter is at the end of a pipeline segment that runs about 1,400 feet to the south-southeast to the next gathering junction. The line comes off the sales meter and then elbows down to below ground and then proceeds towards the southeast. The pipeline was installed in 2005, when the Fox 7 was completed. It is four-inch steel. The original depth was about 36 inches. No elevation surveys were made of the in-place pipe.
- 8. The Fox 12H well was drilled in 2008. Prior to the Fox 12H being drilled, the ground surface was raised by the placement of fill to create the Fox 12H well pad. The pipe stayed in the original location, but fill was added on top. Now the pipe is about 8 feet deep in this area. Since it was installed, there was no pressure testing of the line between the 2005 installation and the discovery of the pipeline leak in October 2011.
- 9. From the Fox Lease sales meter, the pipeline runs about 250 feet to the southeast, then turns to the south-southeast and runs for a total of about 1,400 feet until the first block valve near the Fox Lease Well No. 6. The first segment of the line spatially converges to the pond as it moves south to the turning point 250 feet from the Fox Lease sales meter. The pipeline distance to the pond ranges from about 150 feet to 65 feet (from north to south), but this distance is variable depending on the water level in the pond. The surface trace of the pipeline follows surface topography that runs downhill from the Targa meters then the topography inclines uphill to the south. The topographic low point of this 1,400-foot section of the pipeline is under the northeast corner of the Fox 12H well pad.
- 10. There is no gas compression on the pipeline system between the Fox 7 and 12H and the Waggoner Compressor Station, which is about 10 miles downstream. Before compression at the Waggoner facility, the gas is scrubbed to remove liquids

(condensate and water) that have condensed out of the gas stream due to decreased temperature and pressure. Additional processing and removal of natural gas liquids ("NGL") is performed further downstream at the Chico Gas Plant.

- 11. According to the gas gathering contract between Burlington and Targa ("Contract"), Targa takes title to the gas and all constituents therein. The Targa sales meter is where the transfer occurs. The Contract further provides Burlington shall not process the gas other than by a conventional separator or separators operating with no internal piping for heat interchange and which operate without any chilling or refrigeration. At the compressor station, Targa has scrubbers and oil tanks. Targa processes the gas and can sell any oil, or condensate, recovered. Targa is titled to one-hundred percent of all gas and liquids flowing through the Targa sales meter; transfer of all products that enter the pipeline at the Targa sales meter changes custody there. In exchange for that custody and title transfer, Burlington receives a percentage of the proceeds from sales downstream.
- 12. Complainant discovered hydrocarbon contamination on Saturday, October 8, 2011. He was fishing in his pond when he noticed a strong odor that smelled like diesel. There was a dry section south of the pond, due to drought conditions, with a wet spot on the ground. The odor appeared to come from the location where the wet spot was, so he dug a hole at the wet spot. There was a light yellowish liquid that filled a portion of the hole and stayed at a constant level. Complainant put a stake in the ground to mark where he first observed the contamination (the "Pond Discovery Location"). Currently, the location where Complainant dug and found the liquid is under water and part of the pond.
- 13. Complainant visited the Smith Property, including fishing at the pond, most weekends and on holidays. Prior to October 8, 2011, he had never noticed an odor. Around September 13, 2011, while the south area of the pond was dry, a person he hired excavated and enlarged the dry southern area of the pond.
- 14. After he discovered the contamination, Complainant called a representative of Burlington, who told him there was no Burlington representative available to go to the location, but a Targa representative was available to meet with him.
- 15. A Targa representative, Mike Burris, came to the site on October 9, 2011. The Targa representative saw and acknowledged the contamination. Both Complainant and Mr. Burris took samples of the liquid. According to Mr. Burris, the liquid sample exhibited two immiscible phases. Mr. Burris stated it appeared to be water and some kind of petroleum product.
- 16. Because it was supposed to rain that night, Targa did place booms around the hole that Mr. Smith had dug so that if it did rain, the booms would catch any runoff. It did rain that night enough that the south end of the pond, where the discovery site was located, was under water.

- 17. On October 9, 2011, Mr. Smith emailed two Burlington representatives to convey the facts of discovery of the contamination and visit by Mr. Burris. He asked that they keep him updated as to what is being done. Burlington responded that Targa confirmed "the leak is on their pipeline." Burlington further directed Complainant to discuss clean-up efforts with Targa's representatives. Burlington's representative stated that Burlington should not be commenting "since it is not our asset."
- 18. After Burlington notified Targa of Complainant's discovered spill, Targa isolated and tested the pipe in the vicinity of the Pond Site; the pipe would not hold pressure. Consequently, Targa excavated the area to expose the pipe, starting at the sales meter and continuing along the pipe until it discovered a small hole caused by corrosion. Targa replaced 60 feet of pipe. The hole in the pipe was approximately 150 feet from the Pond Discovery Location. The release point is to the southwest of the Pond Site on the northeast corner of the Fox 12H pad.
- 19. After the pipeline was replaced, Targa pressure tested the line and it held pressure. In or about June 2014, Targa did a follow-up test. According to the test results, the pipe held pressure.
- 20. After the discovery of the hydrocarbons in the pond and the leak in Targa's pipeline, the parties conducted various site inspections and sampling events over an approximately five-year period.

a. October 8, 2011 - Sampling Event 1: the discovery of contamination at the Pond Site

On the day of the discovery of contamination, October 8, 2011, both Complainant and Targa's representative visited the Pond Site, saw and smelled what appeared to be hydrocarbons and each took a sample of the liquid. Complainant's sample was ultimately tested; the results indicate that the sample contained unrefined hydrocarbons. The sample was tested for total petroleum hydrocarbons ("TPH") and Benzene, Toluene, Ethylbenzene and Xylenes ("BTEX"). The sample collected by Complainant contained elevated TPH levels. Targa's representative did not retain his sample, so it was never tested.

b. October 10, 2011 - Pipeline leak detection inspection

Targa discovered a small hole on the bottom of the pipeline at a depth of about 8 feet. The Pipeline Leak Location is near the northeast corner of the Fox 12H well pad, about 100 feet southwest of the pond. Targa determined the hole was caused by internal corrosion, and about 60 feet of pipe was replaced. Mr. Burris observed gas flowing from the hole in the bottom of the pipeline.

c. December 10, 2011 – Sampling Event 2: Complainant's consultant, Mr. Allen, initial site visit and sampling of pond surface water

After the discovery of the hydrocarbons at the Pond Site, Complainant hired an environmental consulting firm. The consultant assigned is David Allen. On December 10, 2011, Mr. Allen collected surface water samples from the Pond Site, but the results of the tested constituents were at a concentration below the laboratory quantitation limits ("non-detect" or "ND").

d. April 19, 2012 – Sampling Event 3: Staff initial inspection with Mr. Allen

After being notified of the possible contamination, on April 19, 2012, Staff inspected the Pond Site. Staff obtained soil and water samples from the pond and sights along the pipeline spill affected area. The testing results were ND.

e. August 6, 2012 – Sampling Event 4: Mr. Allen samples near the stake in the pond

On August 6, 2012, Mr. Allen collected sediment samples (designated MSP-1) from below the surface of the pond adjacent to the stake. He also collected surface water samples around the stake (designated MSP-1W). The lab results for the sediment sample are:

- TPH for MSP-1 was 835 mg/kg
- Benzene for MSP-1 was 0.291 mg/kg
- Toluene for MSP-1 was 4.360 mg/kg
- Ethylbenzene for MSP-1 was 0.975 mg/kg
- Xylenes for MSP-1 were 17.040 mg/kg

The lab results for the surface water sample are:

- TPH for MSP-1W was 792 mg/l
- Benzene for MSP-1W was ND
- Toluene for MSP-1W was 0.0363 mg/l
- Ethylbenzene for MSP-1W was ND
- Xylenes for MSP-1W were 0.0905 mg/l

f. August 21, 2012 – Sampling Event 5: Targa takes samples for a limited assessment

Targa hired a consulting firm to perform additional work at Complainant's property. The consultant assigned was Chris Mitchell. On August 21, 2012, Mr. Mitchell visited the site and advanced four soil borings (designated B-1 through B-4) around the vicinity of the pipeline release point on the Targa gas line. B-1 was advanced adjacent to the estimated release point ("Pipeline Release Point"). B-2 was advanced approximately 20 feet northeast of the Pipeline Release Point, between the release point and the pond and almost directly west of the Pond Discovery Location. B-3 was advanced approximately 40 feet from the Pipeline Release Point, and northwest of the Pond Discovery Location. Both B-2 and B-3 are topographically downgradient from the Pipeline Release Point. B-4 was advanced

approximately 20 feet southwest of the Pipeline Release Point, on the opposite side of the pipeline from the pond. At the site, petroleum hydrocarbon odors were detected in the soil samples from B-1, B-2 and B-3—the samples collected between the Pipeline Release Point and the Pond Discovery Location. A photoionization detector ("PID") capable of detecting volatile organic compounds ("VOCs") was utilized on the soil borings. The PID readings of the soil borings ranged as follows:

- B-1 range was up to 206 ppm
- B-2 range was up to 37 ppm
- B-3 range was up to 169 ppm
- B-4 range was up to 29 ppm

Soil samples from each boring were collected from the area with the highest PID reading and sent to a lab to be tested for TPH and BTEX. The lab results range as follows:

- TPH for B-1 through B-4 ranged from 76.4 mg/kg to 381 mg/kg
- Benzene for B-1 through B-4 ranged from ND to 13.3 μg/kg
- Toluene for B-1 through B-4 ranged from ND to 4,180 μg/kg
- Ethylbenzene for B-1 through B-4 was ND
- Xylenes for B-1 through B-4 ranged from 107 μg/kg to 35,300 μg/kg

g. November 6, 2012 et al. – Sampling Event 6: Targa initiates groundwater monitoring

Mr. Mitchell performs another investigation including on-site activity on the following dates: November 6-7, 2012, December 12, 2012, February 12, 2013 and April 18, 2013. The on-site activity from December 12, 2012 through April 18, 2013 predominately consisted of taking groundwater monitor samples from monitoring wells installed November 2012.

On November 6-7, 2012, Targa installed eight additional soil borings: MW-5 through MW-8 and B-9 through B-12. Hydrocarbon odors were detected in MW-7, B-9, B-10 and B-11. PID ranged from below detection to 1,710 ppm. MW-5 through MW-8 were converted to permanent monitoring wells. One sample from each boring, taken from the zone exhibiting the highest PID rating, olfactory or visual evidence of impairment, was sent to a lab for testing. Additionally, one sample was taken from MW-6 at the estimated depth of the Targa pipeline adjacent to the Pipeline Release Point.

Sediment samples were collected from the pond's shoreline downgradient from the Pipeline Release Point (SED1 through SED-3). Surface water samples (SW-1 and SW-2) were collected from the pond downgradient of the pipeline. Groundwater samples were taken from MW-5 through MW-8. The lab results for the soil samples range as follows:

- TPH for MW-5 through B-12 ranged from ND to 1,760 mg/kg
- Benzene for MW-5 through B-12 were ND
- Toluene for MW-5 through B-12 ranged from ND to 0.404 mg/kg
- Ethylbenzene for MW-5 through B-12 were ND
- Xylenes for MW-5 through B-12 ranged from ND to 5.86 mg/kg

The lab results for the groundwater samples range as follows:

- TPH for MW-5 through MW-8 was ND
- Benzene for MW-5 through MW-8 ranged from ND to 0.0043 mg/l
- Toluene for MW-5 through MW-8 ranged from ND to 0.0051 mg/l
- Ethylbenzene for MW-5 through MW-8 was ND
- Xylenes for MW-5 through MW-8 ranged from ND to 0.0238 mg/l

The lab results for the sediment samples range as follows:

- TPH for SED-1 through SED-3 ranged from ND to 119 mg/kg
- Benzene for SED-1 through SED-3 was ND
- Toluene for SED-1 through SED-3 ranged from ND to 0.007 mg/kg
- Ethylbenzene for SED-1 through SED-3 was ND
- Xylenes for SED-1 through SED-3 ranged from ND to 11.7 mg/kg
- Xylenes for SED-1R (resampling of SED-1 due to the opinion that the 11.7 mg/kg result was inconsistent with other data points) were 0.0624 mg/kg

The lab results for the surface water samples range as follows:

- TPH for SW-1 and SW-2 ranged from ND to 1.5 mg/l
- Benzene for SW-1 and SW-2 was ND
- Toluene for SW-1 and SW-2 was ND
- Ethylbenzene for SW-1 and SW-2 was ND
- Xylenes for SW-1 and SW-2 ranged from ND to 0.0082 mg/l

h. December 17, 2012 – Sampling Event 7: Complainant expert's site investigation

On December 17, 2012, Mr. Allen returned to the Pond Site for additional sampling. The stake identifying the Pond Discovery Location was visible. He collected surface water (MSP-2 SW), soil (MSP-2 Soil) and sediment (MSP-2 Sed) samples in the vicinity of the stake, which were sent to a lab for testing. The lab results for the soil sample are as follows:

- TPH for MSP-2 Soil was 3,731.0 mg/kg
- Benzene for MSP-2 Soil was 1.540 mg/kg

- Toluene for MSP-2 Soil was 23.200 mg/kg
- Ethylbenzene for MSP-2 Soil was 4.410 mg/kg
- Xylenes for MSP-2 Soil were 80.300 mg/kg

The lab results for the sediment samples are as follows:

- TPH for MSP-2 Sed was 683.0 mg/kg
- Benzene for MSP-2 Sed was 0.0358 mg/kg
- Toluene for MSP-2 Sed was ND
- Ethylbenzene for MSP-2 Sed was 0.0386 mg/kg
- Xylenes for MSP-2 Sed were 1.055 mg/kg

The lab results for the surface water sample are as follows:

- TPH for MSP-2 SW was ND
- Benzene for MSP-2 SW was ND
- Toluene for MSP-2 SW was ND
- Ethylbenzene for MSP-2 SW was ND
- Xylenes for MSP-2 SW were 0.0268 mg/l

December 17, 2012 – Sampling Event 8: Targa groundwater monitoring sampling event

On September 5, 2013, Mr. Mitchell, on behalf of Targa, visited the site to collect surface water samples and groundwater samples from MW-5 through MW-8. The lab results for the groundwater samples are as follows:

- Benzene for MW-7 was 22.9 µg/l
- Xylenes for MW-8 were 35.4 μg/l
- TPH for MW-8 was 1.0 mg/l

The remaining sampling results for TPH and BTEX were ND.

j. November 11, 12, 21 and 24, 2014 – Sampling Event 9: Staff trench and sampling event

On November 11 and 12, 2014, Staff excavated several trenches beginning from the pond toward locations upslope and where Targa previously installed borings and wells. Water with a hydrocarbon sheen was observed in the excavation in the pond. Staff observed water and a light hydrocarbon liquid accumulating in one of the trenches near MW-7. Staff collected water and soil samples.

On November 21, 2014, Staff dewaters one of the trenches. After dewatering, Staff collected sample of PSH liquid seeping from the western wall of the trench—the western wall is the Targa pipeline side of the excavation. On November 24, Staff

took a sample from one of the Burlington condensate storage tanks from the tank battery for the Fox 7 and 12H. Staff obtained chromatographs comparing the two samples; they are practically identical.

k. November 21, 2014 – Sampling Event 10: Targa groundwater monitoring event

On November 21, 2014, Targa takes groundwater samples. PSH was not observed. The lab results for the groundwater samples are as follows:

- Benzene for MW-7 was 6.9 μg/l
- Ethylbenzene for MW-7 was 1.1 μg/l
- Xylene for MW-7 was 16.0 μg/l
- Benzene for MW-8 was 4.4 μg/l
- Ethylbenzene for MW-8 was 1.4 μg/l
- Xylene for MW-8 was 12.0 μg/l

The remaining sampling results for TPH and BTEX were ND.

August 2016 – Sampling Event 11: Targa excavation event

In August 2016, Targa conducted excavation activities in the vicinity of the Pipeline Release Point; Targa excavated along the pipeline horizontally 5 feet on each side of the Pipeline Release Point and vertically to competent limestone. PSH was not observed. Staff took two samples of the groundwater that had recharged into the excavation for TPH and BTEX. All were ND.

m. September 28, 2016 – Sampling Event 12: Complainant trenching and sampling event

On September 28, 2016, Mr. Allen, on behalf of Complainant, returned to the Pond Site to conduct trenching to further delineate the contamination and to conduct groundwater sampling. The trenching occurred southwest of MW-7and MW-8 and northeast of the Targa excavation and advanced approximately 45 feet. Three soil grab samples (EX-1 through EX-3) were collected, as well as a grab sample of the groundwater accumulating in the trench (EXW). He also took groundwater samples from MW-5, MW-7 and MW-8. The lab results are as follows:

- TPH for EXW was 10.8 mg/l
- Benzene for EXW was 0.00408 mg/l
- Ethylbenzene for EXW was 0.00759 mg/l
- Xylenes for EXW were 0.0916 mg/l
- TPH for EX-1 through EX-3 ranged from 125 to 258 mg/kg
- Benzene for EX-1 through EX-3 ranged from 0.00127 to 0.0113 mg/kg
- Toluene for EX-1 through EX-3 ranged from 0.00202 to 0.00488 mg/kg

- Ethylbenzene for EX-1 through EX-3 ranged from 0.0212 to 0.0746 mg/kg
- Xylenes for EX-1 through EX-3 ranged from 0.202 to 2.34 mg/kg
- 21. On September 5, 2013, a Commission inspector noted strong hydrocarbon odors and the presence of groundwater mixed with possible condensate at the Pond Discovery Location; the area around the Pond Discovery Location had been recently drained. There were no odors or visible indications of hydrocarbon contamination on a July 17, 2014 inspection, but the pond was full of rainwater obscuring the Pond Discovery Location.
- 22. Generally, the lithology of the area is that clay is encountered at surface to different depths based on the topography. Below the clay is an approximately one-foot layer of weathered and fractured limestone. Below that is competent limestone.
- 23. Based on the observations and information gathered during the sampling events—including visual observations, hydrocarbon odor detection, PID readings and the sampling results—after the discovery of the pond contamination and the pipeline leak, hydrocarbons have been detected in and near the pond, near the pipeline leak location and the soil and groundwater in the area in between.
- 24. Condensate can occur in a gas pipeline such as Targa's. Condensate can get into a gas line and accumulate in a low spot in the line. This moisture in the line can cause corrosion.
- 25. The reason for the leak in the Targa pipeline is internal corrosion.
- 26. The pond is downgradient from where the pipeline leak occurred.
- 27. Shallow groundwater can follow the topographic gradient. In this case it would be east-northeast, and the Pond Discovery Location is northeast of the Pipeline Leak Location.
- 28. Hydrocarbons were found in the weathered limestone. The hydrocarbons appear to have come from subsurface and not from being dumped on the surface. The hydrocarbons had to migrate from somewhere subsurface. Underground releases will migrate along the path of least resistance. In this case, there is weathered limestone and fractured limestone directly under the soil surface layer. The hydrocarbons appear to have flowed downgradient in the fractures of the weathered limestone.
- 29. It is not always the case that the concentrations of hydrocarbons are highest at their release point because of contaminant fate and transport over time.
- 30. Prior to the issuance of the initial Proposal for Decision, there had been no removal of free hydrocarbons from the vicinity of the Pond Site.

- 31. Regarding delineation, a clean well or data point is when the groundwater is not affected, and the soils are not affected.
- 32. Prior to the issuance of the initial Proposal for Decision, there had been no delineation of the area of contamination in the vicinity of the Pond Site.
- 33. As of April 4, 2018, further delineation of the impacted hydrocarbon footprint needed to be performed since it was not yet defined.
- 34. The Pond Site was contaminated with petroleum hydrocarbon constituents attributed to the release from Targa's pipeline.
- 35. In addition, the following factors indicate the leak from the Targa pipeline caused the pond contamination:
 - The proximity of the pipeline leak to the pond;
 - Targa replaced 60 feet of pipeline around the Pipeline Leak Location;
 - The Pipeline Leak Location is upgradient of the contamination in the pond
 - There was evidence of hydrocarbons near the Pipeline Leak Location;
 - The area of confirmed hydrocarbon impact includes the pipeline where Targa had a confirmed leak, the area around the Pond Discovery Location and in between:
 - A migration pathway of fractured limestone exists between the area of replaced pipe and the contamination in Complainant's pond;
 - Targa's gas pipeline can and does include liquids;
 - There was a known leak in a pipeline that is located within the footprint of hydrocarbon impacts;
 - The length of time the pipeline leak persisted is unknown; and
 - The chromatographs of fluid samples show a common source of the hydrocarbons in the pond and the Burlington lease production.
- 36. The contamination entered the pond from the soil beneath the pond, most probably via fractures, seams or channels in the underlying limestone.
- 37. The leak in Targa's pipeline likely caused the hydrocarbon contamination at the Pond Site.
- 38. Targa is the Commission gatherer of record for the gas from the Fox 7 and Fox 12H and has been for the Fox 7 since 2006 and the Fox 12H since 2008.
- 39. Targa is a responsible person for compliance with regulatory cleanup standards regarding the contamination in the vicinity of the Pond Site.
- 40. Burlington is the Commission operator of record for the Fox Lease and has been the operator of the Fox 7 since 2005 and the Fox 12H since 2008.
- 41. The pond hydrocarbon contamination at issue was on the Fox Lease property.

- 42. The source of the hydrocarbon contamination at the Pond Site is the same as the hydrocarbon production from the Fox Lease.
- 43. Burlington is a responsible person for compliance with regulatory cleanup standards regarding the contamination in the vicinity of the Pond Site.
- 44. On April 4, 2018, the Hearings Division of the Commission sent an initial Proposal for Decision and proposed order to Complainant, Targa, Burlington and Staff. The initial Proposal for Decision recommended the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners recommended the Commission order Targa to take those steps necessary to bring the site into compliance with regulatory remediation standards.
- 45. On April 18, 2018, Complainant filed exceptions. On April 19, 2018, Targa and Burlington filed exceptions. On April 27, 2018, Complainant filed a reply to the exceptions. On April 30, 2018, Targa, Burlington and Staff filed replies to the exceptions.
- 46. On May 15, 2018, the Hearings Division sent a notice to Complainant, Targa, Burlington and Staff notifying the parties that the initial Proposal for Decision was set to be considered by the Commission at the Commission's May 22, 2018 conference.
- 47. At a May 22, 2018 Commission conference, the Commission considered the initial Proposal for Decision At the conference, the Commission remanded the case to reopen the hearing for the limited purpose of specifying a plan for assessment and remediation of the Pond Site. At the conference meeting, the Commission indicated that the only issue to be addressed was specific plans for Targa to remediate contamination at the Pond Site. The Commission directed the parties to develop a specific plan within 60 days.
- 48. On June 5, 2018, the Examiners issued an order setting a post-conference hearing date of September 10-12, 2018. The order was sent to Complainant, Targa, Burlington and Staff. The post-conference hearing was held on September 10 as noticed. Complainant, Targa, Burlington and Staff appeared at the hearing and participated. There was additional water sampling and analysis to be performed after the September 10 post-conference hearing. On October 26, 2018, Targa filed a letter stating the parties had agreed to continue the post-conference hearing on November 27, 2018. The post-conference hearing resumed on November 27 as agreed. All parties appeared and participated.
- 49. Pursuant to the Commission's direction, Targa submitted its Supplemental Site Investigation Plan ("Work Plan") to Commission Staff on July 10, 2018.

- 50. Commission Staff approved Targa's Work Plan, with comments, on July 20, 2018.
- 51. On July 23, 2018, Targa agreed to comply with Staff comments to Targa's Work Plan.
- 52. On July 27, 2018, in accordance with Section 1(C) of the Work Plan, Targa's consultant, Ensolum, LLC., collected surface water samples from Mr. Smith's water impoundment in the immediate vicinity of the RRC trenches. The results were below detection limits and/or clean-up standards.
- 53. On August 1-3, 2018, Targa excavates and removes soil from Complainant's pond; and samples soil from the excavation sidewalls and floor. The results are below detection limits and/or clean-up standards.
 - a. On August 1, 2018, based on the absence of constituent concentrations in the surface water samples above the National Pollution Discharge Elimination System benchmark parameters, the Commission Class 1 and 2 GW Impacted Groundwater Delineation and Remediation Limits, and/or the Texas Commission on Environmental Quality Aquatic Life and Human Health surface water risk-based exposure limits, Targa's consultant, Ensolum, LLC., discharged the pond water over the earthen dam to the northern portion of the pond, in accordance with Section 1(C) of the Work Plan. During the discharge of pond water, no sheen or other visual indication of the presence of petroleum hydrocarbon contact water was observed. In order to improve the efficiency in dewatering, an estimated 110 barrels of ponded water were recovered from the floor of the Commission trench and transported off-site for disposal in accordance with state and federal regulations. In addition, more than 100 game fish (large-mouth bass, crappie, catfish, bluegill, and other sunfish) observed in the ponded water around the Commission trenches during water removal were collected utilizing a net or similar methodology and immediately released to the northern portion of the pond.
 - b. On August 2-3, 2018, in accordance with the requirements of Section 1(C) of the Work Plan, excavation activities began at the location where PSH was historically observed in the RRC trench south of monitoring well MW-7. The excavation proceeded based on the visual, olfactory, or PIO evidence of impairment. The excavation was evaluated and terminated based on the absence of PSH and visual, olfactory, and significant PIO evidence of impairment. The excavated soils were transported to the Targa Denton Station in accordance with the minor permit issued by RRC District 9.
 - c. PSH was not encountered during the performance of the supplemental site investigation activities. A dark brown silty clay seam, appearing to exhibit "oilfield waste staining and odor," according to Commission Staff, was observed just below the tan weathered limestone interface with the overlying dark brown silty clay, approximately 5 feet above the top of the gray limestone, along the

western limit of the excavation, to the south of monitoring well MW-7. The silty clay seam was excavated during the performance of the exploratory excavation activities.

- d. Subsequent to the completion of excavation activities, ten discrete soil samples were collected from the excavation sidewalls based on the results of field screening the excavation utilizing a PIO capable of detecting volatile organic compounds.
 - TPH of the soil samples ranged from below sample detection limits ("SDLs") to 514 mg/Kg
 - Benzene in the soil samples was below SDLs; 16.1ug/Kg for the silty clay seam
 - Toluene in the soil samples was below SDLs
 - Ethylbenzene for the soil samples ranged from below SDLs to 13.3 ug/Kg
 - Xylenes in the soil samples ranged from below laboratory RLs to 346 ug/Kg
- e. Commission Staff witness, Mr. Peter Pope, stated that during excavation, seepage of condensate liquids was not observed.
- f. Complainant's expert, Mr. Allen, was present when Targa conducted the excavation sampling. Mr. Allen did not object to the location where the samples were taken, the soil sampling itself, or to the place where Targa stopped excavating.²²⁵ Mr. Allen did not take any samples.²²⁶
- 54. The results of the testing of the water samples taken in July 2018 and the soil samples taken during the August 1-3, 2018 excavation activities revealed that there were no samples that tested above Commission Class 1 and 2 Soil-to-Groundwater Protection Limits for Delineation and Remediation.
- 55. On August 13, 2018, Staff approves termination of the excavation activities.
 - a. Targa requested Commission Staff for approval to terminate the excavation in accordance with Section 1(B) – Investigation of the Work Plan and proceed with Site Restoration in accordance with Section 1(D) of the Work Pan. Commission Staff issued its approval of Targa's request to proceed with Site Restoration on August 13, 2018, stating that:

Per the work plan, the excavation may be terminated based on the results of confirmation sampling. The results of confirmation sampling reveal concentrations in excavation sidewall samples that are either below detection limits and/or below the critical PCLs identified in the RRC's July 20, 2018 comment letter. No further indications of liquid condensate were observed during the excavation. Based on this information, RRC staff do not object to

²²⁵ Tr. Vol. 5 at 57.

²²⁶ *Id*.

Targa moving forward with site restoration as described in the work plan, Section I D. We look forward to receiving a report, per Section I E.

- 56. On August 20, 2018, Targa files a Status Report which included a Supplemental Environmental Site Investigation Report ("Supplemental Report") prepared by Mr. Mitchell, Targa's expert in this case. The Supplemental Report recommends no further remediation activities.
 - a. The only samples obtained on Mr. Smith's property since the remand were gathered by Targa. The samples were analyzed by Mr. Mitchell in the Supplemental Report. The Supplemental Report includes the conclusions that "[b]ased on the absence of PSH and/or chemical of concern concentrations above the RRC Class 1 and 2 Soil-to-Groundwater Protection Limits for Delineation and Remediation during the performance of Supplemental Site Investigation activities and the results of historical assessment activities, no additional investigation or response actions are warranted at the Site."
 - b. The Supplemental Report provides the following information regarding the samples reviewed in the report:

Total petroleum hydrocarbons: The excavation confirmation soil samples exhibited TPH concentrations ranging from below the laboratory [sample detection limits ("SDLs")] to 514 mg/Kg, which are below the RRC Protection Limit for Delineation and Remediation of 7,200 mg/Kg.

Benzene: The excavation confirmation soil samples did not exhibit benzene concentrations above the laboratory SDLs, which are below the RRC Protection Limit for Delineation and Remediation of 26 ug/Kg. The soil sample (8218-ES-1) collected from the silty clay seam to the south of monitoring well MW-7 exhibited a benzene concentration of 16.1 ug/Kg, which is below the RRC Delineation and Remediation Limit of 26 ug/Kg. In addition, the soil from the dark brown silty clay seam was excavated and transported off-site with the balance of excavated soil.

Toluene: The excavation confirmation soil samples did not exhibit toluene concentrations above the laboratory SDLs, which are below the RRC Protection Limit for Delineation and Remediation of 8,200 ug/Kg.

Ethylbenzene: The excavation confirmation soil samples exhibited ethylbenzene concentrations ranging from below the laboratory SDLs to 13.3 ug/Kg, which are below the RRC Protection Limit for Delineation and Remediation of 7,600 ug/Kg.

Xylene: The excavation confirmation soil samples exhibited xylenes concentrations ranging from below the laboratory RLs to 346 ug/Kg, which are below the RRC Protection Limit for Delineation and Remediation of 120,000 ug/Kg.

- 57. On August 23, 2018, Staff asks for additional information regarding the test results and asks Targa to conduct additional groundwater testing.
- 58. On or about September 5, 2018, Targa answers Staff's questions and agreed to conduct additional groundwater testing.
- 59. On September 13, 2018, Targa performs the additional testing of groundwater; results are below detection limits and/or clean-up standards.
 - a. Targa conducted additional groundwater sampling and conducted site restoration on September 13, 2018, in accordance with Section 1(D) of the Work Plan. The groundwater sampling was conducted at the request of Commission Staff. The laboratory analysis of the groundwater samples collected from monitoring wells MW-5, MW-7, and MW-8 during the September 13, 2018 sampling event did not exhibit TPH and/or BTEX concentrations above the RRC Class 1 or 2 Impacted Groundwater Delineation and Remediation Limit.
 - b. On that same day, Targa also completed all of the site restoration work requested by Mr. Smith as evidenced by an email from Staff to Targa and the testimony of Mr. McQuade at the September 10, 2018 hearing.
- 60. Targa provided its response to Commission Staff's comments in the form of its Status Report and Supplemental Site Investigation Addendum that included the following conclusion by Mr. Mitchell:

The laboratory analysis of the groundwater samples collected from monitoring wells MW-5, MW-7 and MW-8 during the September 13, 2018 sampling event did not exhibit TPH and/or BTEX concentrations above the RRC Class 1 or 2 Impacted Groundwater Delineation and Remediation Limit.

- 61. On September 26, 2018, Staff provided its response and comments to Targa's Status Report and Supplemental Site Investigation Addendum. Staff's response included several requests for additional information.
- 62. Targa submitted its Response to Commission Staff's September 26 letter that included Mr. Mitchell's Supplemental Site Investigation report that responded to Staff's questions and comments.
- 63. Commission Staff provided a letter clarifying one of its requests regarding tabulated field parameters and requesting an updated response from Targa.

- 64. Targa filed its response to Staff's letter and provided the requested additional information on October 30, 2018.
- 65. On November 27, 2018, Commission Staff sent a letter to Mr. McQuade stating, among other things, that "[b]ased on field observations and the results of soil confirmation sampling during excavation activities on August 2, 2018, and subsequent groundwater sampling performed September 13, 2018, RRC staff has determined that no further remediation or investigation is necessary related to the contamination previously identified beneath and near the pond on Mr. Smith's property."
- 66. On November 27, 2018, Staff issues a letter stating that "[b]ased on field observations and the results of soil confirmation sampling during excavation activities on August 2, 2018, and subsequent groundwater sampling performed September 13, 2018, RRC staff has determined that no further remediation or investigation is necessary related to the contamination previously identified beneath and near the pond on Mr. Smith's property." Staff asks Targa to plug the monitor wells.
- 67. Prior to the Commission remand on May 22, 2018, delineation, assessment and if necessary, remediation of the contamination at the Pond Site needed to be performed, which should include:
 - 1. Identification of the extent of contamination of surface soils;
 - 2. Identification of the presence, if any, of hydrocarbon contamination of groundwater;
 - 3. Removal of any free hydrocarbons;
 - 4. Evaluation of current conditions of the affected pond and development of a plan to remediate affected media and prevent further impacts to the pond: and
 - 5. Implementation of a plan to remediate approved by Staff.
- 68. Prior to the Commission remand, there was evidence of hydrocarbon liquids in the ground near the pond and commingled with groundwater which needed to be addressed.
- 69. The hydrocarbon contamination at the Pond Site was from condensate produced on the Fox Lease.
- 70. The hydrocarbon contamination at the Pond Site was in close proximity to surface water of the pond and shallow groundwater.
- 71. The hydrocarbon contamination at the Pond Site was in a sensitive area.

72. After the Commission remand on May 22, 2018, Targa timely remediated the contamination at the Pond Site in accordance with regulatory standards under the direction of Staff.

Conclusions of Law

- 1. Proper notice of hearing was timely issued to appropriate persons entitled to notice. See, e.g., Tex. Gov't Code §§ 2001.051, .052; 16 Tex. Admin. Code §§ 1.42, 1.45.
- 2. The Commission has jurisdiction in this case. See, e.g., Tex. Nat. Res. Code §§ 81.051, 91.101; Tex. Water Code § 26.131.
- 3. Targa is a responsible person for regulatory cleanup of the contamination in the vicinity of the Pond Site and the Pipeline Release Point.
- 4. Burlington is a responsible person for regulatory cleanup of the contamination in the vicinity of the Pond Site.
- 5. Prior to the Commission remand on May 22, 2018, the contamination at the Pond Site had not been assessed, delineated or remediated in accordance with Commission regulatory requirements.
- 6. Prior to the Commission remand on May 22, 2018, the Fox Lease was not in compliance with regulatory cleanup requirements.
- 7. The hydrocarbon contamination at the Pond Site consisted of condensate.
- 8. The hydrocarbon contamination at the Pond Site was in a sensitive area.
- 9. The cleanup standard for the hydrocarbon contamination at the Pond Site is to be determined on a case-by-case basis in consultation with Commission staff. 16 Tex. Admin. Code § 3.91(b).
- 10. After the Commission remand, Targa remediated the contamination in the vicinity of the Pond Site, including the Pipeline Release Point, in compliance with Commission regulatory standards, with consultation and approval of Commission staff.
- 11. Targa should not be required to further assess or remediate in the vicinity of the Pond Site.
- 12. Complainant's request for additional relief should be denied.

Recommendations

The Examiners recommend the Commission find it can hold Targa and/or Burlington responsible for compliance with regulatory remediation standards. The Examiners recommend the Commission find that after the Commission remand, Targa timely remediated the contamination at the Pond Site in accordance with regulatory standards under the direction of Staff. The Examiners recommend in this case that Targa not be ordered to further assess or remediate contamination at the Pond Site and that Complainant's request for additional relief be denied.

Respectfully,

Jegnifer Cook

Administrative Law Judge

Petar Buva

Technical Examiner