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Sent: Monday, June 06, 2011 9:57 PM
To: Fahn, Patrick J.; Jeffcoat-Sacco, Illona
Cc: Vern Meier; Jim Krause
Subject: Keystone Ludden Release Environmental Reports
Attachments: Off-Site Area Clean-up Plan - Agency draft 051911.pdf; Fig1_topo.pdf; Fig2_SitePlan.pdf; Fig3_offSiteWaterSampleLoc_REV.pdf; Fig4_soilSampleLoc.pdf; Fig5_oilMistedAreas.pdf; Fig6_landFarmAreas.pdf; Bosse Property - Insitu Land Farming Plan Excerpt 5-18-11.doc; Environmental Incident Report

Attached are the environmental reports that have been generated to date for the Keystone Ludden Pump Station release. This include a copy of the environmental incident report made to NDDH (spill report) and copies of work plans that have been provided to Jason Bosse (property owner) and NDDH. We have not issued any environmental cleanup reports up to this point. As more reports and information become available we will provide those also. If you have any questions please contact me.

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736 PU-06-421 Filed: 6/6/2011 Pages: 22
Ludden Pump Station failure environmental reports
provided to ND Dept. of Health

TransCanada Keystone Pipeline, LP

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DRAFT
INTERIM OFF-SITE AREA
CLEAN-UP PLAN
Ludden Pump Station
Brampton, ND

Prepared For: TransCanada
Keystone Pipeline, LP



Date: May 19, 2011

URS Project No. 31810958

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Interim Off-Site Area Clean-Up Plan
TransCanada Ludden Pump Station
Brampton, North Dakota

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TransCanada Ludden Pump Station
Brampton, North Dakota

1.0 INTRODUCTION

1.1 Overview (Figure 1 Site Location)

TransCanada Keystone Pipeline, LLC (TransCanada) has prepared this *Interim Off – Site Area Clean-Up Plan* (Plan) in response to a May 7, 2011 crude oil spill at its Ludden Pump Station in Brampton, North Dakota. The objective of this Plan is to communicate TransCanada's interim actions to mitigate residual off-site crude oil impacts to agricultural property located directly south of the Ludden Pump Station.

1.2 Scope of Plan

The scope of this plan is to address the mitigation of residual off-site crude oil which was released outside the property boundaries of TransCanada's Ludden Pump Station. Oil containment, recovery and clean-up activities being implemented within the Ludden Pump Station property and secondary containment structures will be documented in a separate spill cleanup completion report.

1.3 Site History

On Saturday, May 7, 2011, at 6:05 am local time, TransCanada oil control centre detected a drop in pressure at Ludden pump station in Sargent County, approximately 40 miles southwest of Milnor, North Dakota. Shortly after an initial investigation began, TransCanada received a call from a nearby resident indicating there was an incident at the pump station. Within minutes, TransCanada isolated the pump station by remotely closing the valves both up and down stream from the site. The first technician on site reported back that there was a release of oil from the pump station and the majority of it was contained on TransCanada's property. Some mist appears to have travelled outside of the TransCanada site and has settled on neighboring land.

1.4 Site Description

The Ludden Pump Station site is located at 119th Avenue SE, Cogswell, North Dakota (**Figure 1**). The location is T129N, R58W, Section 26.

The pump station is an approximate 8 acre facility utilized to pump crude oil through the Keystone Pipeline in a southerly direction. The pump station was constructed in 2009 and is equipped with secondary containment gravel structures and remote control and shutdown capabilities. The location of the release was from a pressure relief valve fitting on the western side of the facility. The site plan is shown in **Figure 2**.

1.5 General Area Environment

The site is located in a very low population density area of southeastern North Dakota. The nearest residence to the site is over 1.3 miles to the north-northwest. Primary land use in the area is agricultural production to include hay, corn, soybean, and grazing. Primary land types include agriculture and

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wetlands. The nearest major surface water body is Lake Taayer approximately 12 miles from the site (**Figure 1**).

1.6 Interim Response Actions to Date

As required in the Federal Response Framework and the Area Contingency Plans, TransCanada owns and maintains extensive emergency response equipment throughout its operating liquids pipelines system. The Company has working agreements with qualified contractors to supply supplemental resources in the case of a significant discharge scenario.

Upon discovery of the release, TransCanada mobilized its Incident Command Team and emergency response contractors to the site. Oil containment and recovery activities were initiated on May 7, 2011 and have included the following activities as of the date of this Report:

- Approximately 345 barrels of crude oil recovered;
- Approximately 24 barrels of oil/water mixture collected;
- Approximately 800 cubic yards (CY) of crude oil impacted on and off-site gravel and soil excavated and stockpiled pending disposal.
- Off-site oil mist residual area delineated.

1.7 Water and Soil Sampling to Date

Water samples have been collected from two wetlands on the property to the south of the Ludden Pump Station (one sample from WSC1BNDSA025 and two samples from WSC1BNDSA026), the trench that flows from WSC1BNDSA026, and the wetland to the south of 101st Street SE (WSC1BNDSA027). These samples were analyzed for extended range total petroleum hydrocarbons using silica gel clean-up (TPH) and without the silica gel clean-up (TEM) for the C7-C40 range of hydrocarbons, BTEX, ammonia, aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. Two background samples were collected from wetlands to the north of the pump station (WSC1BNDSA023 and WSC1BNDSA018) and were analyzed for ammonia, aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. All water sample locations are shown on **Figure 3**. Analytical results are pending. In addition, two water samples from WSC1BNDSA026 were analyzed for pH, Total Phosphorus and total suspended solids.

Samples of off-site soils were collected and were submitted to PACE Analytical on May 16 and 17, 2011. Soils were sampled off-site from the field area where oil mist residual had occurred and two samples in an adjacent field for background conditions. The field area was sampled in the top 2 inches in four areas A, B, C, and D. Each area included four to six discrete samples that were composited to represent each area and submitted for laboratory analysis. The same sampling procedure was used for the two background samples A and B. All of the soil sampling locations are shown in **Figure 4**. The samples were analyzed for pH, TOC, Total Phosphorus, Nitrates, Extended range TPH and TEM.

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2.0 INTERIM OFF-SITE AREA RESPONSE ACTION PLAN

2.1 Off-Site Area Description

The off-site area has been designated as the farmed agricultural property to the south of the pump station which was impacted by residual spray from the release (**Figure 5**).

2.2 In-Situ Land Farming

This plan is developed for treating the off-site soils impacted with the oil misting from the release. The intent for this plan is to biologically treat the soils in- place. This includes the ponded wetland area in the field south of the site.

2.2.1 Scope Overview

The scope of this plan is to treat the lightly crude oil impacted surface soils by land farming methods. This will include the assessment of contaminated soils for Extended Range Total Petroleum Hydrocarbons (TPH) and nutrients to determine baseline conditions at the site (results pending).

The off-site area is divided into three areas as shown in **Figure 6**. Areas 1 and 3 are the base non-flooded areas that have oil impacts and decreasing amounts of oil toward the south of Area 3. Area 2 is impacted and ponded water exists in this lower wetland area of the south field. Area 2 is considered for in-situ treatment of the water. The farming techniques include potentially adding amendments and tilling periodically to mix and aerate soils to promote biodegradation. Follow-up monitoring will be conducted until the levels of TPH are reduced to levels approved by the North Dakota Department of Health (NDDH).

2.2.2 Regulatory Approvals

The NDDH requires that excavated petroleum contaminated soil be treated or disposed of properly. Incorporation of petroleum contaminated soil into the top six inches of native soil can be an effective treatment option. On a case-by-case basis, depending on the site capabilities and the waste material, the NDDH may allow this treatment. According to state guidance, Form SFN-51601 entitled "Land Treatment Variance Application" may be required and submitted to the NDDH for approval prior to land application at single application sites. A local official signature such as from the county may be needed. In place treatment guidance states that treatment of soil in-place (biodegradation, leaching venting, etc.) until the TPH value is less than 100 ppm. If this method is chosen, soil and groundwater samples must be submitted on a regular schedule approved by the NDDH to monitor progress.

2.2.3 Sheen Recovery and Absorbent Boom Monitoring

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Absorbent boom was used to contain the sheen on the ponded water to the south of the pump station from a drainage trench dug by the property owner. The drainage trench was blocked with permission of the property owner to further contain sheen in the event of heavy rain. After the drainage trench was blocked and a prevailing wind from the south, absorbent boom was pulled across the ponded water from south to north to contain sheen to the north end of the pond, adjacent to the pump station. Absorbent boom remains in place at the north and south ends of the wetland to the south of the pump station (identified as WSC1BNSA026 on TC Keystone alignment sheets) and also in the incoming and outgoing drainage trenches that were constructed by the property owner. The absorbent booms will be inspected on a weekly basis. Should any boom become saturated or degraded, it will be replaced and the spent boom will be containerized in a lined roll-off dumpster maintained on the pump station property for this purpose. While the boom is inspected, the water surface will be inspected and the presence of sheen will be documented. Photos will be taken to document during each monitoring event to document boom condition and presence of sheen.

2.2.4 Soil Characteristic Assessment

The site soil characteristics for land treatment are as follows. The NDDH may make exceptions to the recommended criteria.

- A. Site Slope: 6 percent or less.
- B. Minimum distance to surface water: 200 feet.
- C. Minimum distance to residences: site-specific, but in general, 200 ft.
- D. Minimum depth of three feet to seasonal high water table for most soils
- E. Soil characteristics:
 - Permeability: slow to moderate, less than two inches per hour. Areas underlain by highly permeable soils, very slowly permeable soils, or sodium affected soils should be avoided.
 - PH: Minimum PH of 6.5, neutral or slightly alkaline preferred.
 - Nutrients: soils with moderate to high levels of fertility are preferred.

Areas with highly permeable soils should not be considered.

Adequate soil nitrogen and phosphorus levels are critical for bacterial growth and effective land treatment of contaminated soil. Soil nitrogen and phosphorus tests are required to determine if minimum fertility levels exist at the land treatment site, and if fertilizer application is necessary. The amount of soil nitrogen necessary for effective land treatment is based on a ratio of parts per million (ppm) TPH to ppm Nitrogen (N). The NDDH considers a C:N of 100:2 acceptable. Adequate extractable soil phosphorus levels are also required for effective land treatment. Analytical results of soil nitrogen and phosphorus levels are pending.

Recommended land treatment site fertility levels are listed in the following table. The table illustrates what fertility levels are required to maintain a C:N ratio of 100:2 at specific total hydrocarbon concentrations. Using results from soil fertility testing, one can determine if fertilizer should be added to the treatment site. For example, assume soil contaminated with 2000

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ppm TPH is land treated. If soil fertility tests indicate the six-inch surface layer contains 40 pounds per acre nitrogen, and additional 40 pounds per acre nitrogen should be added to the treatment site. Extractable soil phosphorus levels should be maintained in the 20 to 30 pound per acre range.

Soil Containment Concentration

Fertility Requirements (lbs/acre)	Nitrate-Nitrogen	Extractable Phosphorus
1000 ppm TPH	40	20-30
1500 ppm TPH	60	20-30
2000 ppm TPH	80	20-30
2500 ppm TPH	100	20-30
3000 ppm TPH (or greater)	120	20-30

NOTE: Fertility levels assume four-inch soil application thickness. Maintain proportionally lower fertility levels for thinner soil application. Fertility levels should not exceed 120 pounds per acre nitrate-nitrogen or 30 pounds per acre extractable phosphorus. If only the top 2 inches need treatment the nitrogen levels would be half of the above requirements.

Soil samples are necessary to evaluate and document contamination levels in the soil to be treated. To avoid cross-contamination, subsamples should be taken using clean disposable gloves (and other clean sampling utensils) at each sample location (refer to NDDH "Procedures for the Collection of Soil Samples at Underground Storage Tank (UST) Sites"). Mix equal portions of each subsample to obtain a composite sample. Completely fill each sample vial so that no headspace exists, wipe soil from the vial threads, and seal the vial using a cap with a Teflon septum. Label the vial, wrap it in aluminum foil, and place in a covered cooler with ice for transport to a laboratory for analysis. The number of soil samples should be based on the following table:

Volume of Soil (cubic yards) Number of Samples

Volume of Soil (cubic yards)	Number of Samples
<10	0
10-50	1
50-500	2
500-1000	3
1000-2000	4
2000-4000	5
Each additional 2000	One additional sample

Based on the areas outlined in **Figure 6** the following are the associated contaminated volumes assuming a 2 inch depth for Area #1 and 1 inch depth for Areas #2 and #3:

- Area #1-93 cubic yards (CY)
- Area #2-217 CY
- Area #3-1,509 CY

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Brampton, North Dakota

Therefore, for Areas 1 and 3, 4 samples would be needed and would not change if Area #2 is added. It is recommended that each sample be a composite of 4 samples. The discrete samples would be spread based on approximately equal areas within each area. An additional two composite samples should be collected in the nearby fields in non-impacted soils for background data.

Soil samples should be analyzed for TPH, available phosphorus, nitrate nitrogen, and pH. Total Organic Carbon (TOC) and organic nitrogen may be analyzed on a couple of samples if the soils are suspected to be low in organic matter. Baseline analytical results are pending.

2.2.5 Land Treatment Actions

2.2.5.1 Site Preparation and Storm-water Control

Surface water run-on and runoff will be diverted or contained around treatment area. Ditches and berms up slope of the site will divert surface water run-on around and away from the treatment area. Ditches and berms will prevent any surface water runoff to cause degradation of any streams, rivers, wetlands, lakes, etc. Berms, ditches or impoundments down slope of the site will be provided to contain and store any contaminated runoff during precipitation events.

2.2.5.2 Soil Amendment Application (Optional)

The soil amendments will be incorporated into the contaminated soils based on the results of the soil assessment that may include fertilizer to meet the available phosphorus and nitrate nitrogen requirements. In addition to adding nitrogen and phosphorus to meet the requirements, Micro-Blaze® will be added to speed-up the biodegradation process. Micro-Blaze® Emergency Liquid Spill Control is listed with the U.S. EPA on their NCP Product Schedule as a bioremediation agent for oil spills. Its combination of wetting agents, nutrients and microbes formulation is for use on oil pollutants found in spills and contaminated sites. It is applied in a 3% solution by diluting the concentrate with water and then sprayed on the soils. It is also possible to treat the ponded water Area #2 by spraying a 3% solution to the water surface. It is applied at the rate of 1 gallon concentrate per 10 cubic yards of soil. It contains phosphorus and nitrogen to help the supplementation of the required nutrients. Based on the top 2 inches for treatment for Area 1 and 1 inch depth for Area 3, an application rate of 160 gallons is needed. For all three Areas (shown in Figure 4) and assuming 1 inch depth in Area 2, 185 gallons would be needed. If sprayed onto the water surface the same volume is assumed as the soil application rate.

2.2.5.3 Soil Tilling

The surficial oil will be blended (mixed) with the upper four to six inches of non-impacted soil. The blended soil will be tilled at least four times during the land application season to provide adequate aeration and mixing and promote hydrocarbon breakdown. Soil monitoring will dictate tilling operations needed in the subsequent season. Depending on site conditions, climatic conditions, and other factors, measures to control soil moisture and wind erosion as well as to improve the soil bacterial culture may be necessary. Optimum soil moisture content is 50-70 percent of the soil water holding capacity. More frequent tillage or site drainage may be necessary if the site is wet. The incorporation of legume hay is advised to help control wind erosion and improve soil aeration. If the soil is deficient in organic matter and/or oil-degrading soil bacteria,

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TransCanada Ludden Pump Station
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the addition of inoculants (such as Micro-Blaze®), rotted manure, mature compost, or topsoil is advised.

2.2.5.4 Soil Sampling and Metrics

Soil sampling will be conducted to evaluate and document contamination levels in the soil to be treated. Soil samples will be analyzed for TPH and pH.

Follow-up monitoring will be done to assess and document hydrocarbon breakdown. Soil samples will be taken from a depth of four to six inches in the treatment area using NDDH "Procedures for the collection of soil samples at underground storage tank (UST) sites". The number of samples should follow the table below and should adequately represent the entire land treatment area. Samples need only be analyzed for total petroleum hydrocarbons; however, NDDH may require sampling for additional constituents. Refer to Section 2.2.4 for additional sampling methods. Samples should be collected in same general areas as Section 2.2.4 initial characterization.

The number of soil samples should be based on the following table:

<u>Volume of Soil (cubic yards)</u>	<u>Number of Samples</u>
<10	0
10-50	1
50-500	2
500-1000	3
1000-2000	4
2000-4000	5
Each additional 2000	One additional sample

Based on the areas outlined in Figure 1 the following are the associated contaminated volumes assuming a 2 inch depth for Area #1 and 1 inch depth for Areas #2 and #3:

- Area #1-302 CY
- Area #2-474 CY
- Area #3-1,509 CY

Therefore, for Areas 1 and 3, 4 samples would be needed and would not change if Area #2 is added.

During the year of land treatment, samples should be taken at the times specified below until soil analytical results indicate 100 ppm TPH or less.

<u>Land Application Date</u>	<u>Soil Sampling in First Year</u>
Before July 1	Once in August and once in October
July 1 to September 15	Once in October
After September 15	None

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TransCanada Ludden Pump Station
Brampton, North Dakota

If targeted result of 100 ppm TPH or less are not achieved within the first year, sampling in subsequent years should include three samples taken approximately in June, August, and October.

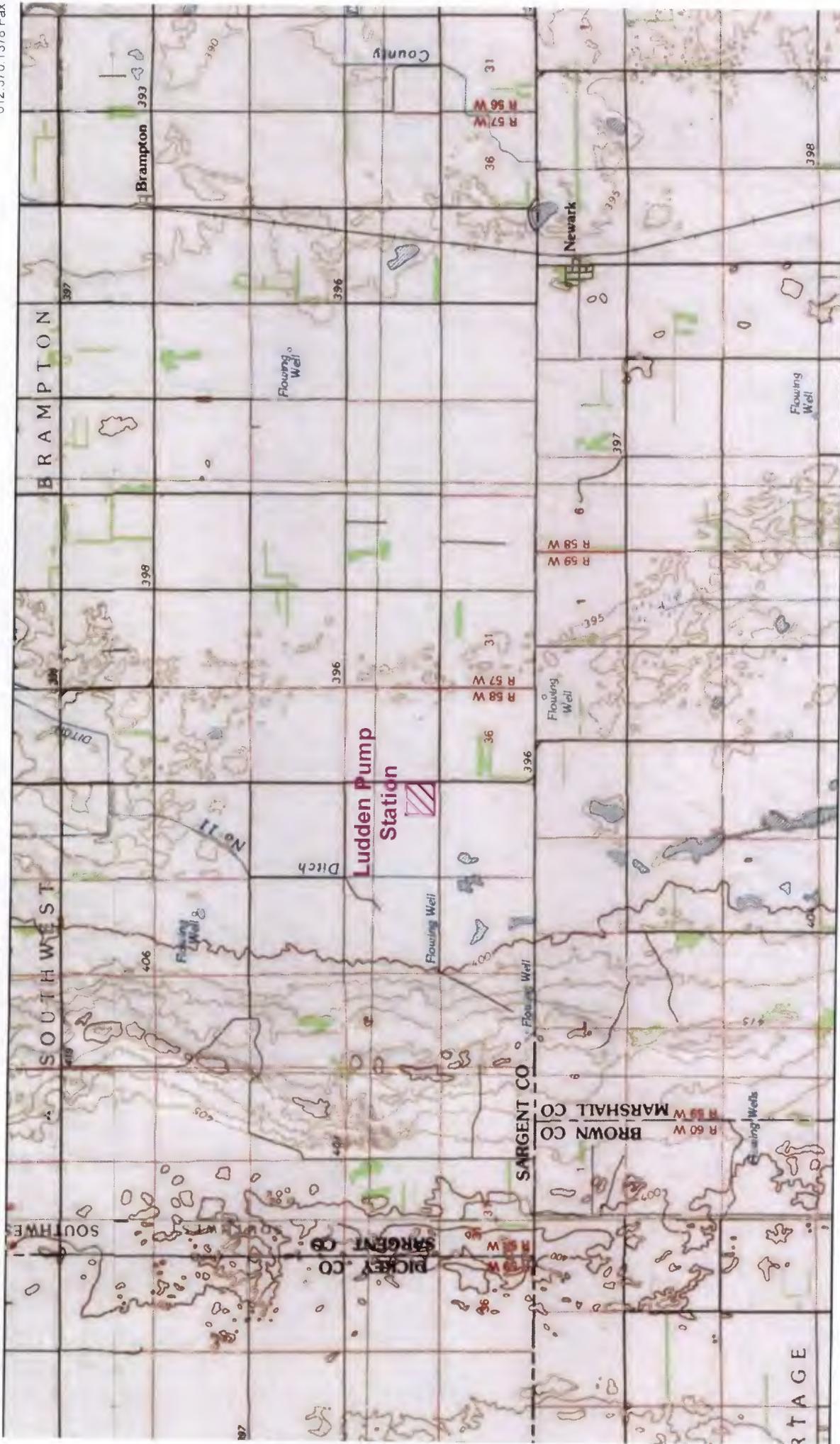
2.2.6 Regulatory Reports

Reports will be prepared documenting the land treatment operations after each monitoring event as required by the NDDH. This will summarize the operations and monitoring results. Recommendations for further actions and final closure will be included.

TransCanada Ludden Pump Station

Figure 1. Site Location Map

URS
Fifth Street Towers
100 South Fifth Street, Suite 1500
Minneapolis, MN 55402
612.370.0700 Tel
612.370.1378 Fax



Data: USGS 7.5" topographic base map
Projection: NAD83 UTM Zone 14N



TransCanada Ludden Pump Station

Figure 2. Site Plan with Pump Station

URS
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0 75 150 300



Feet

Data:
SCAT areas collected by GPS in May
2011.

Projection:
NAD83 UTM Zone 14N



TransCanada Ludden Pump Station

Figure 3. Off-Site Water Sampling Locations



Fifth Street Towers
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- Fence
- ▭ Misted Spray Area
- Toe of Slope
- ☪ Pond
- Off-Site Water Sample

Data:
SCAT areas collected by
GPS in May 2011.

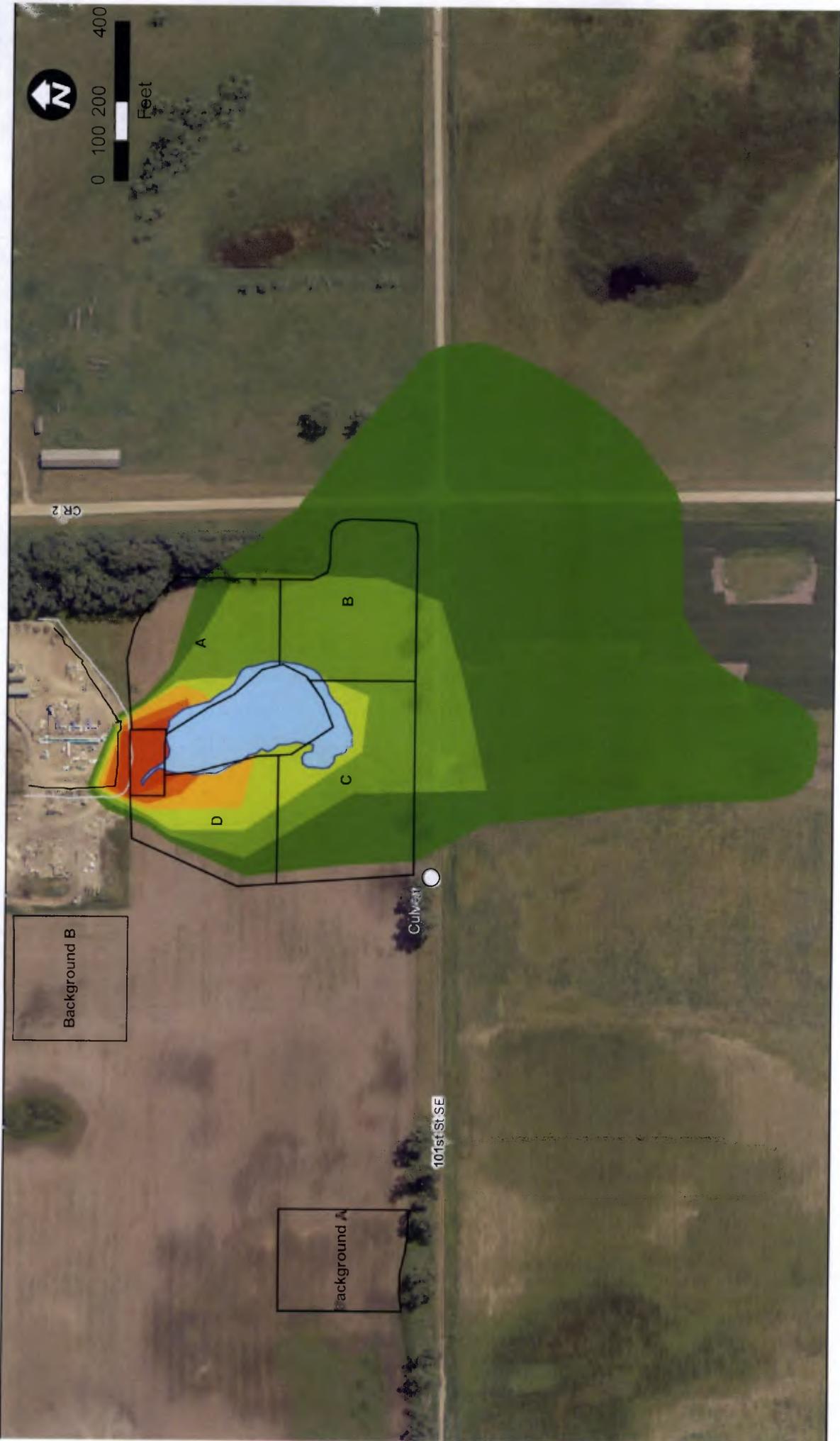
Projection:
NAD83 UTM Zone 14N



TransCanada Ludden Pump Station

Figure 4. Soil Sample Locations

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—	Fence	■	Misted Areas
—	Toe of Slope	■	Continuous = 91-100% coverage
—	Pond	■	Broken = 51-90% coverage
		■	Patched = 11-50% coverage
		■	Sporadic-High = 6-10% coverage
		■	Sporadic-Low = 1-5% coverage
		■	Trace = <1% coverage

Data: SCAT areas collected by GPS in May 2011.
 Projection: NAD83 UTM Zone 14N

TransCanada Ludden Pump Station

Figure 5. Oil Misted Areas

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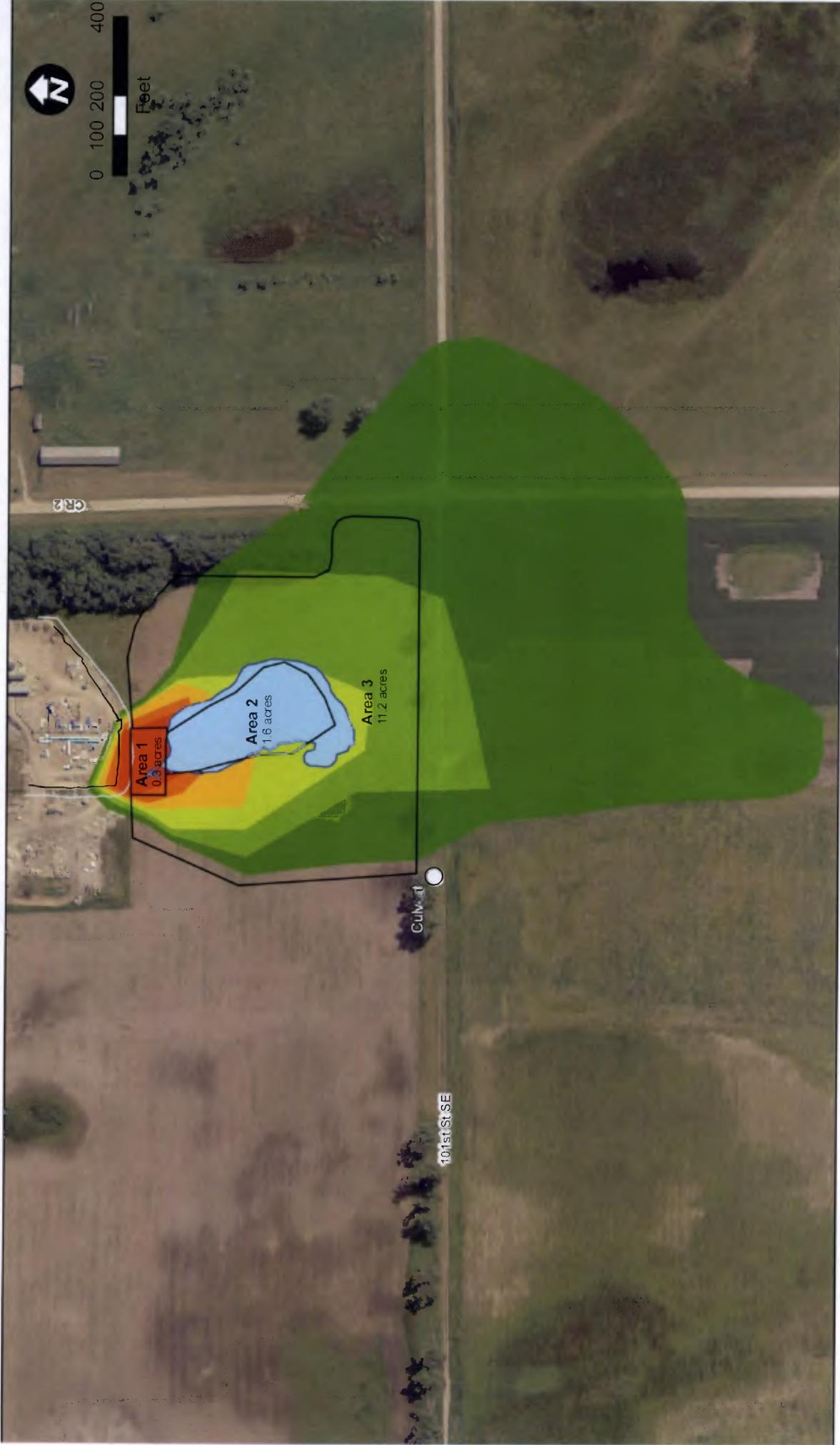
- Fence
- Toe of Slope
- 🟦 Pond
- 🟡 Misted Areas
 - 🟠 Continuous = 91-100% coverage
 - 🟡 Broken = 51-90% coverage
 - 🟠 Patchy = 11-50% coverage
 - 🟢 Sporadic-High = 6-10% coverage
 - 🟡 Sporadic-Low = 1-5% coverage
 - 🟢 Trace = <1% coverage

Data: SCAT areas collected by GPS in May 2011.
 Projection: NAD83 UTM Zone 14N



TransCanada Ludden Pump Station

Figure 6. Land Farm Areas



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Data:
 SCAT areas collected by GPS in May 2011.
 Projection:
 NAD83 UTM Zone 14N

- Fence
- Toe of Slope
- Pond
- Misted Areas
 - Continuous = 91-100% coverage
 - Broken = 51-90% coverage
 - Patchy = 11-50% coverage
- Sporadic-High = 6-10% coverage
- Sporadic-Low = 1-5% coverage
- Trace = <1% coverage



Bosse Property Cleanup Plan¹
Brampton, North Dakota
May 18, 2011

Selective Surface Soil Removal

In the offsite area that was most highly coated with crude oil, the top 3-4 inches of oil covered surface soils were excavated. The soil removed from this area is staged on the Ludden Pump Station site pending landfill disposal.

In-Situ Land Farming

This plan is developed for treating the off-site soils (Bosse property) impacted with oil misting from the Ludden Pump Station crude oil release. The intent for this plan is to biologically treat the soils in-place in accordance with North Dakota Department of Health (NDDH) land farming guidelines. This includes the ponded wetland area in the field south of the site.

The scope of this plan is to treat the lightly crude oil impacted surface soils by land farming methods. This will include the assessment of contaminated soils for Total Petroleum Hydrocarbons (TPH) and nutrients to determine baseline conditions at the site. The farming techniques include potentially adding amendments and tilling periodically to mix and aerate soils to promote biodegradation. Follow-up monitoring will be conducted until the levels of TPH are reduced to levels approved by the NDDH.

A. Soil Characteristic Assessment

Adequate soil nitrogen and phosphorus levels are critical for bacterial growth and effective land treatment of contaminated soil. Soil nitrogen and phosphorus tests are required to determine if minimum fertility levels exist at the land treatment site, and if fertilizer application is necessary. The amount of soil nitrogen necessary for effective land treatment is based on a ratio of parts per million (ppm) TPH to ppm Nitrogen (N). The NDDH considers a TPH:N of 100:2 acceptable. Adequate extractable soil phosphorus levels are also required for effective land treatment.

Soil samples will be collected and analyzed for TPH, available phosphorus, nitrate nitrogen, pH, total organic carbon (TOC) and organic nitrogen. Other analysis such as benzene, ethylbenzene, toluene, and xylenes may also be conducted.

B. Soil Amendment Application

The soil amendments will be incorporated into the contaminated soils based on the results of the soil assessment that may include fertilizer to meet the available phosphorus and nitrate nitrogen requirements. In addition to adding nitrogen and phosphorus to meet the requirements, Micro-Blaze® may be added to speed-up the biodegradation process.

¹ – Excerpted from Draft Ludden Pump Station, Interim Off-site Area Cleanup Plan For Bosse property access agreement discussion.

Micro-Blaze® Emergency Liquid Spill Control is listed with the U.S. EPA on their NCP Product Schedule as a bioremediation agent for oil spills and its use on this site has been suggested by the NDDH. Its combination of wetting agents, nutrients and microbes formulation is for use on oil pollutants found in spills and contaminated sites.

C. Soil Tilling

The surficial oil will be blended (mixed) with the upper four to six inches of non-impacted soil. The blended soil will be tilled at least four times during the land application season to provide adequate aeration and mixing and promote hydrocarbon breakdown. Soil monitoring will dictate tilling operations needed in the subsequent season. Depending on site conditions, climatic conditions, and other factors, measures to control soil moisture and wind erosion as well as to improve the soil bacterial culture may be necessary. If the soils are excessively dry, addition of moisture to the site may be necessary (ponded surface runoff water could be used). Optimum soil moisture content is 50-70 percent of the soil water holding capacity. More frequent tillage or site drainage may be necessary if the site is wet.

Legume hay may be incorporated into the soil to help control wind erosion and improve soil aeration. If the soil is deficient in organic matter and/or oil-degrading soil bacteria, inoculants (such as Micro-Blaze®), rotted manure, mature compost, or topsoil may be added.

D. Soil Sampling and Metrics

Land farm treatment verification monitoring will be done to assess and document hydrocarbon breakdown. Soil sampling will be conducted using NDDH procedures to evaluate and document contamination levels in the soil undergoing treatment. Soil samples will be analyzed for TPH and pH. Other analysis such as benzene, ethylbenzene, toluene, and xylenes may also be conducted.

During the year of land treatment, samples will be collected at the times until soil analytical results indicate 100 ppm total petroleum hydrocarbons or less.

If targeted result of 100 ppm total petroleum hydrocarbons or less are not achieved within the first year, soil tilling and monitoring will occur in subsequent years.

E. Ponded Water

Within this In-situ Land Farming plan, the ponded water will also be treated, if monitoring results indicate necessary. A 3% solution of Micro-Blaze® will be applied to the water surface. Treatment verification monitoring will be conducted in accordance with the soil sample schedule.

Interim Poned Water Monitoring Plan

Absorbent booming remains in place on the ponded wetland and it's outlets as an extended interim measure to absorb/contain any residual sheen that may occur while the In-situ Land Farming plan is accommodated with the land owner and implemented. On a weekly basis the integrity of the booming will be monitored and surface water samples will be collected to assess any dissolved levels of TPH and Metals (requested by NDDH) in the surface water. Weekly monitoring will be discontinued upon the implementation of the In-situ Land Farming plan.

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From: aharries@nd.gov
Sent: Tuesday, May 17, 2011 1:30 PM
To: Radig, Scott A.; Erickson, Curtis L.; Disney, Robert T.; Hall, Derek A.; christysmith@nd.gov; Roob, Chris K.; Tillotson, Steve J.; Torgerson, Brad J.; Poppke, Ted T.; Kangas, Jane K.; Johnson, Kirk D.; Berreth, Gary W.; Cameron, Dave A.; Fewless, Dennis R.; Anderson, Carl J.; Harries, Alison; Roberts, Kris D.; Stockdill, Shane T.; Suggs, Shannon M.; Grosz, Joseph E.; Bartelson, Norene E.; Hubrig, Hunter J.; Bracht, Gary D.; Sauer, Mike T.; O'Clair, Terry L.; Bachman, Tom A.; Semerad, Jim L.; Thorstenson, Craig D.; Kern, David W.; Bergsagel, David L.; Glatt, Dave D.; Johnson, Allen L.; Cain, Cindy C.; Lundquist, Tracy J.; Estrada, Jose; Wanner, Joe K.; Flanders, Paula L.; Bata, Marcie; Lee, Michael S.; Otto, Elisabeth C.; Adams, Sherry L.; Fischer, Melvin; Peterson, Colleen J.; Michael, James D.; Heckman, Jim; McKay, Allen R.; Carlson, Candace R.; Pavlish, Kevin J.; Ikok@umdhu.org; Bitz, Jeff R.; DeBoer, Raymond L.; Dyke, Steve R.; Gunnerson, Bill T.; Wiedrich, Tim W.; -Info-ND Dept. of Emergency Services; Walters, Sherry L.; Schaan, Blake J.; Kerzman, Jody S.; dclark@umdhu.org; thaak@grandforksgov.com; dstreitz@grandforksgov.com; mlarson@grandforksgov.com; bbergman@grandforksgov.com; rklockmann@grandforksgov.com; dhuseby@cityoffargo.com; mschacher@cityoffargo.com; MOBerglund@cityoffargo.com; richard_grosz@fws.gov; micah_reuber@fws.gov; R8_RRC@epamail.epa.gov; Robert Baumgartner; Robert Baumgartner
Subject: Environmental Incident Report

Location Information

Location of Incident (County/Township/Range/Section/Q/QQ/QQQ):

Sargent / 129 / 58 / 26 / / /

Description of Incident Location: 10075 119th Ave SE Brampton, ND 58017

Distance to Nearest Occupied Building: 1.3 Miles

Incident Information

Date and Time of Incident: 5/7/2011 at 0605

Type of Incident: Pipeline Pump Station Equipment

Duration of Incident/Release: 30 minutes

Estimated Volume of Release: 500 barrels

Description of Substance of Concern: Crude Oil

Agriculture Related: No

On Extremely Hazardous Substance List: No

Cause of Incident: Small diameter piping failure.

Action Taken and Recommended/Planned Future Action: Pipeline system shutdown and pump station isolated. Company and contractor spill response crews mobilized to the facility. Oil contained and controlled onsite by earthen berm. Offsite oil mist delineated. Absorbent boom and earthen dam were used to collect sheen and control flow from ponded water on adjacent property to the south of the facility. Free phase oil was collected by vacuum truck and stored onsite in frac tanks/transported offsite for recycling. Oil saturated and covered onsite and offsite gravel and soil have been excavated and stockpiled onsite pending disposal. Surface water monitoring is ongoing. Insitu land farming treatment is being pursued for treating the residual oil mist on the offsite property immediately to the south of the facility.

Where Will the Recovered Wastes be Disposed: Recovered crude oil/water mix transported to LePier Oil, Fosston, MN for recycling. Excavated oil impacted gravel/soil will be transported to Veolia LF, Buffalo MN

Impact Information

Fatalities: 0

Injuries: 0

Medium Affected: 04 - water and soil

Risk Evaluation: NA - work conditions were monitored throughout response/cleanup activities.

Potential Environmental Impacts: Soils - oil saturated soils were excavated as described above. Residual oil impacts will be treated using insitu landfarming techniques. Surface water - oil sheen was collected utilizing absorbent boom. Potential dissolved impacts are being monitored.

Responsible Party Information

Responsible Party: TransCanada

Contact Address: 13710 FNB Parkway, Suite 300

City: Omaha

State: NE

Zip: 68154

Contact Person: Robert Baumgartner

Contact Telephone: 832-320-5538

Contact Email: robert_baumgartner@transcanada.com

Property Owner (if not the Responsible Party):

Has or Will the Incident be Reported to Property Owner: Unknown

Reporting Information

Reported By: Robert Baumgartner

Date and Time of Notice: 5/7/2011 at 1015

Other Agencies That Have or Will be Notified:

Local Fire Department

Local Law Enforcement

Local Emergency Manager

Has or Will This Incident be Reported to the NRC: Yes

Agency Person Who Received Call:

DEM Incident Number:

This Report Also Emailed to:

robert_baumgartner@transcanada.com