BEFORE THE PUBLIC UTILITIES COMMISSION STATE OF SOUTH DAKOTA



DOCKET NO. HP14-002

1 Q. State your full name.

3 A. Kimberly Lorrene McIntosh.

5 Q. State your employer.

7 A. South Dakota Department of Environment and Natural Resources.

9 Q. Explain the specific program for which you work.

Α.

Ground Water Quality Program - Spill Assessment and Cleanup Section. The spill section is responsible for documenting all reported regulated substance releases: petroleum, chemical, pesticide, fertilizer, metals, etc. The spill section maintains the program files and the environmental events database which contains information on each reported release. This section investigates complaints and releases, obtains environmental samples, provides direction to responsible parties, environmental consultants and local officials on state laws and rules, and issues letters directing the assessment and cleanup of contamination. This section is responsible for the SARA (Superfund Amendment and Reauthorization Act) Title III Program which requires that chemicals stored in certain quantities be reported to the state. The spill section also is responsible for other projects such as emergency planning and response, methamphetamine issues, low level radiation issues, and homeland security issues.

Q. State what you do for this program.

I direct and oversee the staff in the spill section. I evaluate information and data to identify and name responsible parties. I direct environmental contractors and responsible parties on emergency response activities, assessment and cleanup activities associated with spills, releases and un-permitted discharges. I manage the State Regulated Substance Response Fund and the Environmental Livestock Fund. I am responsible for the selection and hiring of contractors to be used in the event that a responsible party is unable to perform a cleanup or refuses to perform a cleanup and the Regulated Substance Response Funds are necessary to remedy a situation. I am responsible for the evaluation of spills and releases to insure that the cleanup meets state requirements.

Α.

Q. Explain the range of activities and duties your program covers and what you specifically do for the program.

Α.

I review consultant reports detailing sampling of soil and ground water contamination associated with all types of spills and releases of regulated substances. I review and approve cleanup plans and act as the team leader, directing day to day work activity of the spill section. Activities included in the spill section include the Superfund Amendment and Reauthorization Act (SARA) Title III activities, department emergency response activities, homeland security activities, and state emergency and disaster planning activities. I also represent the state on the Regional Response Team acting as a state liaison with EPA, and other federal agencies in the event of an incident of national significates, federally declared disaster or a large oil spill to navigable waters.

Q. O	n whose	behalf	was thi	s testime	ony pr	epared?
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A. This testimony was prepared on behalf of the Staff of the South Dakota Public
 Utilities Commission (Staff).

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6 Q. What state environmental laws and rules address petroleum spills?

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- 8 A. State: SDCL 34A-2, SDCL 34A-12, SDCL 34A-18 and ARSD Chapter 74:34:01,
- 9 ARSD Chapter 74:54:01, ARSD Chapter 74:56:03, ARSD Chapter 74:56:05 and
- 10 ARSD Chapter 74:10:05.

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12 Q. Which of those laws or rules do you personally work with?

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14 A. All of the above.

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Q. What level of cleanup is required in the case of a petroleum spill?

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A. All petroleum spills are evaluated to determine what damage has occurred and what risk to human health and the environment exists based on the specifics of each release: substance released, amount released, location of release, depth to ground water, threat to surface water, threat to basements, water wells, or utilities, etc. The department has established cleanup criteria and standards in which each release is evaluated against to protect human health and the environment, so not all petroleum releases are cleaned up to the same level of contamination.

1	Q.	Can there be hydrocarbon left in the soil after a cleanup?
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3	A.	Yes, petroleum contamination may be left in the soil after a cleanup if the department
4		determined that the remaining contamination does not pose a risk to human health or
5		further risk to the environment.
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7	Q.	What kind of remediation activities are conducted in response to a
8		hydrocarbon spill in soil?
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10	A.	Excavation and off-site disposal/treatment of impacted soil, excavation and onsite
11		treatment of impacted soil and in-situ soil vapor extraction.
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13	Q.	What kind of remediation activities are conducted in response to a
14		hydrocarbon spill in groundwater?
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16	A.	Excavation of impacted soil and soil venting may be conducted in conjunction with
17		ground water sparging. Ground water monitoring is required to document ground
18		water conditions.
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20	Q.	Explain other activities you use for remediation.
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22	A.	Soil can be excavated and incinerated to destroy hydrocarbons. Bioremediation
23		activities may also be performed to treat contaminated soil and ground water.

1	Q.	What are the leak size requirements for a reportable spill?
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3	A.	SDCL 34A-12: A release or spill of a regulated substance (petroleum) must be
4		reported to DENR immediately if any one of the following conditions exists:
5		1. The discharge threatens or is in a position to threaten the waters of the
6		state (surface water or ground water);
7		2. The discharge causes an immediate danger to human health or safety;
8		3. The discharge exceeds 25 gallons; (For crude oil see bullet #8)
9		4. The discharge causes a sheen on surface water;
10		5. The discharge of any substance that exceeds the ground water quality
11		standards of ARSD chapter 74:54:01;
12		6. The discharge of any substance that exceeds the surface water quality
13		standards of ARSD chapter 74:54:01;
14		7. The discharge of any substance that harms or threatens to harm wildlife
15		or aquatic life;
16		8. The discharge of crude oil in field activities under SDCL chapter 45-9 is
17		greater than 1 barrel (42 gallons).
18		
19	Q.	Has there been any permanent natural resources damage in South Dakota as a
20		result of a hydrocarbon pipeline leak?
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22	A.	I am not aware of any permanent natural resource damage from a petroleum pipeline
23		release in South Dakota.

Q. Are there spills that cannot be remediated?

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A. 3 I do not believe there are any petroleum spills that can't be remediated given sufficient time and resources.

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Q. Who is obligated to remediate a spill?

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Α. SDCL 34A-12 identifies that the person or persons who caused the release are responsible to assess and cleanup the contamination. SDCL 34A-18-8 identifies that each crude oil pipeline operator must implement their response plan regardless of the party responsible for the release.

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Q. How do you remediate hydrocarbon contaminated wells?

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- A. It depends on the level of contamination present in the well and in the ground water. Depending on the concentration of contamination in the well and ground water the water from the well may be treated with a carbon filter system that removes (strips) the hydrocarbons.
- Q. 19 What if you can't achieve remediation of a well?
- 20 A. The responsible party is required to supply the well owner/user with an alternate 21 source of drinking water. This may require drilling a new well in a different location, 22 drilling a deeper well in a deeper formation or hooking the well user up to rural or city 23 water supply.

Q. What is the extent of landowner involvement in remediation?

A. It depends on the situation. Some landowners want to be involved in the cleanup but
most allow the department to work with the responsible party to get the cleanup work
performed to state standards. The department copies the land owner on all written
correspondence with the responsible party and consultant. If the land owner wishes
to be involved with the cleanup, meetings may be held to address the concerns of the
landowner and other interested parties. Copies of assessment and remediation
documents can be provided if the land owner wishes to receive them.

Q. Does DENR have the resources to deal with a spill from a hydrocarbon pipeline such as Dakota Access Pipeline?

A. The DENR has the resources necessary to oversee the assessment and cleanup of a crude oil release from existing crude oil pipelines and has the resources to oversee a release from the Dakota Access pipeline, if one should occur. The DENR manages a fund with sufficient resources to contain and initiate cleanup actions, if a release should occur, and the pipeline company is unable or refuses to perform the required response activities. Federal financial resources may also be available if the responsible party refuses or is unable to perform the assessment cleanup work.

Q. Does this pipeline place any additional burden on your program?

1	A.	The Dakota Access Pipeline does not place additional burden on the Ground Water
2		Quality Program.
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4	Q.	Please explain the State's Regulated Substance Response Fund that may be
5		available to help fund a remediation project if the responsible party is unable of
6		unwilling to perform the work.
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8	A.	Please see Attachment 1. Attachment 1 is a copy of Appendix I from the "Findings
9		Report" dated December 1, 2008 from the South Dakota Underground Pipeline Task
10		Force report. This attachment is information on the South Dakota Regulated
11		Substance Response Fund. This information was previously compiled and provided
12		to the South Dakota Underground Pipeline Task Force.
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14	Q.	Is the information provided in Attachment 1 still accurate or has there been any
15		change?
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17	A.	The information provided in this document is accurate with the exception with the last
18		sentence. The balance of the Regulated Substance Response Fund as of
19		06/30/2014 was \$2,753,000.00.
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21	Q.	Please explain the Federal Oil Spill Liability Trust Fund and/or any other

program available to help fund a remediation project.

- A. Please see Attachment 2. Attachment 2 is a copy of "NPFC Mission Overview"
 produced by the U.S. Coast Guard National Pollution Funds Center. This attachment
 contains information on the federal Oil Spill Liability Trust Fund.
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- Q. Any other information you believe the commission and the public will find
 useful.
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- A. Staff in Ground Water Quality Program has extensive experienced in overseeing the assessment and cleanup of all types of petroleum releases. In addition, the Federal Environmental Protection Agency and U.S. Coast Guard have extensive technical expertise and experience in responding to major crude oil incidents across the country.