BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

FILED

FEB 25 2008

Terri A. Lorenzon, Director
Environmental Quality Council

IN RE: THE FINAL DETERMINATION OF REIMBURSEMENT OF FUNDS TO LINCOLN COUNTY LANDFILLS	) Docket No. 07-3216	

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY'S MEMORANDUM IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

Respondent Wyoming Department of Environmental Quality (DEQ), pursuant to the Wyoming Environmental Quality Council's (EQC) January 24, 2008 Status Conference Order, Chapter II, Section 14 of the DEQ Rules of Practice & Procedure, and Rules 56 & 7(b)(1) of the Wyoming Rules of Civil Procedure, has moved for summary judgment on the 2 issues set forth below and submits this Memorandum in Support of DEQ's Motion for Summary Judgment.

The DEQ Decision Being Contested

On or about October 23, 2007, Petitioner Lincoln County requested a hearing before the EQC to contest a final decision of the DEQ contained in the DEQ's September 25, 2007 letter to Mr. Bob Rawlings, the Lincoln County Landfill Manager. Lincoln County's Response to DEQ's First Discovery Requests, Response to Interrogatory 1 (Attachment A hereto). The DEQ's September 25, 2007 letter to Mr. Rawlings, filed by Lincoln County along with its October 23, 2007 Petition letter, determined that $1,053.90 for 50% of the cost for *preparation of workplans to install additional monitoring wells* at Cokeville #1 landfill and Kemmerer #1 landfill was not eligible for reimbursement under WYO. STAT. ANN. § 35-11-521(b), because those existing monitoring systems currently meet DEQ standards. The contested DEQ decision does not preclude Lincoln County from adding the proposed wells.

Lincoln County's Stated Grounds for Appeal

Lincoln County is appealing the referenced DEQ decision on the grounds that:

- WYO. STAT. ANN. § 35-11-521(a) states that the DEQ Director "shall" provide grants to local governments toward the costs of activities specified in subsection (b);

- WYO. STAT. ANN. § 35-11-521(b)(ii) specifies "preparing plans" for installation of systems to monitor or detect subsurface pollutant releases from landfills as an activity for which grant funding "may" be provided;

- the costs for which Lincoln County applied for reimbursement should be eligible because they were "for preparation of plans, and not for the physical act of upgrading existing monitoring systems;" and

- WYO. STAT. ANN. § 35-11-521(a) "does not specifically restrict funding to activities [described in § 35-11-521(b)] deemed necessary by the Department."

Lincoln County's Response to DEQ's First Discovery Requests, Response to Interrogatory 2 (Attachment A hereto).

Issues for Summary Judgment

I. Are costs of preparing plans for installing *additional wells to upgrade the existing monitor well systems* to detect subsurface pollutant releases from the Cokeville and Kemmerer landfills eligible for reimbursement grants under WYO. STAT. ANN. § 35-11-521, even if those existing monitor well systems currently meet applicable standards established by DEQ?

II. Do the existing monitor well systems to detect subsurface pollutant releases from the Cokeville and Kemmerer landfills currently meet applicable standards established by DEQ?

Standard for Summary Judgment

Chapter II, Section 14 of the DEQ Rules of Practice & Procedure makes the Wyoming Rules of Civil Procedure (Wyo. R. Civ. P.) applicable to matters before the EQC. Summary judgment is appropriate if there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Wyo. R. Civ. P. 56(b), (c). Summary judgment procedures set out in Wyo. R. Civ. P. 56 apply to administrative cases. *Rollins v. Wyoming Tribune Eagle*, 2007 WY 28, ¶6; 152 P.3d 367, 369 (Wyo. 2007). The judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file show that there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. *Id.* at 370. The purpose of summary judgment is to dispose of cases before trial that present no genuine issues of material fact. *Id.* A fact is material if proof of that fact would have the effect of establishing or refuting one of the essential elements of the cause of action or defense. *Id.*

Where there are no genuine issues of material fact, summary judgment concerns strictly

application of the law. *Board of County Com'rs of County of Laramie v. City of Cheyenne*, 2004 WY 16, ¶8; 85 P.3d 999, 1002 (Wyo. 2004). Summary judgment may involve statutory interpretation as a question of law to determine the Legislature's intent. *Id.* at 1002-03.

Undisputed Material Facts

Wyoming has at least 130 existing municipal solid waste (MSW) landfills, 52 of which are currently operating and 78 are closed, old or abandoned. All but one of these 130 existing MSW landfills are owned by units of local government. Groundwater contamination has been identified at 21 of these landfills. The DEQ has predicted that as many as 65 of the 130 known MSW landfills will ultimately require remedial action. As the DEQ evaluates groundwater monitoring data at more of the operating landfills, the list of leaking landfills will grow.

Report on "Improving Solid Waste Management in Wyoming," dated October 28, 2004, submitted to the Governor by the "Citizens' Advisory Group on Solid Wastes" (which included both Bob Rawlings, Lincoln County Landfill Manager, and Ken Schreuder, Lincoln County's consultant), pp.1-5 (Attachment B hereto).

Cokeville #1 and Kemmerer #1 are Type I sanitary landfills as defined in Chapter 1, Section 1(e) of the DEQ Solid Waste Rules, because there *is* evidence of existing groundwater contamination at both landfills. See Lincoln County's January 20, 2006 letters to DEQ regarding the Cokeville #1 landfill and the Kemmerer #1 landfill (Attachments C & D hereto), listed in Lincoln County's Response to DEQ's First Discovery Requests, Response to Interrogatory 3 (Attachment A hereto). Chapter 2, Section 6 of the DEQ Solid Waste Rules establishes standards for groundwater monitoring systems for sanitary landfills. Under those standards, a landfill groundwater monitoring system must be able "to monitor water from the uppermost aquifer which may be affected by leakage from the facility" and "be capable of monitoring background and downgradient water quality." Ch. 2, Sec. 6(b)(i)(B)(I), DEQ Solid Waste Rules.

If a statistically significant difference in water quality between background and any downgradient well is detected, the standards for "detection monitoring" require the landfill operator to either:

(1) start "assessment monitoring" within 90 days; or

(2) demonstrate that the statistically significant water quality difference is not due to the landfill, but that the difference is due to another source of pollution or natural variation in groundwater quality.

Ch. 2, Sec. 6(b)(i)(D)(III), DEQ Solid Waste Rules.

In November, 2005, the DEQ informed Lincoln County that:

- the existing groundwater monitoring networks at both Cokeville #1 and Kemmerer #1 landfills were adequate to detect groundwater impacts from those landfills;
- statistical analysis of the available data indicated that those landfills have impacted groundwater;
- those landfills should move from *detection* monitoring to *assessment* monitoring.

Lincoln County's January 20, 2006 letters to DEQ regarding the Cokeville #1 landfill and the Kemmerer #1 landfill (Attachments C & D hereto).

Interwell analysis has already identified "statistically significant increases between the upgradient [background] and downgradient wells for a relatively large number of constituents" at Cokeville, and "statistically significant increasing trends for several constituents in the two shallow downgradient wells" at Kemmerer.

January 20, 2006 letters ("Statistical Analysis") from Lincoln County to DEQ regarding Cokeville #1 landfill and Kemmerer #1 landfill (Attachments C & D hereto).

Considering the site-specific "variable hydrogeologic conditions" at Cokeville #1 landfill and "complex and highly variable hydrogeologic conditions" at Kemmerer #1 landfill, "utilization of interwell statistical protocols for geochemical parameters may not be appropriate" at these two landfills.

January 20, 2006 letters ("Suggestions for Consideration" & "Statistical Analysis") from Lincoln County to DEQ regarding Cokeville #1 landfill and Kemmerer #1 landfill (Attachments C & D).

Lincoln County has proposed "shifting the detection monitoring strategy to focus on anthropogenic compounds, and more specifically, volatile organic compounds (VOCs)" at both Cokeville #1 and Kemmerer #1 landfills, because given the referenced site-specific conditions, "it is not clear that additional drilling will be successful in establishing an environmental monitoring system that is capable of accurately distinguishing geochemical impacts to groundwater that are due to landfilling activities from those that are due to natural phenomena."

January 20, 2006 letters ("Suggestions for Consideration") from Lincoln County to DEQ regarding Cokeville #1 landfill and Kemmerer #1 landfill (Attachments C & D hereto).

The Wyoming Environmental Quality Act (WEQA) authorizes adoption of DEQ rules, regulations and standards to provide requirements for environmental monitoring. WYO. STAT. ANN. § 35-11-503(a)(i). The Administrator of the Solid and Hazardous Waste Division and the Director of the DEQ are responsible for administering such rules, regulations and standards. WYO. STAT. ANN. §§ 35-11-501(b); 35-11-110(a); 35-11-109(a)(xii).

Argument

Lincoln County's appeal raises questions involving the proper interpretation of WYO. STAT. ANN. § 35-11-521(a) and (b)(ii)&(iii). WYO. STAT. ANN. § 35-11-521 states (emphasis added):

> (a) Subject to the availability of funds, the director *shall provide* grants toward the costs of performing activities specified in subsection (b) of this section to local governmental entities who own or are responsible or any municipal solid waste landfill, for any project where a work plan has been submitted to the department for work performed or initiated after July 1, 2005.
>
> (b) Grant funding under this section *may be provided* at existing or closed municipal solid waste landfills for the following activities:
>
> > (ii) Preparing plans for installation of systems to monitor or detect releases of subsurface pollutants from landfills; [and]
> > (iii) Installing new monitor systems or upgrading existing monitor systems *to meet standards for the systems established by the department* under this article [Article 5].

Statutory interpretation is a question of law. *Basin Elec. Power Co-op. v. Bowen*, 979 P.2d 503, 506 (Wyo. 1999). Courts endeavor to interpret statutes in accordance with the Legislature's intent. *Id.* When the Court determines that a statute is clear and unambiguous, it must give effect to the plain language of the statute and should not resort to rules of statutory construction. *Id.* If the Court determines that a statute is ambiguous, it may use extrinsic aids of statutory interpretation to help determine the Legislature's intent. *Id.* The question of whether an ambiguity exists is a matter of law to be determined by the Court. *Id.* A statute is ambiguous if it is found to be vague or uncertain and subject to varying interpretations. *Id.* at 506-507.

In a case where it is not so much a matter that the statute is ambiguous as to its terms, but rather that the statute does not expressly contemplate the current dispute, the Court is left to determine how, in light of the statutory scheme as a whole, the Legislature would wish to resolve the question. *Bowen*, 979 P.2d at 507. The fundamental rule of statutory construction is to ascertain, if possible, what the Legislature intended by the language used, viewed in light of the objects and purposes to be accomplished. *Id.* at 508. When confronted with two possible but conflicting conclusions, the Court will choose the one that is most logically designed to accomplish the Legislature's objective. *Id.*

All parts of an act should be construed as a whole, because it embodies the complete legislative act, and division of a law into codified sections has no substantive meaning. *V-1 Oil Co. v. State*, 934 P.2d 740, 745 (Wyo. 1997). Every subsection of a statute must be read in the context of all others to ascertain the meaning of the whole statute. *B&W Glass v. Weather Shield Mfg., Inc.*, 829 P.2d 809, 816 (Wyo. 1992). Specific statutory language should not be read in isolation, but rather the particular statutory language at issue should be read in the context of the language and design of the statute as a whole. *Leonhardt v. Western Sugar Co.*, 160 F.3d 631, 635 (10th Cir. 1998).

Issue I: Costs of preparing plans for installing additional wells to upgrade the existing monitor well systems to detect subsurface pollutant releases from the Cokeville and Kemmerer landfills are not eligible for reimbursement grants under WYO. STAT. ANN. § 35-11-521 if those existing monitor well systems currently meet applicable standards established by DEQ.

Lincoln County is contesting the DEQ's September 25, 2007 decision that the cost of preparing plans to upgrade existing monitor systems by adding new wells at the Cokeville and Kemmerer landfills are not eligible for reimbursement because the additional wells are not needed to meet DEQ standards. Lincoln County's Response to DEQ's First Discovery Requests, Response to Interrogatory 1 (Attachment A hereto). Lincoln County's grounds for appeal are:

- the costs incurred by Lincoln County were for the preparation of plans, and not for the physical act of upgrading existing monitoring systems; and

- WYO. STAT. ANN. § 35-11-521(a) & (b) do not specifically restrict funding to activities "deemed necessary by the Department."

Lincoln County's Response to DEQ's First Discovery Requests, Response to Interrogatory 2 (Attachment A hereto).

The costs for which Lincoln County is now seeking reimbursement were for preparing plans to add wells to upgrade the existing monitor systems at the Cokeville #1 and Kemmerer #1 landfills, not the physical act of adding those wells. Although Lincoln County has requested a grant for preparing plans to add wells to the existing systems, rather than actual physical installation of those additional wells, the DEQ's September 25, 2007 decision letter explained that those costs are not eligible for reimbursement because the planned additional wells are not needed *to meet DEQ standards*.

The DEQ's position is based on its interpretation of §§ 35-11-521 & 35-11-522 together, which were both created as parts of the same legislation during the 2006 Budget Session. Original Senate File 38, Enrolled Act 43, Laws 2006, Ch. 101. Two related functions of §§ 35-11-521 & 522 are a reimbursement grant program for the monitoring-related activities specified in §521(b), and evaluation and reporting by DEQ of all available groundwater monitoring data from municipal solid waste disposal facilities, including a description of the extent to which such facilities cause or contribute to groundwater pollution and an estimate of *statewide* groundwater remediation costs for such facilities under §522(e). The legislation assigns or recognizes the following DEQ responsibilities:

- subject to the availability of funds, provide grants for specified municipal landfill monitoring activities, including preparation of plans for and installation or upgrade of *eligible* groundwater monitoring systems (§521(a)&(b)(ii)&(iii));

- establish standards for municipal landfill monitor systems (§521(b)(iii));

- evaluate all available municipal landfill groundwater monitor data and report to the Legislature the estimated "statewide" groundwater remediation cost faced by local governmental owners of such facilities by June 30, 2010 (§522(e)).

This legislation also appropriated a total of $7,970,000 to fund the monitoring grant program under WYO. STAT. ANN. §§ 35-11-521 & 522. Laws 2006, Ch. 101, Section 2.

Activities eligible for reimbursement grants under WYO. STAT. ANN. § 35-11-521(b) include preparing plans for installation of systems to monitor or detect subsurface pollutant releases from landfills, and installing new or upgrading existing monitor systems "*to meet standards for the systems established by the department.*" (Emphasis added.) WYO. STAT. ANN. § 35-11-521(b)(ii)&(iii).

Construing WYO. STAT. ANN. §§ 35-11-521(b) and 522(e) together, the terms reflect legislative intent to limit grants for upgrades of existing landfill monitoring systems to only those needed to meet DEQ standards, and to have DEQ evaluate the data from such monitoring systems to estimate the "statewide" groundwater remediation costs at the 129 government-owned MSW landfills in Wyoming.

According to the Citizens' Advisory Group on Solid Wastes, Wyoming has at least 130 existing MSW landfills, all but one of which are owned by units of local government. Report on "Improving Solid Waste Management in Wyoming," dated October 28, 2004, p.1 (Attachment B hereto). Limiting grant eligibility under §35-11-521(b)(ii)&(iii) to costs for bringing groundwater monitoring systems at all 129 existing governmentally owned MSW landfills up to the current DEQ minimum standards, rather than using the appropriation to fund upgrades beyond minimum standards for fewer landfills, will enable use of the limited funds available for monitoring grants to serve the related purpose of obtaining the extensive *statewide* landfill data needed for the 2010 DEQ report mandated by §35-11-522(e). Statutes must be interpreted in a fashion which permits an agency to carry out its legislative mandate. *Bowen*, 979 P.2d at 509.

Grant eligibility under WYO. STAT. ANN. § 35-11-521(b)(iii) expressly includes "installing new" or "upgrading existing" monitor systems, but is expressly limited to those being done "to meet standards for the systems established by the department." Grant eligibility under §521(b)(ii) for preparing plans expressly includes "plans for installation of [monitor] systems," but not plans for "upgrading existing monitor systems," and is not expressly limited to plans for monitor systems being installed to meet standards for the systems established by the department.

Omission of words from a statute must be considered intentional on the part of the Legislature. *Bowen*, 979 P.2d at 509. Where the Legislature has specifically used a word or term in certain places in a statute and excluded it in another place, the Court should not read that term into the section from which it was excluded. *Id.* The Court has no power to add to, or substitute, words in a statute. *Id.* By the same token, every word in Legislation is presumed to have a meaning, and a statute should be construed so that no part will be inoperative or superfluous. *Id.*

Interpreting §35-11-521(b)(ii) to allow awarding Lincoln County a grant for costs of preparing plans to add more wells to upgrade their existing landfill monitoring systems which currently "meet standards for the systems established by the department" will not make subsequent installation of those additional wells eligible for such grants under the express language of §521(b)(iii). The Legislature should not be assumed to intend futile things and statutes should not be interpreted in a manner producing absurd results. *Corkill v. Knowles*, 955 P.2d 438, 444-445 (Wyo. 1998). Statutes should be construed to avoid an absurd result, whenever apparent, and the Legislature is presumed to intend to adopt legislation that is logical and not to intend to adopt statutes that are futile. *Stauffer Chemical Co. v. Curry*, 778 P.2d 1083, 1093 (Wyo. 1989).

II. The existing monitor well systems to detect subsurface pollutant releases from the Cokeville and Kemmerer landfills currently meet applicable standards established by DEQ.

Lincoln County identifies a ground for its appeal to be that §35-11-521 "does not specifically restrict funding to activities deemed necessary by the Department." Lincoln County's Response to DEQ's First Discovery Requests, Response to Interrogatory 2 (Attachment A hereto). However, the statute expressly limits grant eligibility for costs of upgrading existing monitor systems only "to meet standards for the systems established by the department." WYO. STAT. ANN. § 35-11-521(b)(iii).

If grant eligibility under §35-11-521(b)(iii) for installing new monitor systems or

upgrading existing monitor systems depends upon whether those installations or upgrades are needed to "meet standards for the systems established by the department," then under §§ 35-11-501(b), 110(a) & 109(a)(xii), as noted above, the DEQ is responsible for making that determination.

Lincoln County's two January 20, 2006 letters to DEQ (Attachments C & D hereto) confirm that the existing landfill groundwater monitoring networks have detected statistically significant differences in groundwater quality between upgradient and downgradient monitor wells at Cokeville #1 and statistically significant increasing trends for several constituents in the two shallow downgradient wells at Kemmerer #1. The DEQ Solid Waste Rules require a shift from detection monitoring to assessment monitoring if a statistically significant difference in water quality is detected between background and any downgradient well, *unless* the facility can demonstrate that the statistically significant difference in water quality is due to another source of pollution and not the landfill. Chapter 2, Section 6(b)(i)(D)(III)(2), DEQ Solid Waste Rules.

The existing monitor systems at Cokeville #1 and Kemmerer #1 landfills currently meet the above-referenced DEQ standards established in Ch. 2, Sec. 6, because:

- they are able to monitor water from the uppermost aquifer which may be affected by leakage from those facilities;
- although statistically significant differences in water quality between background and downgradient wells have been detected at Cokeville and statistically significant increasing trends for several constituents have been detected in the two shallow downgradient wells at Kemmerer, considering site-specific information at both landfills, it is not clear that additional drilling will be successful in establishing an environmental monitoring system that is capable of accurately distinguishing geochemical impacts to groundwater that are due to landfilling activities from those that are due to natural phenomena; and
- Prior to starting assessment monitoring, Lincoln County proposes shifting the

detection monitoring strategy to focus on anthropogenic compounds, and more specifically, volatile organic compounds (VOCs) to demonstrate that the statistically significant water quality differences at Cokeville #1 and increasing trends at Kemmerer #1 are due not to the landfills, but rather to another source of pollution or natural variation in groundwater quality.

Conclusion

For the reasons set forth above, there is no genuine issue of material fact and summary judgment should be rendered as a matter of law on the two specified issues.

DATED this 25th day of February, 2008.

Mike Barrash
Sr. Assistant Attorney General
123 Capitol Building
Cheyenne, Wyoming 82002
(307) 777-6946

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY'S MEMORANDUM IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT was served by United States mail, first class postage prepaid, and by email or facsimile transmission this 25th day of February, 2008, addressed as follows:

Mr. Eric Phillips
Lincoln County Attorney
520 Topaz St., Suite 110
Kemmerer, Wyoming 83101
Phone: 307-877-2119/4481
FAX: 307-877-4168
ephillips@lcwy.org

Wyoming Attorney General's Office

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

IN RE: THE FINAL DETERMINATION OF REIMBURSEMENT OF FUNDS TO LINCOLN COUNTY LANDFILLS	)))	**DOCKET NO. 07-3216**

LINCOLN COUNTY'S RESPONSE TO DEQ'S FIRST DISCOVERY REQUESTS

Petitioner Lincoln County, pursuant to W.S. § 16-3-107(g) and Chapter II, §10(a) of the DEQ Rules of Practice & Procedure, hereby provided the following responses to DEQ's interrogatories in accordance with Rule 33 of the Wyoming Rules of Civil Procedure.

INTERROGATORY NO. 1 Please identify the specific DEQ action or decision Lincoln County is contesting in this appeal before the Wyoming Environmental Quality Council (Council), and specify the date and document by which that DEQ action or decision was communicated to Lincoln County.

Response to Interrogatory 1: Lincoln County is contesting the DEQ's decision contained in correspondence dated September 25, 2007 (received by Lincoln County on or about September 27, 2007). In correspondence dated October 23, 2007 (received by the EQC on October 25, 2007), Lincoln County filed an appeal and requested a hearing on this matter.

INTERROGATORY NO. 2: Please specify the statute(s), rule(s), and/or order(s) Lincoln County alleges was/were violated by the DEQ action or decision identified in Lincoln County's answer to interrogatory #1 above, and explain in detail the complete factual and legal basis for that allegation.

Response to Interrogatory 2: DEQ denied Lincoln County's request for reimbursement for costs incurred between June 3 and August 13, 2006, relative to the preparation of plans for installation of systems to monitor or detect releases of subsurface pollutants from the Cokeville #1 and Kemmerer #1 landfills. The DEQ stated that its determination is based on the eligibility requirements of W.S. § 35-11-521 (b) (iii), which states:

> *"**Installing** (emphasis added) new monitor systems or **upgrading** (emphasis added) existing monitor systems to meet standards for the systems established by the department under this article;"*

Lincoln County is appealing the referenced decision on grounds that W.S. § 35-11-521 (a) states:

ATTACHMENT
A
(EQC Doc. # 07-3216)

*"Subject to availability of funds, the director **shall** (emphasis added) provide grants toward the cost of performing activities specified in subsection (b) of this section to local government entities who own or are responsible for any project where a work plan has been submitted to the department for work performed or initiated after July 1, 2005."*

Furthermore, W.S. §.35-11-521 (b) (ii) states:

*"**Preparing plans** (emphasis added) for installation of systems to monitor or detect releases of subsurface pollutants from landfills;"*

The costs incurred by Lincoln County were for the preparation of plans, and not for the physical act of upgrading existing monitoring systems, and should, therefore, be eligible for reimbursement.

Lincoln County also contests the Department's decision that activities identified by W.S. § 35-11-521 (b) (i) through (iv) are eligible for reimbursement only if they are determined to be necessary by the Department. W.S. § 35-11-521 (a) states that funds shall be provided for the activities described in W.S. § 35-11-521 (b) (i) through (iv), and does not specifically restrict funding to activities deemed necessary by the Department.

INTERROGATORY NO. 3: Please list individually all documents, reference materials, and any other materials supporting or relied on for Lincoln County's answer to interrogatory #2 above.

Response to Interrogatory 3:

1. W.S. § 35-11-521 and 35-11-522
2. November 8, 2005 correspondence from DEQ to Lincoln County regarding Cokeville #1
3. November 8, 2005 correspondence from DEQ to Lincoln County regarding Kemmerer #1
4. January 20, 2006 correspondence from Lincoln County to DEQ regarding Cokeville #1
5. January 20, 2006 correspondence from Lincoln County to DEQ regarding Kemmerer #1
6. June 28, 2006 correspondence from Environmental Engineering Solutions to DEQ regarding Cokeville #1
7. July 3, 2006 correspondence from Environmental Engineering Solutions to DEQ regarding Cokeville #1
8. October 21, 2006 guidance published by DEQ regarding Municipal Solid Waste Landfill Monitoring Program Grant Criteria under Senate File 0038 (2006) and Environmental Quality Act Article 5, § 35-11-521 and § 35-11-522
9. March 5, 2007 correspondence from DEQ to Lincoln County regarding Cokeville #1
10. March 5, 2007 correspondence from DEQ to Lincoln County regarding Kemmerer #1

11. March 6, 2007 correspondence from DEQ to Lincoln County regarding Cokeville #1
12. March 6, 2007 regarding Kemmerer #1
13. April 11, 2007 correspondence from DEQ to Lincoln County regarding Cokeville #1 and Kemmerer #1
14. March 2, 2007 correspondence from DEQ to Lincoln County regarding Cokeville #1 and Kemmerer #1
15. June 14, 2007 transcripts of Water & Waste Advisory Board Hearing in Casper
16. September 13, 2007 transcripts of Water & Waste Advisory Board Hearing in Jackson, and written recommendations to DEQ
17. September 25, 2007 correspondence from DEQ to Lincoln County

DATED this 18th day of January, 2008.

Joseph Cole, Deputy
Lincoln County Attorney
520 Topaz, Ste. 110
Kemmerer, WY 83101
307-877-2119
307-877-4168 FAX

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing *Lincoln County's Response to DEQ's First Discovery Requests* was served by in the U.S. mail, first class postage prepaid, and by facsimile transmission this 18th day of January, 2008, addressed as follows:

Mike Barrash
Sr. Assistant Attorney General
123 Capitol Building
Cheyenne, WY 82002
307-777-6946
307-777-3542 FAX

Joseph Cole

Citizens' Advisory Group on Solid Waste and Department of Environmental Quality Report:

Improving Solid Waste Management in Wyoming

Submitted to:

Governor Dave Freudenthal
and the Wyoming DEQ

October 28, 2004

Submitted by:

The Citizens Advisory Group on Solid Wastes

ATTACHMENT
B
(EQC Doc. # 07-3216)

Advisory Group Members:

Michele Barlow, Wyoming Outdoor Council
Susan Benepe, Lander Recycles
Don Connell, Fremont County Solid Waste Disposal District
Alan Cummins, City of Sheridan
Bobbe Fitzhugh, City of Douglas and Wyoming Association of Municipalities
Carmen Goodman, (formerly) WWC Engineering
Myron Heny, Wyoming Solid Waste and Recycling Association Board
Howard Johnson, Inberg-Miller Engineers
Susan Kramer, Sublette Citizens for Recycling
Cindie Langston, City of Casper
Bill Massey, Medicine Bow resident
Pamela McClure, (formerly) Town of Guernsey
Craig McOmie, Campbell County Recycling
Joe Megeath, Wyoming Solid Waste and Recycling Association Board
Gary Mines, Mines Consulting
Clay Muirhead, Wyoming Solid Waste and Recycling Association Board, Terracon Engineering
Dennis Pino, City of Cheyenne
Alden Prosser, Platte County Commission and Wyoming County Commissioners Association
Jackie Smith, City of Cheyenne
Bob Rawlings, Lincoln County
Ken Schreuder, Environmental Engineering Solutions
Bob Stoddard, Uinta County Commission and Wyoming County Commissioners Association
Glenn Sugano, Wyoming Solid Waste and Recycling Association Board
Heather Thomas, Jackson Community Recycling
Bart Webb, Campbell County
Jim Yocum, Energy Labs
Bryan Sweeney, City of Douglas

DEQ staff supporting the efforts of the Citizens Advisory Group included:

Robert Doctor
Maggie Davison
Dale Anderson
David Finley
Patrick Troxel

Table of Contents

Executive Summary

Every individual in Wyoming generates solid waste. Solid waste is the trash that we take out to our alleys, where it is hauled 'away' by local government sanitation agencies or private haulers. Trash is also an inevitable byproduct, at least for the foreseeable future, of the economic activity that provides jobs and livelihoods for Wyoming families.

Since the days of statehood, Wyoming's trash has been dumped in unlined trenches in the ground and covered with dirt. As our population grew, and as people began to recognize the environmental and public health threats posed by trash disposal, trash dumps became more organized. Local governments assumed the responsibility for managing these dumps, and with one exception all currently operating landfills in Wyoming are owned by cities, towns, counties, or special purpose districts. With time, regulations and permitting systems were also developed. The goal of these regulations and permitting systems, which are now enforced by the Wyoming Department of Environmental Quality (DEQ), is to ensure that solid waste disposal activities don't cause harm to public health or the environment.

Municipal solid waste (MSW) disposal facilities began to be regulated by DEQ in 1975. The 1975 regulations were generally focused on eliminating open burning of trash to control air pollution, controlling litter, limiting the presence of scavenging animals that could carry disease, and limiting nuisance factors like flies and odors. The regulations were significantly strengthened in 1989 to focus on limiting the potential for groundwater contamination from MSW landfills, but the option to continue to have unlined disposal trenches was maintained. This option was maintained because the science of the time predicted that Wyoming was too arid for its MSW landfills to cause groundwater contamination, and because local government landfill owners strongly desired to keep MSW disposal costs low.

The problems:

Since 1989, DEQ has collected a substantial body of data showing that an increasing number of Wyoming's MSW landfills are leaking and contaminating groundwater. To address this situation, DEQ, at the recommendation of Governor Dave Freudenthal, convened a citizens' advisory group (the Advisory Group) to help it identify the key problems with MSW disposal in Wyoming and to identify solutions to these problems. The Advisory Group believes there are three interrelated solid waste problems facing the state and its communities:

• **The cost to provide safe MSW landfill disposal services to Wyoming communities will increase appreciably in future years, and much of the cost increase is unnecessary.** Safer, lined landfills should be built to prevent future contamination of Wyoming's groundwater from landfill leachate. However, lined landfills are more expensive. Smaller communities should band together, using a more cost effective, integrated, regional approach to solid waste

management. Unfortunately, it may be politically difficult for local government to site new landfills, and there are significant barriers for communities to create regional landfills. In addition, there are inadequate incentives for cities, towns, and counties to close small landfills and build cost-effective regional landfills. The state should provide incentives, and assist local governments seeking more economical disposal in lined regional landfills.

• **Wyoming's recycling rate is lower than it should be.** Overall, Wyoming is diverting a very small proportion of its waste stream away from landfills. While landfills are becoming more and more expensive to build and operate, the amount of solid waste we generate is also increasing. We are filling up our landfills at an unnecessarily fast rate and "consuming" more land than we need. Additionally, we are failing to capitalize on a significant resource when we bury useable materials.

Repeated public surveys show that citizens want to recycle, but there are limited opportunities and economic incentives to help them to actually do it. The 2003-2004 Wyoming Recycling Directory lists 57 communities across the state that offer some type of waste reduction or recycling services. However, the lack of support and state coordination of these systems, the lack of a statewide recycling goal, the lack of a system to track waste diversion, and the difficulties in finding markets for collected recyclable materials has stymied progress.

• **Most Wyoming communities do not have the financial ability to remediate groundwater contamination caused by releases from current and historic unlined MSW landfills. In addition, local financial constraints have significantly delayed the pace of remediation. These delays allow contamination to spread and will significantly increase the ultimate cost of remediation.** Wyoming has at least 130 existing MSW landfills. Fifty-two of these are currently operating, and 78 are closed, old or abandoned. Groundwater contamination has been identified at twenty-one (21) municipal landfills. As DEQ evaluates groundwater monitoring data at more of the operating landfills, and as testing begins at some of the older, closed landfills, the list of leaking landfills will undoubtedly grow. DEQ predicts that as many as 65 of the 130 known municipal landfills will ultimately require remedial action. All but one of the 130 existing MSW landfills are owned by units of local government—which means they are owned by the citizens of Wyoming. Remediating contaminated groundwater at municipal landfills could cost between $0.55 and $6.5 million per site. DEQ estimates that the total cost of remediation in Wyoming could be at least $180 million (Lydigsen, 2004). For smaller communities especially, the cost impact on families living in the community for remediation of a leaking landfill can be staggering. For this reason, most Wyoming communities resist DEQ efforts to compel remediation, prolonging the problem and making it ultimately more expensive to deal with in the long run.

10.335

Lincoln County Landfills

Bob Rawlings
Landfills Manager
P.O. Box 670
Kemmerer, WY 83101
(307) 877-9056 ext 347
(307) 877-5101 Fax

January 20, 2006

WDEQ/SHWD
ATTN.: Patrick Troxel
510 Meadowview Drive
Lander, Wyoming 82520

RE: Response to WDEQ November 8, 2005 Groundwater Monitoring Network Review
Cokeville #1 Sanitary Landfill

Mr. Troxel:

Lincoln County is in receipt of the WDEQ's November 8, 2005 review of the groundwater monitoring network at the Cokeville #1 sanitary landfill. In summary, your letter indicated that the WDEQ has concluded that the groundwater monitoring network at this facility is adequate to detect groundwater impacts from the landfill, and that statistical analysis of the available data has lead to a conclusion that landfilling activities have impacted groundwater. Based on this conclusion, your letter recommended that this facility move from detection monitoring to assessment monitoring.

We asked Ken Schreuder (Environmental Engineering Solutions) to review the WDEQ's analysis and offer the following comments.

Groundwater Monitoring Network

As noted in the WDEQ's review, upgradient well GW-1 is completed in a siltstone lithology that is associated with the Thomas Fork Formation, and the downgradient well is completed in a claystone lithology that is associated with the Cokeville Formation. Available data indicates that upgradient well GW-1 produces water from depths of at least 20-26 feet, while downgradient well GW-2 produces water from depths of at least 40 feet and a zone that may be under confined or semi-confined conditions. The noted variations in the stratigraphy, lithology and chemistry of the water bearing zones at this facility have the potential to affect the geochemistry of the groundwater moving through these zones.

Statistical Analysis

Two interwell statistical protocols (analysis of variance and prediction intervals) were used to identify statistically significant distances in groundwater quality between upgradient and downgradient wells. Intrawell trend analysis (Sen's Slope) was also used to evaluate trends within each well.

The interwell analysis identified statistically significant increases between the upgradient and downgradient wells for a relatively large number constituents. In all cases, the limits for Type I and Type II error levels specified by Solid Waste Chapter 2 or EPA Guidance

ATTACHMENT
C
(EQC Doc. # 07-3216)

were exceeded, and in most cases by significant margins. As such, there is a chance that one or more of these comparisons falsely registered potential contamination even if none is present.

The relatively large number of "statistically significant" constituents identified by the interwell analysis would suggest that a diverse mixture of constituents are migrating from the landfill. If a diverse mixture of constituents were in fact leaching from a landfill, it would not be unreasonable to see some variations in the concentrations of the various constituents with time (i.e., different constituents may leach at different times and different rates, causing dissimilar trends in the concentrations of constituents being discharged). However, the intrawell analysis did not identify any statistically significant increasing or decreasing trends in any of the downgradient data, which implies that the concentrations of all geochemical constituents in the downgradient well are relatively stable.

In consideration of hydrogeologic and statistical issues identified above, utilization of interwell statistical protocols for geochemical parameters may not be appropriate at this facility. Any statistically significant increases identified could be due to naturally-occurring spacial variations rather than landfill impacts.

Suggestions for Consideration

Given the variable hydrogeologic conditions at this facility and the statistical limitations noted above, it is not clear that additional drilling will be successful in establishing an environmental monitoring system that is capable of accurately distinguishing geochemical impacts to groundwater that are due to landfilling activities from those that are due to natural phenomena. Lincoln County, therefore, proposes shifting the detection monitoring strategy to focus on anthropogenic compounds, and more specifically, volatile organic compounds (VOCs). VOCs are more likely to provide an earlier indication of impacts because they generally tend to migrate as fast or faster than groundwater, as opposed to geochemical parameters which generally tend to migrate as fast or slower than groundwater. The use of VOCs is also advantageous because if they are identified at statistically significant concentrations, they provide clear and convincing evidence of landfill impacts because they are not naturally-occurring.

Lincoln County is committed to operating its landfills in an environmentally responsible manner and in compliance with Wyoming rules and regulations. I want to thank you and Kathy Brown for meeting with me and Ken Schreuder on November 18 to discuss these issues, and look forward to the opportunity to do so again once you have had a chance to review these comments and suggestions.

Sincerely,

Bob Rawlings
Landfill Manager
Lincoln County

copy : Ken Schreuder, EES/Lander

10.345

Lincoln County Landfills

Bob Rawlings
Landfills Manager
P.O. Box 670
Kemmerer, WY 83101
(307) 877-9056 ext 347
(307) 877-3101 Fax

January 20, 2006

RECEIVED
JAN 2 3 2006
Solid & Hazardous Waste Div.
Lander, Wyoming

Received
JAN 23 2006
Casper DEQ

WDEQ/SHWD
ATTN.: Patrick Troxel
510 Meadowview Drive
Lander, Wyoming 82520

RE: Response to WDEQ November 8, 2005 Groundwater Monitoring Network Review
Kemmerer #1 Sanitary Landfill

Mr. Troxel:

Lincoln County is in receipt of the WDEQ's November 8, 2005 review of the groundwater monitoring network at the Kemmerer #1 sanitary landfill. In summary, your letter indicated that the WDEQ has concluded that the groundwater monitoring network at this facility is adequate to detect groundwater impacts from the landfill, and that statistical analysis of the available data has lead to a conclusion that landfilling activities have impacted groundwater. Based on this conclusion, your letter recommended that this facility move from detection monitoring to assessment monitoring.

We asked Ken Schreuder (Environmental Engineering Solutions) to review the WDEQ's analysis and offer the following comments.

Groundwater Monitoring Network

The hydrogeology of this site varies from the east to the west (perpendicular to the assumed groundwater gradient) and from the north to the south (parallel to the assumed groundwater gradient). The associated variations in stratigraphy, lithology and chemistry of the various water bearing zones have the potential to affect the geochemistry of the groundwater moving through these zones. In addition, the available data suggest that the uppermost groundwater system upgradient of this landfill may be under confined or semi-confined conditions at depths of at least 41 to 45 feet, while the uppermost groundwater system downgradient of this landfill appears to be relatively shallow (less than 10 feet) and most likely unconfined. Shallow, unconfined water bearing zones have the potential to be more susceptible to short term variations in precipitation and runoff which infiltrate surficial soils and recharge the shallow water bearing zone.

Due to the distribution of the waste disposal areas at this site, there are significant distances (up to ~2900 feet) between some of the upgradient and downgradient wells. Although the hydraulic conductivity of the water bearing zones at this site have not been measured, the lithology of the water bearing zones has the potential to demonstrate relatively low groundwater flow velocities.
In consideration of the hydrogeologic factors noted above, the potential exists for naturally-induced spacial and temporal variability in the geochemistry of the groundwater

ATTACHMENT
D
(EQC Doc. # 07-3216)

that is being monitored. It is possible that the two downgradient wells (KGW-2 and KGW-3 could be moved closer to waste disposal areas in an attempt to address these issues. However, it is likely that replacement wells would still be completed in shallow, unconfined zones, making them susceptible to the problems noted above, and the distance between the upgradient and downgradient wells would still be relatively significant (~1500 ft) for a groundwater system with relatively low flow velocities.

Statistical Analysis

Two interwell statistical protocols (analysis of variance and prediction intervals) were used to identify statistically significant distances in groundwater quality between upgradient and downgradient wells. Intrawell trend analysis (Sen's Slope) was also used to evaluate trends within each well.

The interwell analysis identified statistically significant increases in several wells and constituents. In all cases, the limits for Type I and Type II error levels specified by Solid Waste Chapter 2 or EPA Guidance were exceeded, and in some cases by significant margins. As such, there is a chance that one or more of these comparisons falsely registered potential contamination even if none is present.

The intrawell analysis identified statistically significant increasing trends for several constituents in the two shallow downgradient wells. No statistically siginificant increasing trends were noted in the downgradient wells that are closer to waste disposal areas. Many of the constituents that demonstrated statistically significant increasing trends in downgradient wells also demonstrated statistically significant increasing trends in upgradient wells, which may suggest that the trends are associated with a natural phenomena rather than landfill impacts.

In consideration of the hydrogeologic issues identified above, utilization of interwell statistical protocols for geochemical parameters may not be appropriate at this site. Any statistically significant increases identified could be due to naturally-occuring spacial or temporal variations, rather than landfill impacts. The hydrologeologic issues identified above also raise questions regarding the use of intrawell analysis to evaluate the trends of geochemical parameters in the shallow downgradient wells.

Suggestions for Consideration

Given the complex and highly variable hydrogeologic conditions at this facility, and the statistical limitations noted above, it is not clear that additional drilling will be successful in establishing an environmental monitoring system that is capable of accurately distinguishing geochemical impacts to groundwater that are due to landfilling activities from those that are due to natural phenomena. Lincoln County, therefore, proposes shifting the detection monitoring strategy to focus on anthropogenic compounds, and more specifically, volatile organic compounds (VOCs). VOCs are more likely to provide an earlier indication of impacts because they generally tend to migrate as fast or faster than groundwater, as opposed to geochemical parameters which generally tend to migrate as fast or slower than groundwater. The use of VOCs is also advantageous because if they are identified at statistically significant concentrations, they provide clear and convincing evidence of landfill impacts because they are not naturally-occurring.

Lincoln County is committed to operating its landfills in an environmentally responsible manner

and in compliance with Wyoming rules and regulations. I want to thank [illegible] and Kathy Brown for meeting with me and Ken Schreuder on November 18 to discuss these issues, and look forward to the opportunity to do so again once you have had a chance to review these comments and suggestions.

Sincerely,

Bob Rawlings
Landfill Manager
Lincoln County

copy : Ken Schreuder, EES/Lander