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THE HYDROGEOLOGIC INTEGRITY OF THE THE SAND DRAW SAN#1
LANDFILL, FREMONT COUNTY, WYOMING

By

Donald I. Siegel PhD
Hydrogeologist.

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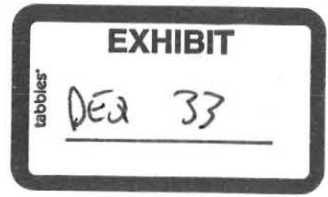
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Solid & Hazardous Waste Div.
Lander, Wyoming

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WYOMING DEQ
CASPER, WY



1.0 INTRODUCTION

My name is Donald I. Siegel. This document constitutes my opinion regarding whether the groundwater hydrology at the Sand Draw San#1 landfill, Fremont County, Wyoming over whether there is a measured continuous water table under the landfill, whether changing elevations potentially compromise the integrity of the landfill with respect to potential migration of environmentally harmful substances in leachate, and whether measured concentrations of contaminants in monitoring wells pose an environmental risk by leaving the landfill area.

I reserve the right to supplement, modify or further clarify my opinions and the bases for my opinions to address any new or additional information that may become available after this report.

In forming my opinions, I have relied upon my training, education, experience, and the report and supporting documents related to; "Subsurface Exploration and Groundwater Study Sand Draw San #1 Landfill (Inberg-Miller Engineers, 2005), a report on the statistical characterization of the landfill water level variability by Dr. Dale Groutage, and letters and memoranda from the Wyoming Department of Environmental Protection. I have also relied upon textbooks and literature references pertinent to my field.

Qualifications

Briefly, I earned a BS in Geology from the University of Rhode Island, an MS in Geology from Pennsylvania State University, and a PhD in Hydrogeology from the University of Minnesota. After and during my studies for the PhD, the United States Geological Survey employed me a hydrologist and geochemist. I followed my employment at the USGS by joining the faculty at Syracuse University as a Professor of Earth Sciences, where I have served for 24 years. I have served as Chairman of the Hydrogeological Division of the Geological Society of America (GSA), am a GSA Fellow, and have been awarded all pertinent GSA professional honors: the Birdsall-

Dreiss Distinguished Lectureship (1992-1993); GSA Distinguished Service Award, 2001; GSA Councilorship 2002-present; and most recently, the O.E. Meinzer Award in Hydrogeology this October (2005) in recognition of my research contributions to the field.

I have served on numerous National Research Council (National Academy of Sciences and Engineering) Committees, including; Techniques for Assessing Ground Water Contamination, 1991-1993; Wetland Characterization and Delineation, 1993-1994; USGS Water Use Program, 2000-2001; Regional Aquifer Studies, 1999-2001; USGS National Stream Information System, 2001-2003; and Committee on Geochemical Fluxes, 2002-2003. I currently serve as the Chairman of the NRC's River Science Committee. I have served as Associate Editor, *Water Resources Research*, 1992-1995; Associate Editor *Wetlands*, 1994-1997; Associate Editor *Ground Water*, 1998-2001 and Associate Editor of *The Hydrogeology Journal*, 2005-present.

Through my academic career, I have mentored over 60 graduate students in research related to hydrogeology and geochemistry, for which Syracuse University presented me the Wassertrom Award for Graduate Teaching in 2003. I have published over 100 peer-reviewed research papers and books on topics spanning the breadth of the discipline, from contaminant geochemistry to wetland hydrology. I also have provided my expert services on over 50 environmental problems related to a wide range of hydrogeologic problems, including solvent spills and contamination, landfill siting and contaminant characterization, water supply, and wetland issues.

I have worked on landfill issues in both the eastern and western United States. For example, I provided my water quality expertise that ultimately led to the closure of the Fresh Kills Landfill, Staten Island, NY. In the arid west, I provided my expertise to the U.S. Department of Defense on the closure of the Box Canyon landfill, Pendleton Marine Corps Base (CA). I have presented short courses on practical contaminant hydrogeology and geochemistry to professional environmental organizations from State and Federal

agencies to provide environmental associations and companies. An updated copy of my professional curriculum vitae is attached as Exhibit A.

2.0 FUNDAMENTAL CONCLUSIONS

My fundamental conclusions are:

- a.) The lack of covariance in water levels in monitoring wells at the Sand Draw San #1 landfill show there is no continuous water table. This conclusion is supported by the highly heterogeneous nature of the sediments under the landfill as well as the overall hydrogeologic setting.
- b.) There is no scientific need to construct a complex artificial impermeable liner system to control leachate under this landfill.

3.0 HYDROGEOLOGIC OVERVIEW

The Sand Draw San #1 landfill is located southeast of Riverton (WY) on laterally discontinuous claystones, siltstones, and dense sandstones. These all are units within the Tertiary age Wind River and Indian Meadows geologic formations (Fig. 1). Produccable water in these formations is commonly hundreds of feet deep (Whitcomb, H.A. and Lowry, M. E.,1968).

At the landfill, multiple monitoring wells were installed to depth of <100 feet below the land surface to try and intercept and measure the regional water table that could potentially transport landfill-related dissolved substances away from the site. Many of these wells, when drilled, did not have saturated sediments marking a water bearing zone, although some filled with water later with time. The paucity of saturated sediments suggests at the onset that no significant water-bearing zone was penetrated at the landfill.

The landfill site is located over a topographically high area that gently slopes away in all directions. The climate is arid, which makes defining the regional, continuous water table (the surface in the subsurface below which pore spaces are completely filled with water) difficult at best. In stratified rocks of the arid west, discontinuous perched water tables are sometimes found, located above the regional water table of interest. These perched water tables consist of lenticular pockets of water underlain by dry or partly dry sedimentary layers of low permeability.

Aquifer recharge is minimal in arid regions because of the combination of evaporation and rapid runoff of storm flow over compacted and cemented surface soil layers. Consequently, regional water tables are usually deep below the land surface except near large rivers (Scanlon *et al.*, 1997) which may, at least seasonally, serve as the discharge zone for regional water-table seepage. During snowmelt, these rivers may serve as recharge areas for the deep water table aquifer.

Sand Draw San #1 landfill lies on an interfluvial topographic high between small ephemeral tributaries to the Little Wind River. In this hydrogeologic setting, the regional water table, from first principles, must be deep, probably close to the elevation of the Little Wind River at ~4925 feet above sea level. This elevation is literally hundreds of feet below the elevation of the landfill site.

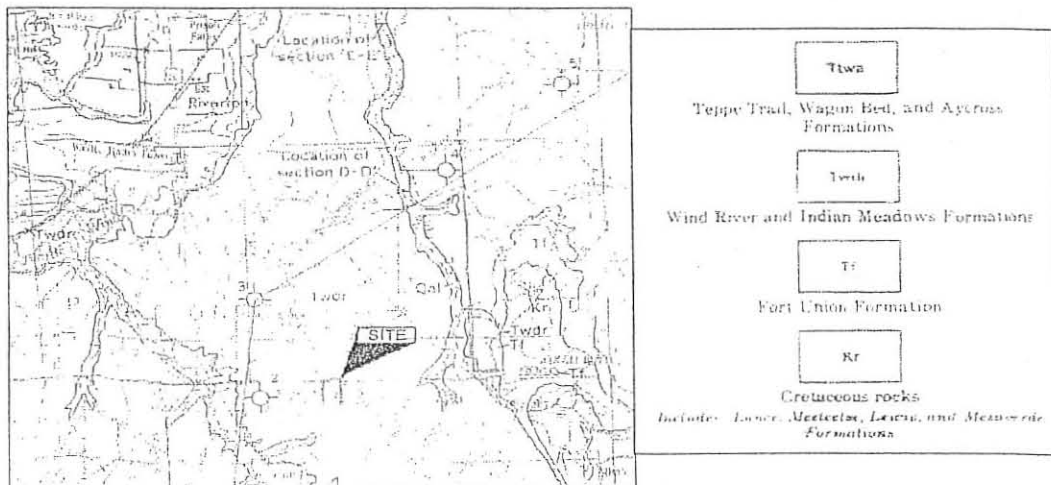


Figure 1. Geologic map of the Sand Draw San #1 landfill

4.0. WATERTABLE CONDITIONS AT THE LANDFILL

Monitoring wells and test holes drilled at the Sand Draw San #1 landfill were screened at depths less than 100 feet. It is highly implausible that any water levels measured in these wells reflect the regional water table elevation. Well screens of monitoring wells at the landfill were placed at different depths and in different permeable layers in the upper 100 feet of soils and rocks. Therefore, measurements of water levels in these wells reflect some degree of compartmentalization of perched water table conditions.

A map of the water level elevations on 12/21/04 (Inberg-Miller, 2005) shows that wells installed in the upper third of the site, along a gentle grade towards the Little Wind River were dry, despite being at a lower elevation than wells installed further to the south at higher elevation. If there were a continuous water table, below which sediments and rocks are, by definition saturated, wells at lower elevations should have water in them if wells at higher elevations do. Even in the southern part of the investigated landfill site, water was found in some wells, but not sufficient to define a continuous occurrence of water (note monitoring wells R-15D and R-15S are dry on sheet 1, Inberg-Miller, 2005).

Inberg-Miller (2005) state that water levels on the figure defined a “potentiometric surface” on their figure. However, this map is, pro-forma, shows water level elevations outside the context of a regional water table because no single water-bearing zone was being investigated. The issue at the site is the location of the water table, if it is proximate the base of the landfill, and if it is sufficiently continuous to connect to receptors, such as rivers and other discharge points.

From first principles, what must occur under the Sand Draw San #1 landfill is a discontinuous perched water table in tight sediments, probably maintained by snowmelt in the spring. Moreover, Inberg-Miller (2005) cannot be faulted for not placing wells in a single aquifer across the site, because short of drilling hundreds of feet deep, such an aquifer could not be likely found. The firm was prudent, trying to find permeable units in an overall very dense, and tight geologic stratigraphic situation. Drilling over 100 feet in

dry sediments and rock to explore the possible configuration of a water table as part of a non-hazardous waste, municipal landfill siting is neither prudent nor warranted. It would be unprecedented in my experience.

The existence of a continuous water in any location can be easily tested by noting if water levels in monitoring wells respond in similar fashion during the year. In a hydraulically unconfined aquifer, or even in a confined aquifer, water levels (water table or potentiometric surface, respectively) will go up and down coincidentally as recharge raises hydraulic head in the spring and combined evapotranspiration and slow drainage removes water in the summer months.

The coincident rise and fall of water levels is usually shown by simply plotting hydrographs of water levels on the same diagram. Alternatively, water levels can be plotted against each other on scatterplots. If water levels go up and down coincidentally, they have to plot on scatterplots as approximately straight lines. The slope of the straight line relates to where water levels might lag behind others a bit as a response to local differences in recharge, and the rate at which recharge pulses move through the porous media.

As I said, this kind of plot is seldom done when water levels visually move up and down at the same time in monitoring wells. However, recently the USGS used regression statistics on scatterplots of water levels to identify water levels unaffected by pumping in the regional Floridian Aquifer (Scott T. Prinos, A.C. Lietz, and R.B. Irvin, 2002). In this case, there were too many hydrographs and complications caused by pumping to use the simpler approach of simply looking at hydrographs and comparing them.

In the USGS case they also used a more advanced step-wise regression approach, which included a square term for the water level in each well. However, this approach would not be appropriate for the Sand Draw case because of the limited extent of wells and small study area, My professional judgment is that were this more sophisticated

regression analysis done for the Sand Draw wells, the higher order terms in the regression would simply fall out as statistically unmeaningful.

Appendix B of the Inberg-Miller (2005) is a plot of hydrographs at the Sand Draw landfill. Even by casual observation, it is clear that water levels in most wells do not move in tandem with time. Water levels in some wells hardly change with time (e.g. R-10), others appear to reflect rainfall events (e.g. R-10), and one, R-8, has an amplitude of water level change tens of times larger than the others.

Monitoring well R-8 is completed through clay and silty clay. In this kind of porous media, most water moves through narrow cracks and fractures in the upper 50 feet before they are pinched off by compaction. Because interconnected pore space is very small in clays and silts, water level responses in these types of porous media are often more pronounced during recharge events (rain and snowmelt) than water level responses in sandier units, be they part of a perched or regional water table.

I note that water levels also rose in R-7 and R-12 at the same time as the rise in R-8, but the response was dampened in comparison. Water levels did not rise at the same time in other wells, indicating that the recharge never reached them. The wells were probably placed below localized layers of particularly low hydraulic conductivity and without fractures allowing the easy vertical migration of water.

Water levels in R-8 are completely inconsistent with that expected for a water table aquifer under the landfill site. The water levels in R-8, and others, are consistent with what would be expected of perched water conditions. And as I indicated before, regional water table elevations in topographically elevated areas (as opposed to adjacent to streams and in valley bottoms) are found far deeper than within a hundred feet of the land surface except for when perched and discontinuous.

As mentioned before, where aquifers are continuous, changes in water levels in them should be similar. To this end, Dr. Dale Groutage also prepared a linear statistical analysis of possible correlations between water levels at the Sand Draw and Lander Landfills. I found his report compelling, showing statistically what would be expected in both a continuous water table condition and one that is not, but dominated by perching.

At the Lander landfill, there is a fairly continuous saturated zone, supported, in part by springs discharging at the base of the landfill and which are recharged from topographically higher areas that occur as flanks of a breached anticline. Here, water levels all vary together nicely with time, as would be expected. In contrast, Groutage found little to no correlation among the water levels across the Sand Draw landfill, not surprising given the hydrographs.

Finally, given the very clayey and silty nature of the stratigraphy under the Sand Draw landfill, coupled to an arid climate with deep regional water table, it is implausible that leachate from this landfill could cause environmental harm, even if the landfill were unlined with synthetic materials rather than compacted clay. First, the amount of leachate that would be generated in the landfill would be small compared to that generated in humid regions with much more precipitation and less evaporation. Second, were some leachate to penetrate through a compacted clay liner, it would be quickly sorbed to the dry soils and rock under negative hydraulic head. Indeed, in arid and semi-arid places, water in the unsaturated (partly dry) zone can be hundreds to even thousands of years old because gravity cannot move the water far below the land surface under suction head (e.g. Scanlon, 1997).

6.0 SUMMARY AND CONCLUSIONS

1. The lack of covariance in water levels in monitoring wells at the Sand Draw San #1 landfill show there is no continuous water table. This conclusion is supported by the highly heterogeneous nature of the sediments under the landfill as well as the overall hydrogeologic setting.

2. There is no scientific need to construct a complex artificial impermeable liner system to control leachate under this landfill.

Donald I. Siegel, PhD.

Hydrogeologist

7.0 REFERENCES CITED

Groutage, D., 2005, Analysis of Well Monitoring Data for Wells R-7, R-8, R-10, & R-12 At Riverton Sand-Draw Landfill And Wells LA-1, LA-11, & LA-12 At Lander Landfill.

Inberg-Miller Engineers, 2005, Subsurface exploration and groundwater study Sand Draw #1 Landfill.

Prinos, S.T. A.C. Lietz, *and* R.B. Irvin, 2002, Design of a Real-Time Ground-Water Level Monitoring Network and Portrayal of Hydrologic Data in Southern Florida, USGS Water-Resources Investigations Report 01-4275.

Scanlon, B.R., Tyler, S.W. and Wierenga, P.J. 1997. Hydrologic issues in arid, unsaturated systems and implications for contaminant transport. *Reviews of Geophysics*. 35(4): 461-490.

Whitcomb, H.A. and Lowry, M. E., 1968, Ground-water resources and geology of the Wind River Basin area, central Wyoming, Hydrologic Investigations Atlas, 12p.



Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Dave Freudenthal, Governor

John Corra, Director

September 18, 2007

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Solid & Hazardous Waste Div.
Lander, Wyoming

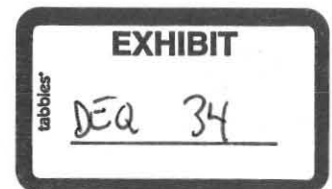
Mr. James Hedges
Fremont County SWDD
POB 1400
Lander, WY 82520

RE: Permit renewal and major amendment application (April 30, 2005)
Sand Draw Landfill
SHWD File # 10.195

Dear Mr. Hedges:

The Wyoming Department of Environmental Quality (WDEQ), Solid and Hazardous Waste Division (SHWD) has completed its review of the permit renewal application which has been submitted for the facility described above. The permit renewal application was received by the SHWD on May 10, 2005. The renewal application includes a vertical expansion which is a major amendment. The WDEQ has determined that approval of the renewal permit and major amendment, contingent on your compliance with the permit conditions specified in the draft permit, is appropriate.

Fremont County SWDD's operating permit extension expired on May 1, 2004. The WDEQ has granted all dates for scheduling as requested by the District per its September 8, 2006, letter. It is the WDEQ's expectation that the District will accomplish all tasks within these scheduled timeframes. Failure to complete all tasks by the scheduled dates called out in the permit conditions could result in permit revocation followed by facility closure under provisions of the SHWD, Solid Wastes Rules and Regulations, Chapter 1, Section 4(b)".)



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Calculations prepared by District indicate that the capacity remaining in the Sand Draw Landfill for MSW is approximately 20 years. This did not include the expansion area. The District should remember, as discussed in the correspondence from the WDEQ Administrator dated September 2, 2005, the Sand Draw Landfill expansion area is required to be constructed with engineered containment unless the District demonstrates that all of the conditions from Chapter 2, Section 4(j)(i) of the Solid Waste Rules and Regulations are met. Please note that per Chapter 2, Section 2(b)(iii)(E) of the Solid Waste Rules and Regulations, the next renewal application for this facility must contain plot plans showing the orderly development and use of the facility through the life of the site; including, but not limited to, excavation plans for development of trenches or preparation of area fill locations. The Department expects the next renewal to include detailed information regarding the use of the expansion area. If the expansion area is not addressed, in detail, in the next renewal application the Department will assume the District does not plan to develop the expansion area for solid waste management (disposal) activities.

The process for expanding the current facility or locating, evaluating, and permitting a new solid waste disposal facility is lengthy; therefore, the WDEQ recommends that the District begin planning in earnest for future solid waste management/disposal. Please be assured that the WDEQ will continue to be available to work with you throughout this process.

Lastly, the following tasks will need to be completed before the final renewal permit and major amendment can be issued by the Department:

- You must submit three (3) clean copies (no strikeouts, bolded or underlined text) of the permit renewal and permit amendment application document.
- You must submit one original and two copies of an updated completed permit application form. A blank form is enclosed. The required approvals, certifications and oaths must be dated after the most recent permit application revisions.
- You must provide documentation that you have complied with the following public notice and comment requirements of SWRR Chapter 1, Section 2(b)(ii). Documentation shall consist of copies of return receipt cards, publisher's affidavits, or affidavits of personal delivery, as appropriate. Please forward this documentation to the Department as soon as all of the following tasks are completed.

- You must provide written notice to landowners with property located within one-half (1/2) mile of the site, the mayor of each city or town within fifty (50) miles of the site, the local county commission and the local solid waste district using certified, return receipt requested mail.
- You must provide written notice to each member of the interested parties mailing list maintained by the SHWD using first class mail. Pre-addressed mailing labels are enclosed.
- You must cause a written notice to be published once a week for two (2) consecutive weeks in a newspaper of general circulation within the county.
- You must deliver, in person or via certified, return receipt requested mail a copy of the permit application, the enclosed review and the enclosed DRAFT permit renewal and permit amendment to the local public library and the county clerk's office for the duration of the public comment period.

The enclosed legal notice should be used to comply with the public notice and comment requirements described above. Please be advised that you are responsible for entering the dates for the beginning and the end of the public comment period. The public comment period begins on the first date of publication in the newspaper, and ends thirty-seven (37) days later. If the last day of the public comment period falls on a Saturday or Sunday, the last day of the public comment period will be the following Monday.

In the event that substantial written objections to the DRAFT permit renewal and permit amendment are received during the public notice and comment period, the Director will schedule a contested case hearing before the Environmental Quality Council, as provided by Chapter 1, Section 2(b)(ii)(D) of the Solid Waste Rules and Regulations.

Thank you for your attention to this matter. Again, let me reiterate that the WDEQ looks forward to continuing to work with the District to move forward through this process. If you have any questions, please contact Patrick Troxel at (307)335-6950.

Sincerely,



LeRoy C. Feusner, P.E., BCEE
Administrator
Solid & Hazardous Waste Division

- encl. :Chapter 2 Operating Permit Amendment (DRAFT)
:Legal Notice (File #10.195)
:Solid Waste Guideline #3 (August 16, 1999)
:WDEQ/SHWD Interested Parties Mailing List (pre-addressed labels)
- cc :Cheyenne SHWD File #10.195 (w/encl.)
:Patrick Troxel, District Supervisor ☞ Lander SHWD File # 10.195 (w/encl.)
:Bob Doctor, Program Manager ☞ Casper SHWD File # 10.195 (w/encl)

PUBLIC NOTICE

In accordance with the provisions of the Wyoming Environmental Quality Act and Chapter 1, Section 3(a) of the Solid Waste Rules and Regulations, the Fremont County Solid Waste Disposal District has submitted an application for a permit renewal and major permit amendment for the Sand Draw Landfill. This facility currently provides for the disposal of municipal solid wastes, construction and demolition wastes, dead animals, and nonfriable asbestos which have been generated within the City of Riverton and the surrounding residential and agricultural areas, and the Riverton baler facility which includes wastes transported from the Dubois, Pavillion, Missouri Valley, Crowheart, Arapahoe, and Jeffrey City transfer stations. The 80 acre facility is located approximately 12 miles SE of Riverton off Hwy. 135. More specifically, this facility is located in the NE1/4, NW1/4, SW1/4, and SE1/4 of Section 26, T.34N., R.96W., 6th P.M., Fremont County, Wyoming.

The current total volumetric capacity of this facility is approximately 1.1 million cubic yards of solid waste. The purpose of the permit amendment application is to allow the operator of this facility to place municipal solid wastes within a specified vertical expansion area of the original 80 acres; thereby increasing the total disposal volume to approximately 2.7 million cubic yards. The current life of the facility is estimated to be 20 years.

The Department of Environmental Quality, Solid and Hazardous Waste Division (DEQ) has determined that the permit renewal and major amendment application is generally complete and technically adequate. DEQ's solid waste rules, in Chapter 1, Section 2 (b)(ii) , require that the applicant must provide public notice that a draft permit has been issued, and inform the public that there is an opportunity to comment on the draft permit before it is issued in final form. The notice is also required to indicate that the public may file formal written objections to issuance of a final permit. This publication provides notice of those opportunities.

Copies of the major amendment application, the DEQ's review of the application, and the draft permit can be viewed at DEQ's Lander office (510 Meadowview Drive, Lander, WY), the Riverton Public Library, and the Fremont County Clerk's Office.

Any interested person has the right to either: provide comments on the draft permit, which DEQ will consider prior to taking final action on the permit application, or file formal written objections to the draft permit. The period for providing comments, or filing formal written objections to the draft permit, shall begin on **<First Date of Publication>** and end on **<37 Days Following the First Date of Publication>**. Any comments or formal written objections must be received by 5:00 PM on the last day of the notice period. Comments or formal objections must be submitted in writing to the Department of Environmental Quality, John Corra, Director, 122 West 25th Street, Cheyenne, WY 82002. Formal written objections must be accompanied by a statement of the facts upon which the objection is based. If substantial written objections are filed, a contested case hearing will be held by the Environmental Quality Council.

In accordance with the Americans With Disabilities Act, special assistance or alternative formats will be made available upon request for individuals with disabilities.

NOTE TO PUBLISHER: This legal notice is provided to you as a requirement of the Wyoming DEQ/SHWD rules and regulations and must be published once per week for two (2) consecutive weeks. This legal notice should not be published unless specifically requested by the applicant identified above. If published, the applicant is solely responsible for all costs which are incurred.



Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

Date

CERTIFIED MAIL #
RETURN RECEIPT REQUESTED

Mr. James Hedges
Fremont County SWDD
POB 1400
Lander, WY 82520

RE: Solid Waste Chapter 2 Operating Renewal Permit
Sand Draw Landfill
SHWD File # 10.195

Dear Mr. Hedges:

This letter constitutes a Wyoming Department of Environmental Quality, Solid Waste Chapter 2 operating renewal permit for the Sand Draw (SHWD File # 10.195). On November 17, 2006, the Wyoming Department of Environmental Quality, Solid and Hazardous Waste Division (Department) completed its final review of the most recent renewal application for the facility identified above, dated May 10, 2005. The Department has determined that an approval of your current renewal permit, contingent on complying with the permit conditions below, is appropriate.

The operator of the facility authorized by this permit shall be responsible for complying the terms of the permit application specified above and this permit. Based on the Department's permit application review and/or the Department's inspection of this facility, the Department has concluded that this permit shall be issued under the following conditions:

Permit Condition #1

The operator of this facility shall submit a work plan for an adequate groundwater monitoring system, drill and install wells, and submit a final report by December 31, 2007.



3379



Permit Condition #2

The operator of this facility shall submit a bale filling sequence plan by December 31, 2007.

Permit Condition #3

The operator of this facility shall revise and submit the entire site environmental monitoring plan by June 30, 2008.

Permit Condition #4

The operator of this facility shall submit a final cover design with a quality assurance/quality control plan by June 30, 2008.

The operator of the facility authorized by this permit shall allow the administrator or an authorized representative, upon the presentation of credentials and other documents as may be required by law to enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate rules and regulations of the Department, any substances or parameters at any location.

The Department has also received the necessary information to document that the public notice requirements of Chapter 1, Section 2(b)(ii) of the Solid Waste Rules and Regulations were properly completed. No comments were received by the Department during the designated public comment period. The financial assurance mechanism provided for this facility is the State Guarantee Trust Account. The annual premium payment for this facility is \$525.68.

This permit is valid for four (4) years from the date of this letter. In order to renew this permit, a renewal permit application shall be submitted between nine (9) and six (6) months prior to the expiration of this permit. Prior to the preparation of a renewal permit application, the Department strongly recommends a face-to-face pre-application meeting with the operator, manager, consultant and the Department. Please note that per Chapter 2, Section 2(b)(iii)(E) of the Solid Waste Rules and Regulations, the next renewal application for this facility must contain plot plans showing the orderly development and use of the facility through the life of the site; including, but not limited to, excavation plans for development of trenches or preparation of area fill locations. The Department expects the next renewal to include detailed information regarding the use of

the expansion area. If the expansion area is not addressed, in detail, in the next renewal application the Department will assume the District does not plan to develop the expansion area for solid waste management (disposal) activities.

The conditions imposed by this permit shall take precedence over conflicting designs, specifications or procedures contained in the referenced permit application document. Failure to comply with this permit or the condition(s) which have been imposed may be grounds for permit revocation under the provisions of Chapter 1, Section 4(b) of the Wyoming Solid Waste Rules and Regulations.

If you are unable to accept any of the conditions in this permit, you must appeal this permit by sending a letter stating your objections to the Environmental Quality Council, Herschler Building, 122 West 25th Street, Cheyenne, Wyoming 82002, within sixty (60) days of your receipt of this permit.

If you have any questions regarding the Department's review, inspection or this permit, please contact Patrick Troxel at (307) 335-6950.

Sincerely,

LeRoy C. Feusner, P.E., BCEE
Administrator
Solid and Hazardous Waste Division
Quality

John V. Corra
Director
Department of Environmental

copy : Patrick Troxel, District #2 Supervisor ☞ Lander SHWD File # 10.195
: Bob Doctor, Program Manager ☞ Casper SHWD File # 10.195
: Cheyenne SHWD File # 10.195