

CLASS IV<sub>b</sub> LANDFILL  
PERMIT RENEWAL APPLICATION

FOR

**RECEIVED**

JAN 09 2012

UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE

2012.00039



JANUARY 2012

Prepared By

Creamer & Noble Engineers

35 South 400 West, Suite 200

St. George, UT 84770



SW099

# CREAMER & NOBLE ENGINEERS

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January 5, 2012

**RECEIVED**

JAN 09 2012

UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE

2012.00039

Scott T. Anderson, Director  
Division of Solid and Hazardous Waste  
Utah Department of Environmental Quality  
P.O. Box 144880  
Salt Lake City, UT 84114-4880

RE: Carbon County Class IVb Landfill  
Permit Renewal Application

Dear Mr. Anderson:

Please find attached the Carbon County Class IVb Landfill Permit Renewal Application which includes the Utah Class IV and VI Landfill Permit Application Form, Part I, General Information and Part II, Application Checklist. The Permit Renewal Application has been prepared in accordance with the Utah Administrative Code R315-301 through 320 of the Solid Waste Permitting and Management Rules.

If you have any questions, please do not hesitate to contact me.

Sincerely,

CREAMER & NOBLE, INC.

Steven E. Layton  
Project Manager

SEL/bam

Attachments

## Utah Class IV and VI Landfill Permit Application Form

<b>Part I General Information</b>						APPLICANT: PLEASE COMPLETE ALL SECTIONS					
<b>I. Landfill Type</b>		<input type="checkbox"/> Class IVa		<input checked="" type="checkbox"/> Class IVb		<b>II. Application Type</b>		<input type="checkbox"/> New Application		<input type="checkbox"/> Facility Expansion	
		<input type="checkbox"/> Class VI				<input checked="" type="checkbox"/> Renewal Application		<input type="checkbox"/> Modification			
For Renewal Applications, Facility Expansion Applications and Modifications Enter Current Permit Number										94-11	
<b>III. Facility Name and Location</b>											
Legal Name of Facility Carbon County Class IVb Landfill											
Site Address (street or directions to site) 2835 E. Airport Road								County Carbon			
City Price				Zip Code 84501				Telephone (435) 636-0005			
Township 14S		Range 10E		Section 14 & 23		Quarter/Quarter Section NE1/4 NE1/4 Sec. 23		Quarter Section E1/2 SE1/4 Sec. 14			
Main Gate Latitude 39 degrees 35 minutes 47.48 seconds N				Longitude 110 degrees 45 minutes 43.89 seconds W							
<b>IV. Facility Owner(s) Information</b>											
Legal Name of Facility Owner Carbon County											
Address (mailing) 120 E. Main Street											
City Price				State Utah		Zip Code 84501		Telephone (435) 636-3200			
<b>V. Facility Operator(s) Information</b>											
Legal Name of Facility Owner Carbon County											
Address (mailing) 120 E. Main Street											
City Price				State Utah		Zip Code 84501		Telephone (435) 636-3200			
<b>VI. Property Owner(s) Information</b>											
Legal Name of Property Owner Carbon County											
Address (mailing) 120 E. Main Street											
City Price				State Utah		Zip Code 84501		Telephone (435) 636-3200			
<b>VII. Contact Information</b>											
Owner Contact John Jones						Title County Commissioner					
Address (mailing) 120 E. Main Street											
City Price				State Utah		Zip Code 84501		Telephone (435) 636-3271			
Email Address john.jones@carbon.utah.gov						Alternative Telephone (cell or Other) (435) 650-4515					
Operator Contact Same						Title					
Address (mailing)											
City				State		Zip Code		Telephone			
Email Address						Alternative Telephone (cell of Other)					
Property Owner Contact Same						Title					
Address (mailing)											
City				State		Zip Code		Telephone			
Email Address						Alternative Telephone (cell of Other)					

## Utah Class IV and VI Landfill Permit Application Form

<b>Part I General Information (Continued)</b>			
<b>VIII. Waste Types</b> (check all that apply)		<b>IX. Facility Area</b>	
<input type="checkbox"/> Landfill will accept all wastes allowed in Class IV or VI landfills Or landfill will accept only the following wastes		Facility Area ..... <u>120</u> acres	
Waste Type                      Combined Disposal Unit                      Monofill Unit	Disposal Area ..... <u>100</u> acres		
<input checked="" type="checkbox"/> Construction & Demolition <input type="checkbox"/>	Design Capacity Years ..... <u>68</u>		
<input checked="" type="checkbox"/> Tires <input type="checkbox"/>	Cubic Yards ..... <u>2,400,000</u>		
<input checked="" type="checkbox"/> Yard Waste <input type="checkbox"/>	Tons ..... <u>2,400,000</u>		
<input checked="" type="checkbox"/> Animals <input type="checkbox"/>			
<input type="checkbox"/> Contaminated Soil <input type="checkbox"/>			
<input checked="" type="checkbox"/> Other <u>Batteries &amp; Appliances</u> <input type="checkbox"/>			
Note: Disposal of dead animals must be approved by the Executive Secretary			
<b>X. Fee and Application Documents</b>			
Indicate Documents Attached To This Application		<input type="checkbox"/> Application Fee: Amount \$	Class VI Special Requirements
<input checked="" type="checkbox"/> Facility Map or Maps	<input checked="" type="checkbox"/> Facility Legal Description	<input checked="" type="checkbox"/> Plan of Operation	<input checked="" type="checkbox"/> Waste Description
<input type="checkbox"/> Ground Water Report	<input checked="" type="checkbox"/> Closure Design	<input checked="" type="checkbox"/> Cost Estimates	<input checked="" type="checkbox"/> Financial Assurance
			<input type="checkbox"/> Documents required by UCA 19-6-108(9) and (10)
<b>I HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.</b>			
Signature of Authorized Owner Representative _____ John Jones Name typed or printed		Title                      County Commissioner	Date <u>January 5, 2012</u>
		Address 120 E. Main Street, Price, UT 84501	
Signature of Authorized Land Owner Representative (if applicable) Same _____ Name typed or printed		Title	Date
		Address	
Signature of Authorized Land Owner Representative (if applicable) Same _____ Name typed or printed		Title	Date
		Address	

## Utah Class IV and VI Landfill Permit Application Checklist

**Important Note:** The following checklist is for the permit application and addresses only the requirements of the Division of Solid and Hazardous Waste. Other federal, state, or local agencies may have requirements that the facility must meet. The applicant is responsible to be informed of, and meet, any applicable requirements. Examples of these requirements may include obtaining a conditional use permit, a business license, or a storm water permit. The applicant is reminded that obtaining a permit under the *Solid Waste Permitting and Management Rules* does not exempt the facility from these other requirements.

An application for a permit to construct and operate a landfill is the documentation that the landfill will be located, designed, constructed, and operated to meet the requirements of Rules R315-305 of the *Utah Solid Waste Permitting and Management Rules* and the *Utah Solid and Hazardous Waste Act* (UCA 19-6-101 through 123). The application should be written to be understandable by regulatory agencies, landfill operators, and the general public. The application should also be written so that the landfill operator, after reading it, will be able to operate the landfill according to the requirements with a minimum of additional training.

Copies of the *Solid Waste Permitting and Management Rules*, the *Utah Solid and Hazardous Waste Act*, along with many other useful guidance documents can be obtained by contacting the Division of Solid and Hazardous Waste at 801-536-0200. Most of these documents are available on the Division's web page at [www.hazardouswaste.utah.gov](http://www.hazardouswaste.utah.gov). Guidance documents can be found at the solid waste section portion of the web page.

When the application is determined to be complete, the original complete application and one copy of the complete application are required along with an electronic copy.

### **Part II            Application Checklist**

<b>I. Facility General Information</b>	
Description of Item	Location In Document
<b>1a. General Information – All Facilities</b>	
Complete Part I General information form above	Under Cover Letter
General description of the facility (R315-310-3(1)(b))	Sec.1a.1 Pg. 6
Legal description of property (R315-310-3(1)(c))	Sec.1a.2 Pg. 6
Proof of ownership, lease agreement, or other mechanism (R315-310-3(1)(c))	Sec 1a.3 Pg. 6
If the permit application is for a Class IV landfill, a demonstration that the landfill is not a commercial facility	Sec. 1a.4 Pg. 7
Waste type and anticipated daily volume (R315-310-3(1)(d))	Sec. 1a.5 Pg. 7
Intended schedule of construction (R315-302-2(2)(a))	Sec. 1a.6 Pg. 8
<b>1b. General Information – New Or Laterally Expanding Facilities</b>	
Documentation that the Historical Survey requirements of R315-302-1(2)(f) have been met (R315-305-4(1)(b)(vi))	Section Not Applicable
Name and address of all property owners within 1000 feet of the facility boundary (R315-310-3(2)(i))	
Documentation that a notice of intent to apply for a permit has been sent to all property owners listed above (R315-310-3(2)(ii))	

Utah Class IV and VI Landfill Permit Application Checklist

<b>I. Facility General Information</b>	
Description of Item	Location In Document
Name of the local government with jurisdiction over the facility site (R315-310-3(2)(iii))	
<b>1c. Location Standards – New Or Laterally Expanding Class Iva Landfills (R315-305-4(1)(a))</b>	<b>Section Not Applicable</b>
Land use compatibility	
Maps showing the existing land use, topography, residences, parks, monuments, recreation areas or wilderness areas within 1000 feet of the site boundary	
Certifications that no ecologically or scientifically significant areas or endangered species are present in site area	
Maps showing the location of dwellings, residential areas, other structures, and historic structures.	
List of airports within five miles of facility and distance to each	
Geology	
Geologic maps showing significant geologic features, faults, and unstable areas	
Maps showing site soils	
Surface water	
Magnitude of 24 hour 25 year and 100 year storm events	
Average annual rainfall	
Maximum elevation of flood waters proximate to the facility	
Maximum elevation of flood water from 100 year flood for waters proximate to the facility	
Wetlands	
Ground water	
<b>1d. Location Standards – New Or Laterally Expanding Class IVb and VI Landfills</b>	<b>Section Not Applicable</b>
Floodplains as specified in R315-302-1(2)(c)(ii) (R315-305-4(1)(b)(i))	
Wetlands as specified in R315-302-1(2)(d) (R315-305-4(1)(b)(ii))	
The landfill is located so that the lowest level of waste is at least ten feet above the historical high level of ground water (R315-305-4(1)(b)(iii))	
Geology as specified in R315-302-1(2)(b)(i) and (iv) (R315-305-4(1)(b)(iv))	
<b>1e. Additional Location Standards – New Or Laterally Expanding Class IVb and VI Landfills Or Landfills Requesting That Dead Animals Be Added As A New Waste Stream (R315-305-4(1)(a)(v))</b>	<b>Section Not Applicable</b>
Maps showing the existing land use, topography, residences, parks, monuments, recreation areas or wilderness areas within 1000 feet of the site boundary	

## Utah Class IV and VI Landfill Permit Application Checklist

<b>I. Facility General Information</b>	
Description of Item	Location In Document
Certifications that no ecologically or scientifically significant areas or endangered species are present in site area	
Maps showing the location of dwellings, residential areas, other structures, and historic structures	
List of airports within five miles of facility and distance to each	
<b>If. Plan Of Operations – All Facilities (R315-310-3(1)(e) and R315-302-2(2))</b>	
Description of on-site waste handling procedures and an example of the form that will be used to record the weights or volumes of waste received (R315-302-2(2)(b) And R315-310-3(1)(f))	Sec. If.1 Pg. 8
Schedule for conducting inspections and monitoring, and examples of the forms that will be used to record the results of the inspections and monitoring (R315-302-2(2)(c), R315-302-2(5)(a), and R315-310-3(1)(g))	Sec. If.2 Pg. 9
Contingency plans in the event of a fire or explosion (R315-302-2(2)(d))	Sec. If.3 Pg. 11
Plan to control fugitive dust generated from roads, construction, general operations, and covering the waste (R315-302-2(2)(g))	Sec. If.4 Pg. 12
Plan for litter control and collection (R315-302-2(2)(h))	Sec. If.5 Pg. 12
Procedures for excluding the receipt of prohibited hazardous or PCB containing waste (R315-302-2(2)(j))	Sec. If.6 Pg. 12
Procedures for controlling disease vectors (R315-302-2(2)(k))	Sec. If.7 Pg. 14
A plan for alternative waste handling (R315-302-2(2)(l))	Sec. If.8 Pg. 14
A general training plan for site operations (R315-302-2(2)(o))	Sec. If.9 Pg. 15
Any recycling programs planned at the facility (R315-303-4(6))	Sec. If.10 Pg. 15
Any other site specific information pertaining to the plan of operation required by the Executive Secretary (R315-302-2(p))	None
<b>Ig. Additional Plan Of Operation Requirements – Class IVa Facilities</b>	Section Not Applicable
Corrective action programs to be initiated if ground water is contaminated (R315-302-2(e))	
<b>II. Facility Technical Information</b>	
<b>I/a. Maps – All Facilities</b>	
Topographic map drawn to the required scale with contours showing the boundaries of the landfill unit, ground water monitoring well locations, gas monitoring points, and the borrow and fill areas (R315-310-4(2)(a)(i))	Sec. IIa.1 Pg. 16
Most recent U.S. Geological Survey topographic map, 7-1/2 minute series, showing the waste facility boundary; the property boundary; surface drainage channels; any existing utilities and structures within one-fourth mile of the site; and the direction of the prevailing winds (R315-310-4(2)(a)(ii))	Sec. IIa.2 Pg. 16

## Utah Class IV and VI Landfill Permit Application Checklist

<b>II. Facility Technical Information</b>	
Description of Item	Location In Document
<b>IIb. Geohydrological Assessment – Class IVa Landfills (R315-310-4(2)(b))</b>	Section Not Applicable
Local and regional geology and hydrology including faults, unstable slopes and subsidence areas on site R315-310-4(2)(b)(i))	
Evaluation of bedrock and soil types and properties including permeability rates R315-310-4(2)(b)(ii))	
Depth to ground water R315-310-4(2)(b)(iii))	
Quantity, location, and construction of any private or public wells on-site or within 2,000 feet of the facility boundary R315-310-4(2)(b)(v))	
Tabulation of all water rights for ground water and surface water on-site and within 2,000 feet of the facility boundary R315-310-4(2)(b)(vi))	
Identification and description of all surface waters on-site and within one mile of the facility boundary R315-310-4(2)(b)(vii))	
For an existing facility, identification of impacts upon the ground water and surface water from leachate discharges (R315-310-4(2)(b)(viii))	
Calculation of site water balance ( R315-310-4(2)(b)(ix))	
<b>IIc. Engineering Report, Plans, Specifications, And Calculations – All Facilities</b>	
Unit design to include cover design; fill methods; and elevation of final cover including plans and drawings signed and sealed by a professional engineer registered in the State of Utah, when required (R315-310-3(1)(b) and (R315-310-4(2)(c)(iii))	Sec. IIc.1 Pg. 16
Design and location of run-on and run-off control systems (R315-310-4(2)(c)(viii))	Sec. IIc.2 Pg. 17
Anticipated facility life and the basis for calculating the facility's life (R315-310-4(2)(c)(ii))	Sec. IIc.3 Pg. 17
Engineering reports required to meet the location standards of R315-305-4 including documentation of any demonstration or exemption made for any location standard (R315-310-4(2)(c)(i))	Sec. IIc.4 Pg. 18
Identification of borrow sources for final cover (R315-310-4(2)(c)(iv))	Sec. IIc.5 Pg. 18
Run-off collection, treatment, and disposal and documentation to show that any treatment system is being or has been reviewed by the Division of Water Quality (R315-310-4(2)(c)(v) and R315-310-3(1)(i))	Sec. IIc.6 Pg. 18
<b>IIId. Closure Requirements - All Facilities</b>	
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Closure schedule (R315-310-4(2)(d)(i))	Sec. IIId.2 Pg. 19
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## Utah Class IV and VI Landfill Permit Application Checklist

<b>II. Facility Technical Information</b>	
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Capacity of site in volume and tonnage (R315-310-4(2)(d)(ii))	Sec. II.d.4 Pg. 20
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<b>II.e. Post-Closure Requirements - All Facilities</b>	
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Changes to record of title, land use, and zoning restrictions (R315-310-4(2)(e)(v))	Sec. II.e.2 Pg. 21
Maintenance activities to maintain cover and run-on/run-off control systems (R315-310-4(2)(e)(iii))	Sec. II.e.3 Pg. 21
List the name, address, and telephone number of the person or office to contact about the facility during the post-closure care period (R315-310-4(2)(e)(vi))	Sec. II.e.4 Pg. 21
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Identification of post-closure care costs including cost calculations (R315-310-4(2)(e)(iv))	Sec. II.f.2 Pg. 22
Identification of the financial assurance mechanism that meets the requirements of Rule R315-309 and the date that the mechanism will become effective (R315-309-1(1) and R315-310-3(1)(j))	Sec. II.f.3 Pg. 23

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CLASS IVb LANDFILL  
PERMIT RENEWAL APPLICATION

CARBON COUNTY LANDFILL  
2835 E. AIRPORT ROAD  
PRICE, UT 84501

SUBMITTED BY:  
CARBON COUNTY ROAD DEPARTMENT

JANUARY 2012

Prepared By  
Creamer & Noble Engineers  
35 South 400 West, Suite 200  
St. George, UT 84770

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Exhibit B12	Financial Assurance Mechanism

## SECTION I FACILITY GENERAL INFORMATION

### la. GENERAL INFORMATION

#### la.1 General Description of the Facility R315-310-3(1)(b)

Carbon County is seeking a permit renewal for the continued operation of a Class IVb Landfill that is owned by Carbon County and operated by the Carbon County Road Department. The Carbon County Landfill is currently being operated under the guidelines established by the Original Permit Number 94-11, issued by the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste.

The Carbon County Landfill Facility is located at 2835 E. Airport Road, Price, Utah 84501, approximately one and three quarters of a mile east of the Airport Road intersection with Main Street in Price.

A location map can be found in Appendix A, Exhibit A1.

#### la.2 Legal Description of Property R315-310-3(1)(c)

The existing landfill facility is owned and operated by Carbon County.

The Class IVb Landfill as presently permitted is located in the E1/2 SE1/4 of Section 14 and the NE1/4 NE1/4 of Section 23, T14S, R10E, Salt Lake Base and Meridian, Carbon County, Utah. The landfill facility's front gate is located at Latitude 39°35'47.48"N, Longitude 110°45'43.89"W.

The property on which the landfill facility is situated is zoned Mining and Grazing (M&G). The property surrounding the landfill facility is zoned M&G and Light Industrial (I-1). The landfill facility is compliant by definition with both the Mining and Grazing and Industrial zones. The Carbon County Planning and Zoning Administrator has confirmed compliance with both zones.

A zoning map can be found in Appendix A, Exhibit A-2.

#### la.3 Proof of Ownership R315-310-3(1)(c)

Land patents issued by the United States of America and a Carbon County Ownership Plat can be found in Appendix A, Figure A3 and provide the required proof of land ownership.

Ia.4 Non-Commercial Landfill Facility

The landfill facility permit is held by the Carbon County Commission. The Carbon County landfill is located on property belonging to Carbon County and the daily landfill operations are performed by the Carbon County Road Department personnel.

Ia.5 Waste Type and Anticipated Daily Volume  
R315-310-3(1)(d)

The area served by the landfill is primarily Carbon County. Carbon County consists of approximately 7,754 households and 21,403 persons. The principal communities in Carbon County are Price, Helper, Wellington, East Carbon, Sunnyside and Scofield. The cities and outlying areas which are more densely populated will be served by mandatory curbside Municipal Solid Waste (MSW) collection services while the more sparsely populated areas will be served by MSW dumpsters strategically placed in the outlying rural parts of the county. The MSW is deposited at the East Carbon Development Corporation Class V Landfill Facility in East Carbon.

The Carbon County Landfill accepts for disposal construction/demolition waste, yard waste, inert waste and dead animals as defined in R315-301-2(10). This includes waste generated from construction including building materials used in construction. Construction related materials include packaging materials from products, waste lumber, wallboard, boxes from appliances, empty paint cans, caulking tubes, and sealer and adhesive cans. "Empty" is defined as no more than 10% of the product remaining inside the container. Demolition waste is generated from the destruction of and remodeling of buildings and houses. Demolition waste may include furnaces, piping, ducting and water heaters. Other acceptable construction/demolition materials include untreated wood, including pallets and crates, bricks, concrete, bituminous asphalt, rock and non-asbestos roofing materials.

Waste materials that are specifically excluded from being disposed of in the active area of the landfill include household waste (municipal solid waste), contaminated soils, friable asbestos, tanks of any kind, railroad ties, cardboard and metal not directly generated from construction or demolition activities, furniture and electronics of any kind, treated lumber, hazardous wastes and sludge and liquids as described in R315-303-3(1)(b).

The Carbon County landfill will accept and stockpile for recycling purposes concrete, tires, batteries and appliances. Appliances containing refrigerants are placed in the metal recycling area of the landfill only after the refrigerant has been removed by a State qualified business that has contracted with the County. Removal of these recyclable materials from the landfill site is an on-going operation with recyclers who are under contract with the County.

During the year of 2010, the Carbon County landfill facility received approximately 23,458 tons of construction/demolition waste, yard waste, inert waste, dead animals, tires

and metals. Of this amount, 898 tons of tires and metals were recycled with the remaining 22,560 tons of waste being landfilled. The daily average of material that was landfilled in 2010 is approximately 62 tons.

Ia.6 Intended Schedule of Construction  
R315-302-2(2)(a)

The Carbon County landfill construction was completed early in the year 1994, with the boundary of the landfill property being entirely fenced. Construction was completed in compliance with Permit No. 94-11 and continues in operation within the original permitted guidelines and the current operations as prescribed by this Permit Renewal Application.

SECTION I FACILITY GENERAL INFORMATION

If. PLAN OF OPERATIONS

If.1 On-Site Waste Handling Procedures  
R315-302-2(2)(b)

Example Waste Form  
R315-310-3(1)(f)

The Carbon County landfill facility is operated seven (7) days a week in accordance with the following schedule:

Mountain Standard Time:

Monday-Sunday 8:00 a.m. to 5:00 p.m.

Mountain Daylight Time:

Monday-Friday 7:00 a.m. to 6:00 p.m.  
Saturday-Sunday 8:00 a.m. to 6:00 p.m.

The facility is closed Thanksgiving Day and Christmas Day. Signs are posted at the entrance gate for public notification of the landfill facility owner and operator, hours of operation, type of materials accepted by and excluded from the landfill, and the penalty of illegal disposal.

Persons disposing of waste at the Carbon County landfill will comply with the following standard procedure:

- All vehicles delivering wastes to the site will stop at the office trailer located on the access road where a Landfill employee will inquire as to the contents of their

load. This information will be recorded into the Vehicle Inspection Form along with vehicle type and the license plate of the vehicle. An example of the daily log can be found in Appendix A, Exhibit A4.

- The driver will be instructed where to deposit each type of waste in the load. The vehicle will then be directed to the scales for a full load reading and instructed to return to the scales for an empty load reading when their load is deposited.
- The driver will then follow the instructions given by the Landfill employee. Signs have been installed directing patrons to the different disposal sites within the Landfill to ensure that only appropriate wastes are disposed of in each disposal site.
- Once all waste has been deposited, the driver returns to the scale for an empty load reading which is also recorded in the Vehicle Inspection Form. The Landfill employee then calculates the tonnage deposited.
- Any vehicle declared to contain, or suspected to contain unacceptable materials (liquid waste, sludge, or hazardous waste) will be prevented from entering the disposal area unless the driver can provide evidence that the waste is acceptable for disposal at the site. If the load contains unacceptable materials it will be rejected without discharging its load. At its sole discretion, the Landfill reserves the right to reject any suspect load.
- Loads will regularly be surveyed at the tipping area. If a discharged load contains unacceptable material, the discharger will be required to reload the material and remove it from the landfill. If Landfill personnel are unable to determine who is responsible, the area where the illegal dump occurred will be sectioned off. The unacceptable material will be moved to a designated area for identification and prepared for proper disposal.
- No open burning or smoking is allowed near the working face.

The Carbon County Landfill primarily utilizes six pieces of heavy equipment during the course of any given day of landfill operations. These pieces of equipment include a CAT D-7 Dozer, a CAT 623G Paddle Wheel, A CAT 950B Loader, a CAT 4-16 Backhoe, a CAT 826H Compactor, and a water truck. As the landfill is operated by the Carbon County Road Department, additional heavy equipment is readily available for use at the landfill as required.

If.2 Inspection and Monitoring Schedule  
R315-302-2(2)(c)  
R315-302-2(5)(a)

Example Inspection and Monitoring Forms  
R315-310-3(1)(g)

Landfill personnel are required to receive initial and periodic waste screening inspection training. Waste screening certificates of training received are kept in personnel files.

A visual inspection of each incoming load of waste material is made by the Gate House Attendant. The load is visually inspected to identify unacceptable and excluded wastes to prevent unauthorized disposal. In depth random inspections of incoming loads are conducted according to the schedule established by the Landfill Supervisor. If frequent violations are identified, additional random inspections will be scheduled at the discretion of the Landfill Supervisor.

If waste is suspicious or if Landfill personnel are unable to identify waste, the following procedure is followed.

- The patron is directed to drive to the waste screening area.
- The Waste Inspection form is completed. An example of a Waste Inspection form can be found in Appendix A, Exhibit A5.
- Appropriate protective gear is worn by Landfill personnel.
- The waste is spread out with landfill equipment or hand tools and visually examined. Suspicious containers, labels or markings similar to the list below are investigated further:
  - Containers labeled hazardous
  - Material with unusual amounts of moisture
  - Biomedical (red bag) waste
  - Unidentified powders, smoke or vapors
  - Liquids, sludge, pastes or slurries
  - Asbestos or asbestos contaminated materials
  - Other wastes not accepted by Landfill
  - Any other unidentifiable substance or material
- The Landfill Supervisor is called immediately if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected. If the Landfill Supervisor concurs, they will contact the Carbon County Hazmat Response Team (Hazmat).

In compliance with R315-302-2(5)(a) the Landfill Supervisor will inspect the facility to minimize malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or threaten human health. These inspections are conducted on a quarterly basis or as needed. A Landfill Monitoring form

is kept as part of the operating record. A Landfill Monitoring form can be found in Appendix A, Exhibit A6. All inspection records are available to the executive secretary or an authorized representative upon request.

If.3 Fire or Explosion Contingency Plan  
R315-302-2(2)(d)

The contingency plan in the event of a fire or an explosion on the landfill property shall include the following preventative measures:

- Identifying and prohibiting the delivery of hot materials to the landfill.
- Fires inside of the delivery trucks which result from spontaneous combustion during the unloading process shall be isolated in as much as possible from the working face of the landfill.
- Implementation and adherence with the waste cover schedule.
- Proper maintenance and cleaning of the landfill equipment and providing for and maintaining fire extinguishers in the equipment and other landfill vehicles.

The contingency plan in the event of a fire or an explosion on landfill property shall include the following corrective measures:

- All persons shall be evacuated from the impacted area with assistance and first aid treatment being rendered to the injured as required.
- 911 and the County Road Supervisor, who directly oversees the landfill operation, shall be notified. The County Road Supervisor in turn shall notify the Division of Solid and Hazardous Waste and, if deemed necessary, the Carbon County Hazmat Response Team.
- The on-site landfill equipment, including the dozer, the loader, the paddle wheel and the water truck, will be utilized to the fullest extent to isolate and combat the fire. The intent being to both cool the burning material with water and smother the fire with earthen cover material.
- Additional personnel and equipment shall be made available from the County Road Department to assist fire-fighting efforts as required.
- The nearest fire hydrant to the landfill property is located at the entrance gate on Airport Road.

If.4 Fugitive Dust Control Plan  
R315-302-2(2)(g)

The landfill access road from Airport Road is paved to the landfill unit near the working face. All other roads on the landfill property consist of dirt, gravel and recycled concrete which require dust mitigation. The landfill water truck is used to water the access roads within the landfill facility at appropriate intervals to prevent the migration of dust from the landfill property.

If.5 Litter Control and Collection Plan  
R315-302-2(2)(h)

The Carbon County Landfill has implemented several preventive measures to help minimize and control wind-blown litter. These measures include:

- County ordinance requiring all loads coming to the landfill to be covered. Uncovered loads entering the landfill are subject to an enforceable fine.
- Any municipal solid waste collected at the landfill is placed in a roll-off dumpster which is regularly removed from the landfill site and emptied.
- The landfill cover material of six (6) inches is placed daily.
- The landfill is fenced around its perimeter which assists in containing wind-blown litter within the landfill property. Landfill personnel perform routine litter clean-up to keep the landfill and surrounding properties free from debris and litter.

If.6 Hazardous and PCB Waste Exclusion Plan  
R315-302-2(2)(j)

Should hazardous or prohibited wastes containing PCB be discovered during random inspections or during tipping, the Landfill Supervisor or his designee will contact the Carbon County Hazmat Response Team (Hazmat). The situation will be turned over to Hazmat once they arrive on scene. The following procedures are only a recommended course of action; ultimately the procedures to be followed will be directed by the Incident Commander.

- If the waste is still in the haulers' vehicle, the hauler is instructed as to appropriate disposal options.
- If the waste has been deposited or is in the process of being deposited, the hauler will immediately stop. The area will be evacuated and Hazmat will assume control of the situation.

- If the hauler or generator is no longer at the Landfill and is known to Landfill personnel, they are asked to retrieve the waste and informed of the proper disposal options.
- If the hauler or generator will not cooperate or does not retrieve the waste in a reasonable amount of time, the Landfill Supervisor arranges to have the waste transported to the proper disposal site and then bills the hauler or generator for costs incurred.
- If the hauler or generator cannot be identified, the Landfill Supervisor arranges to have the waste transported to the proper disposal site.

A record of the identification and removal of all hazardous or prohibited wastes containing PCB will be kept in the site operational records on the Waste Inspection form. A copy of the Waste Inspection form can be found in Appendix A, Exhibit A5. A copy of the Incident Report should be provided to the Landfill personnel by Hazmat after the incident for their records.

In the event the hazardous or prohibited waste containing PCB is discovered at the Landfill after the hauler has left the property, the Landfill Supervisor or his designee will contact Hazmat. The situation will be turned over to Hazmat once they arrive on scene. The following procedures should be followed until Hazmat arrives:

- Restrict access to the disposal area
- Notify the Landfill Supervisor immediately
- The Landfill Supervisor or approved designee should contact Hazmat

The following agencies and people must be notified if any hazardous materials or suspected hazardous materials are discovered at the Landfill:

Brad McCourt	Road Shop/Landfill Supervisor	(435) 636-3652
Rex Sacco	Carbon County Safety Director	(435) 636-3712
Jason Llewelyn	Director of Carbon County Emergency Management and Homeland Security	(435) 630-4736
County Sheriff		(435) 636-3251
Price City Fire Chief		(435) 636-3187
Executive Secretary	Division of Solid and Hazardous Waste	(801) 536-0200

A record should be kept of each phone call and conversation as each contact is made. This record is kept in the site operational records. A copy of the Contact Record form can be found in Appendix A, Exhibit A7.

If.7 Disease Vector Control Plan  
R315-302-2(2)(k)

In accordance with this rule, Carbon County plans to control disease vectors primarily by the application of cover material. Cover material will be placed to eliminate vector food source and habitat. The current landfill operation includes covering the waste with six (6) inches of soil daily. The landfill shall be inspected specifically for disease vectors on a regular basis.

Disease vectors to be considered at the Landfill include mosquitoes, flies, birds, rodents, skunks, and snakes. Occasionally stray house pets are encountered at the Landfill. If during inspection, disease vectors are discovered, Landfill personnel should consult the following recommendations:

- Insects

Grading operations should be conducted in such a way that ponding during rainfall is minimized. This will help to eliminate mosquito breeding and proliferation. Landfill operations should be followed and cover should be applied as per this report.

- Rodents and Birds

Municipal solid waste is directed to roll-off dumpsters that are then removed from the Landfill. No household waste is permanently deposited which is typically a food source for rodents and birds. If significant numbers of rodents are noticed, an exterminator will be consulted.

- Household Pets

Occasionally stray cats and dogs are sighted on Landfill property. Landfill personnel are directed to contact Carbon County Animal Control at (435) 637-6654.

- Wildlife

Wildlife seen on Landfill property includes deer, coyotes, skunks, foxes and snakes. If skunks or snakes become a nuisance they will be exterminated. If other noted wildlife becomes a nuisance, the Southeast Region Office of the Division of Wildlife Resources will be contacted at (435) 613-3700.

If.8 Alternative Waste Handling Plan  
R315-302-2(2)(l)

As required by this rule and in the event the landfill facility is not able to receive wastes during unforeseen events including equipment breakdown, fire, extreme inclement

weather or adverse conditions the area just inside of the landfill entrance gate will be used as an overflow site. Forty yard capacity roll-off dumpsters will be placed at the gate which will receive the incoming waste stream until such time normal operations resume within the landfill facility. When the landfill resumes operation the roll-off dumpsters will then be unloaded in the landfill facility.

If.9 General Training Plan for Site Operations  
R315-302-2(2)(o)

All Landfill personnel involved with management, inspections, and waste disposal operations are required to receive initial and periodic hazardous waste screening inspection training. Landfill personnel are trained in the identification of containers and labels used for hazardous wastes. Documentation including waste screening certificates of training received are kept in personnel files and are included with the operation records of the facility.

If.10 Facility Recycling Plan  
R315-303-4(6)

Municipal solid waste is not accepted at the Carbon County Landfill and therefore, the landfill does not provide containers to the general public for acceptance of recyclable materials. However, the Carbon County Landfill does provide for the receipt of automotive type batteries and tires, and appliances.

Landfill patrons bringing batteries to the landfill are directed to a covered utility shed adjacent to the landfill office where they are stored until collected for recycling. The batteries are collected by a local recycler who has contracted with the County to do so.

The landfill accepts tires from the public and local businesses as well. The tires are deposited in an area isolated from the landfilling operations. The tires are windrowed with enough separation distance to operate equipment between the windrows. This procedure has been adopted after consulting with the local fire authority. In the event that the tires were to ignite and burn, this procedure would aid in quickly extinguishing the fire. The tires are collected by a local recycler who has contracted with the County to do so.

The landfill accepts appliances that are not refrigerated and are separated for recycling in the metal recycling area. All appliances containing refrigerants are segregated to a separate area adjacent to the metal recycling area. The County contracts with State licensed businesses to remove the refrigerant after which the appliances are moved to the metal recycling area. The appliances are then collected by a local recycler who has contracted with the County to do so.

The landfill accepts and processes concrete for recycling purposes.

## SECTION II FACILITY TECHNICAL INFORMATION

### IIa. MAPS

#### IIa.1 Topographical Site Map R315-310-4(2)(a)(i)

A topographic map of the Class IVb Landfill unit located within the Carbon County Landfill facility can be found in Appendix B, Exhibit B1. The topographic Landfill unit map provides for imagery scaled at 1"=200', with contour intervals at 5' which identifies the Class IVb Landfill unit boundaries and the borrow and fill areas.

#### IIa.2 U.S. Geological Survey Topographic Map, 7½ Minute Series R315-310-4(a)(ii)

A copy of a portion of the Price Quadrangle, a 7½ Minute Series U.S. Geological Survey Topographic Map can be found in Appendix B, Exhibit B2. The Price Quadrangle shows the waste facility property boundary, the permitted Class IVb Landfill boundary, surface drainage channels, existing utilities, structures within one-fourth mile of the facility site and direction of the prevailing winds.

### IIc. ENGINEERING REPORT, PLANS, SPECIFICATIONS AND CALCULATIONS

#### IIc.1 Landfill Unit Design and Drawings R315-310-3(1)(b) R315-310-4(2)(c)(iii)

The landfill is currently being constructed by a process where the Landfill Unit is being over excavated to a depth of approximately twenty feet below ground level and ahead of the waste placement. The excavated material is stockpiled for future use as daily cover, intermediate cover and final cover. The waste is placed in the excavation at one end and is brought to a grade that is approximately 20 feet above ground level. The waste pile then progresses with the waste placement towards the opposite end of the Landfill Unit.

Compaction of the waste pile is accomplished through placing limitations on the actual working face within the Landfill Unit. The daily working face is maintained with an approximate maximum width of 100 feet which also minimizes the size of the unloading area in accordance with R315-303-3(7)(g). As the unloading area and working face achieve the upper limits in elevation at one end of the Landfill Unit the landfilling operation will then continue laterally until the unit is full.

A typical cross section of the Landfill Unit including cover design can be found in Appendix B, Exhibit B3.

A topographical map providing for the final grading plan can be found in Appendix B, Exhibit B4.

IIC.2 Run-on and Run-off Control Systems  
R315-310-4(2)(c)(viii)

The design for the Landfill Unit will incorporate a run-off/run-on control system that will divert the surface flows resulting from a 25-year storm event that falls on the working face, the landfill cover and surrounding adjacent areas as required by R315-303-3(1)(c)(d). The National Oceanic and Atmospheric Administration (NOAA) has determined that the rainfall intensity of a 15 minute, 25-year storm to be 2.61 inches/hour in the Price area.

The Landfill Unit lies on the easterly edge of the Hayes Wash. Hayes Wash generally flows from the northwest to the southeast through the landfill property. The property adjacent to the easterly edge of the Hayes Wash drains in a southwesterly direction. The Landfill Unit is presently being developed from the south to the north. All run-off from the landfill cover and the working face is collected in the excavated area of the unit itself from which the daily, intermediate and final cover material has previously been excavated. The run-off water is collected and retained in the bottom of the excavation until it percolates into the soil and/or evaporates.

In the future run-on issues will become more significant as the landfill development expands onto more of the property adjacent to Hayes Wash. It is anticipated that channel construction will be required to intercept the southwesterly flows that traverse the landfill property to Hayes Wash. The run-on flows will be intercepted by a channel that will be constructed along the north boundary line and the east boundary line of the landfill property. The north channel will flow westerly from the northeast property corner while the easterly channel will flow southerly from the same corner.

A location map identifying the location of the run-on channels and the typical sections of the run-on channels can be found in Appendix B, Exhibits B5 and B6.

The calculations for the run-on control system can be found in Appendix B, Exhibit B7.

IIC.3 Anticipated Facility Life and Basis of Calculation  
R315-310-4(2)(c)(ii)

The Class IVb Landfill Unit as described in this Permit Renewal Application and that is located in the E1/2 SE1/4 of Section 14 has a projected capacity of 2,400,000 cubic yards of construction and demolition waste disposal which is calculated to allow for landfilling operations into the year 2079.

The anticipated facility life calculations are based upon the following parameters:

- 1) The average annual growth for the past ten years, as determined by the Carbon County Department of Economic Development, is 1%;
- 2) The assumption that one cubic yard of landfilled and compacted construction and demolition wastes approximates one ton, and;
- 3) The final grading plan found in Appendix B, Exhibit B4.

A table which projects the landfill life expectancy can be found in Appendix B, Exhibit B8.

IIC.4 Engineering Reports Required to Meet the Location Standards  
R315-305-4  
R315-310-4(2)(c)(i)

This section is not applicable as this application is for the renewal of an existing Class IVb Landfill Permit.

IIC.5 Identification of Final Cover Borrow Sources  
R315-310-4(2)(c)(iv)

Final cover material will come from the over excavation of the Landfill Unit in the E1/2 NE1/4 of Section 14. Top soil is available from sources belonging to Carbon County which are located in the NW1/4 NW1/4 of Section 24 lying below the airport plateau and the NE1/4 NE1/4 of Section 23 lying east of the Hayes Wash.

IIC.6 Review Documentation of Run-off Facilities by the Division of Water Quality  
R315-310-4(2)(c)(v)  
R315-310-3(1)(i)

This section is not applicable as there are no run-off/leachate treatment systems.

IId. CLOSURE REQUIREMENTS

IId.1 Closure Plan  
R315-310-3(1)(h)

Proper closure of the Landfill Unit is imperative to:

- 1) Minimize the need for further maintenance;

- 2) Minimize or eliminate threats to human health and the environment from the post-closure escape of solid waste constituents to the ground, ground and surface waters or the atmosphere; and,
- 3) Prepares the unit for the post-closure period.

Final closure of the Landfill Unit will follow the sequential partial closures as the Landfill Unit is filled and graded to the elevation of the final cover. Partial and final closure will include covering, grading and contouring, and seeding. The final cover design and the costs associated with the partial and final cover are discussed more fully in Sections II.d.3 and II.f.1 below.

II.d.2 Closure Schedule  
R315-310-4(2)(d)(i)

It is anticipated that the Landfill Unit will reach its maximum capacity in the year 2079. Partial closures will take place through the years as the Landfill Unit is developed and as its final design grades are attained. The intent for periodic partial closures is to minimize exposure of the landfilled waste to the surrounding environment and to distribute the closure costs over time allowing for annual budgetary consideration by the Carbon County Commission. In addition, partial closures of the Landfill Unit over time will greatly reduce the amount of money required to be held in the financial assurance mechanism for closure and post-closure care needs.

In accordance with R315-302-3(4), the County will notify the Executive Secretary of the Division of Solid and Hazardous Waste 60 days prior to the projected final receipt of waste at the unit. The County will commence implementation of the final closure plan within 30 days after receipt of the final volume of waste and will complete the closure activities within 180 days from the starting time. The County will then submit the closure plans and certification of compliance with the approved closure plan to the Executive Secretary within 90 days of the completed closure.

II.d.3 Design of Final Cover  
R315-310-4(2)(c)(iii)

In accordance with R315-305-5(5)(b)(ii), the Landfill Unit upon closure, whether partial or final, will be covered with two feet of cover soil including six inches of topsoil. Prior to placement of the cover material, the waste and the six inches of previously placed daily cover will be leveled to the extent that it is practicable. After the placement of the final cover material the cover will be final contoured and graded to the appropriate slope to minimize ponding, erosion, and the infiltration of run-off waters. The final cover material will be transported, spread, contoured and compacted using the landfill equipment discussed in previous sections which includes a CAT D7 Dozer, a CAT 623G Paddle Wheel, a CAT 826H Compactor, a CAT 950B Loader, and a water truck.

The final cover will be seeded with native plants and grasses as recommended by the Bureau of Land Management.

The final cover design can be found in Appendix B, Exhibit B9.

IId.4 Capacity of Site in Volume and Tonnage  
R315-310-4(2)(d)(ii)

The anticipated volume and tonnage of the Landfill Unit is 2,400,000 Cu. Yd. and 2,400,000 tons, respectively. The discussion regarding the calculation of the Landfill Unit volume and tonnage and the Landfill Unit life expectancy itself can be found in Section IIc.3.

IId.5 Final Inspection by Regulatory Agencies  
R315-310-4(2)(d)(iii)

As required, a final report will be prepared and submitted to the Executive Secretary of the Division of Solid and Hazardous Waste. Upon approval the report will be entered into the facility operation record.

A final inspection by the Division of Solid and Hazardous Waste and other regulating agencies of the Utah Department of Environmental Quality (UDEQ) will be arranged for upon acceptance of the final report.

The post closure maintenance plan as discussed herein will be implemented upon completion of the final inspection and acceptance by the UDEQ.

IIe. POST-CLOSURE REQUIREMENTS

IIe.1 Post-Closure Care Plan  
R315-310-3(1)(h)

Post-closure care and maintenance activities will be performed as necessary and as deficiencies are identified during the quarterly inspections. In accordance with R315-302-3(6)(vi) post-closure activities including inspection and maintenance shall be performed for a period of 30 years or a period established by the Executive Secretary. An annual report of the post-closure inspections and maintenance activities will be kept in the facility's operating record. When the post-closure activities are complete, as determined by the Executive Secretary, a signed certification by the County will be submitted to the Executive Secretary stating why post-closure activities are no longer necessary. Authorization to discontinue the post-closure plan, and monitoring activities, including inspection and maintenance, must come from the Executive Secretary.

Post-closure inspections will be made quarterly or after severe weather events and will include an on-site tour to ascertain the general overall condition of the closed Landfill

Unit as well as to identify any specific deficiencies that may exist and present potential harm to human health and the environment. Inspections will include the following:

- 1) The boundary fence line will be inspected for downed line posts, broken wire and other breaches to the fence line. Repairs should be made as necessary to provide the necessary security to the Landfill Unit as required.
- 2) The general surface of the closed Landfill Unit cover will be inspected for erosion due to run-off water or wind and holes that are created by burrowing animals. Repairs should be made as necessary and will include importing and grading additional cover material and reseeding. Reseeding will be performed in all areas of the Landfill Unit where the cover material is barren.
- 3) The run-on control channels and adjacent Hayes Wash will be inspected and maintained as necessary to protect the Landfill Unit from flooding and erosion.
- 4) The access and service roads will be inspected and maintained to provide accessibility. Maintenance may include importing and grading additional earthen material.

This Class IVb Landfill is exempt from the post-closure monitoring of landfill gas, and ground and surface waters.

A post-closure inspection form can be found in Appendix B, Exhibit B10.

Ile.2 Changes to Record of Title, Land Use and Zoning Restrictions  
R315-310-4(2)(e)(v)

Carbon County will submit plats and a statement of fact concerning the location of the landfill site to the County Reorder no later than 60 days after certification of closure of the landfill facility. The plats and statement of fact will be recorded as part of the Record of Title and proof of the Record of Title filing will be submitted to the Executive Secretary.

Ile.3 Maintenance of Cover and Run-on/Run-off Control Systems  
R315-310-4(2)(e)(iii)

The post-closure inspection, reporting and maintenance of the run-on/run-off control system is addressed in Section Ile.1 above.

Ile.4 Post-Closure Care Period Contact Information  
R315-310-4(2)(e)(vi)

In the event the Executive Secretary must make contact with those who are responsible for the landfill facility during the post-closure care period contact will be made with the office of the Carbon County Commission:

Contact Information: Sandra Lehman, Carbon County Commission Secretary  
120 E. Main Street  
Price, UT 84501  
(435) 636-3226

II.f. FINANCIAL ASSISTANCE

II.f.1 Identification of Closure Costs Including Cost Calculations  
R315-310-4(2)(d)(iv)

The closure cost estimate is based upon a year 2011 closure and was calculated by multiplying the closure cost estimate found in the 2010 Carbon County landfill annual report by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) Gross Domestic Product Implicit Price Deflator of 1.009479.

The closure cost estimate can be found in Appendix B, Exhibit B11.

Items of work including removal of buildings and equipment and repair/replace perimeter fencing are not included in the landfill closure costs at this time as it is anticipated that a permit for a lateral expansion onto 40 acres of property adjacent to the current landfill facility belonging to Carbon County will be made at some point in time prior to the closing of the existing Landfill Unit. The buildings and equipment would be used for the landfilling operations on the adjacent 40 acres of property and additional perimeter fencing would also be completed at that time.

II.f.2 Identification of Post-Closure Costs Including Cost Calculations  
R315-310-4(2)(e)(iv)

The post-closure care cost estimate is based upon a year 2011 closure and was calculated by multiplying the post-closure care cost estimate found in the 2010 Carbon County landfill annual report by the BEA's Gross Domestic Product implicit price deflator of 1.009479. In addition, a cost for repair of Surface Water Diversion Structures has been included. The post-closure care costs include costs for the quarterly inspections, annual report and required maintenance of fencing, final cover, run-on/run-off controls, and service roads.

The post-closure care cost estimate can be found in Appendix B, Exhibit B11.

It is anticipated that the cost of the post-closure care of the present Landfill Unit will be annually budgeted for by the Carbon County Commission and performed as required in

conjunction with the maintenance and operation of the future lateral expansion of the landfill facility onto the adjacent 40 acre parcel as discussed above.

- IIf.3 Identification and Effective date of Financial Assurance Mechanism  
R315-309-1(1)  
R315-310-3(1)(j)

The Carbon County Commission has established an account with Zions Bank for the express purpose of providing for the landfill closure and post-closure care costs as required.

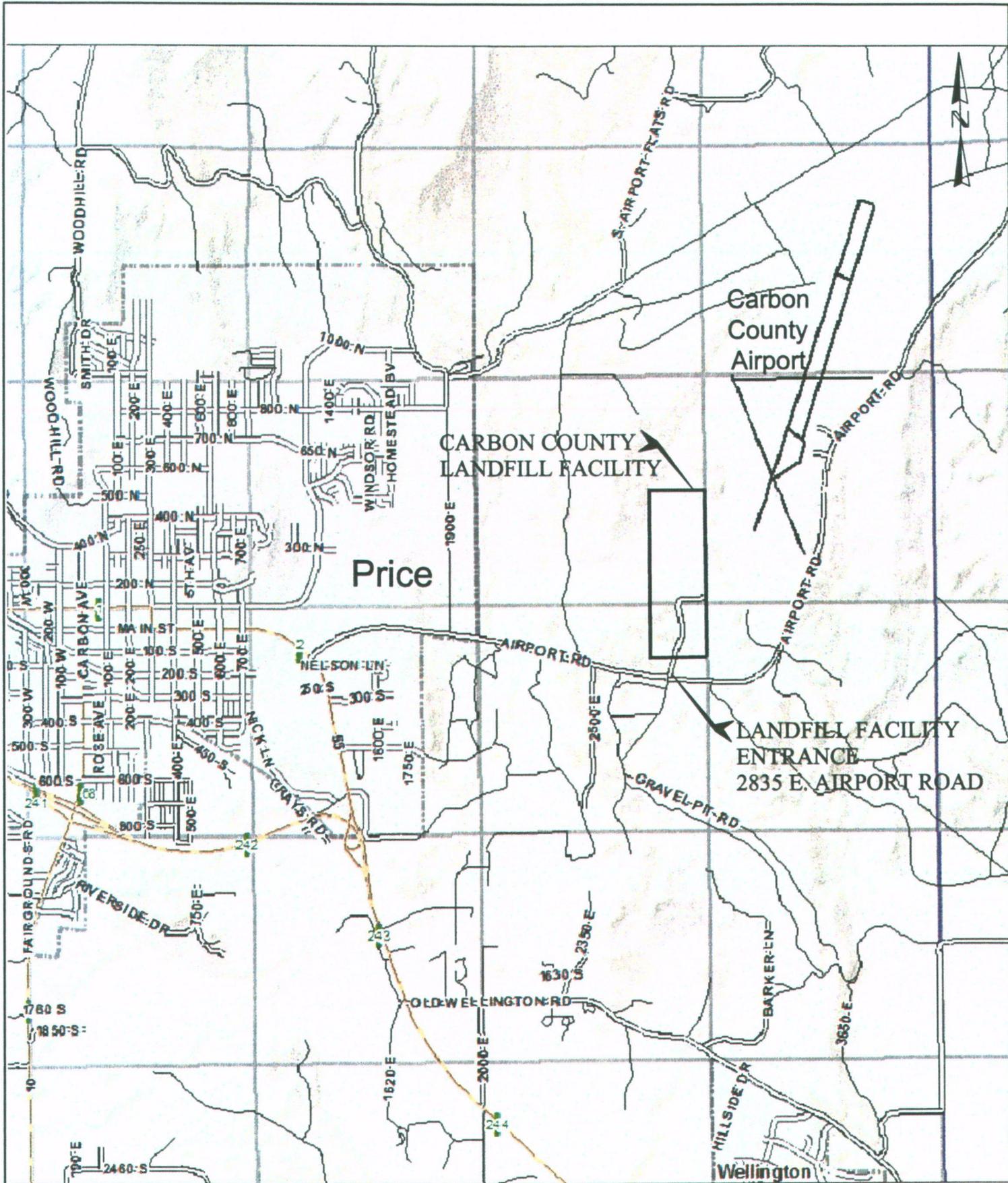
A copy of the Statement of Account dated December 31, 2010, can be found in Appendix B, Exhibit B12.

## APPENDIX A

## APPENDIX A

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<u>Exhibit</u>	<u>Description</u>	<u>Reference</u>
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A3	Warranty Deeds, Ownership Plats	Section Ia.3
A4	Vehicle Description Form	Section If.1
A5	Waste Inspection Form	Section If.2
A6	Landfill Monitoring Form	Section If.2
A7	Contact Record Form	Section If.6

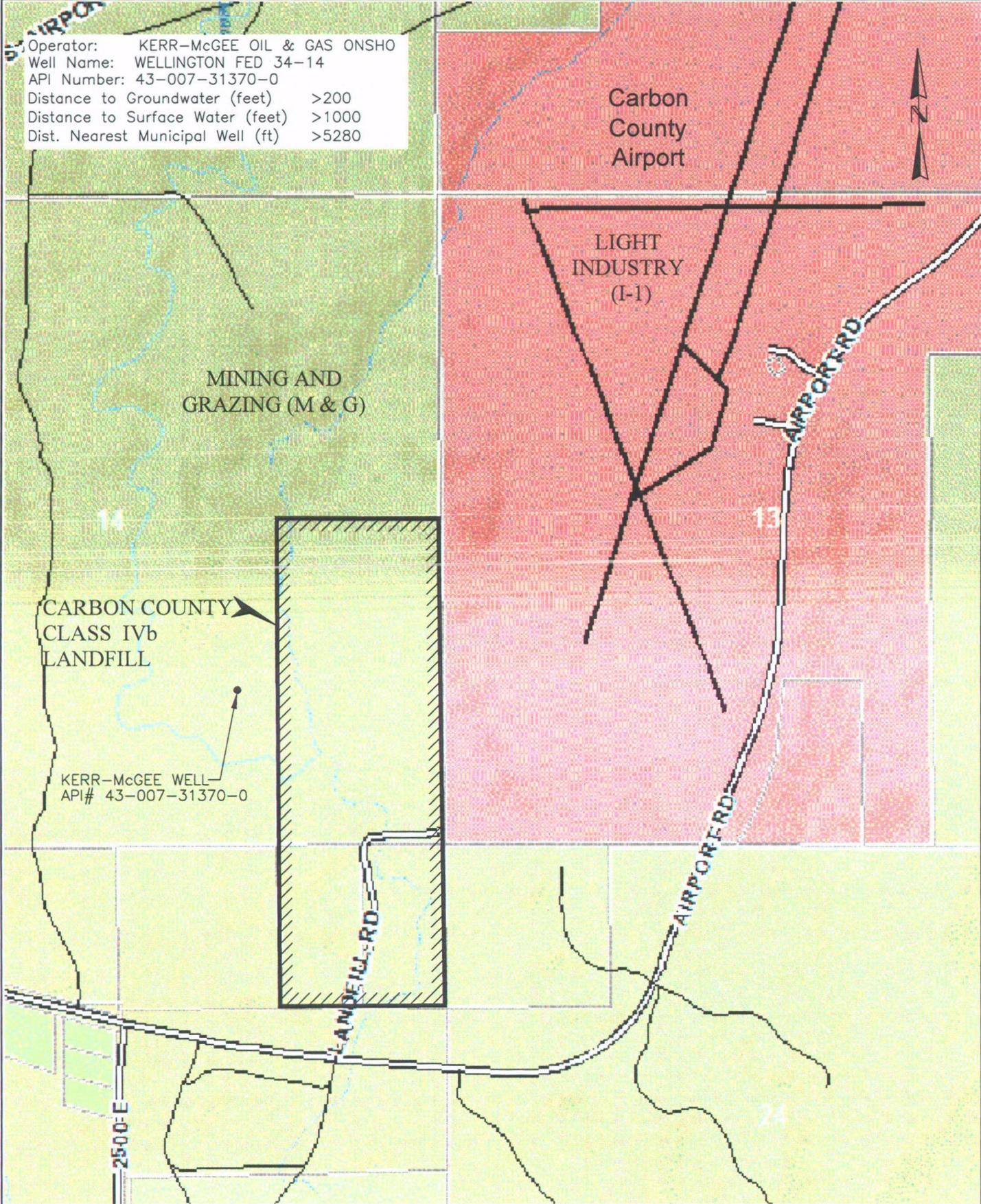


CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

LOCATION MAP

EXHIBIT NO.: A1



Operator: KERR-McGEE OIL & GAS ONSHO  
 Well Name: WELLINGTON FED 34-14  
 API Number: 43-007-31370-0  
 Distance to Groundwater (feet) >200  
 Distance to Surface Water (feet) >1000  
 Dist. Nearest Municipal Well (ft) >5280

MINING AND  
 GRAZING (M & G)

Carbon  
 County  
 Airport

LIGHT  
 INDUSTRY  
 (I-1)

CARBON COUNTY  
 CLASS IVb  
 LANDFILL

KERR-McGEE WELL  
 API# 43-007-31370-0

CARBON COUNTY  
 CLASS IVb LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

ZONING MAP

EXHIBIT NO.: A2



# The United States of America

To all to whom these presents shall come, Greeting:

14

Serial: UTU-54737

WHEREAS

Carbon County, Utah

is entitled to a land patent pursuant to Section 206 of the Act of October 21, 1976, 90 Stat. 2786, 43 U.S.C. 1716, for the following described land:

Salt Lake Meridian

T. 14 S., R. 10 E.,

sec. 14, E $\frac{1}{2}$ SE $\frac{1}{4}$ ;

sec. 23, E $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NE $\frac{1}{4}$ .

Containing 180.00 acres

NOW KNOW YE, that there is, therefore, granted by the UNITED STATES, unto the above named claimant the land above described: TO HAVE AND TO HOLD the said land with all rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto belonging, unto the said claimant, its successors and assigns, forever;

EXCEPTING AND RESERVING TO THE UNITED STATES:

1. A right-of-way thereon for ditches and canals constructed by the authority of the United States. Act of August 30, 1890, (25 Stat. 391; 43 U.S.C. 945 (1970)).
2. A right-of-way, serial number UTSL-068580, for a Federal highway granted under Section 17 of the Act of November 9, 1921 (43 U.S.C. 317) as amended, located in T.14 S., R. 10 E., sec. 23, S $\frac{1}{2}$ NE $\frac{1}{4}$ .
3. Reserve all oil and gas as to the lands patented, together with such further rights as may be necessary for the full and complete enjoyment of all rights, privileges, and benefits under or with respect to oil and gas lease UTU-66789 in above patented lands and for so long only as such lease shall remain in effect. At the termination of oil and gas lease UTU-66789, the patentee shall succeed the United States with respect to the oil and gas estate.

STATE OF UTAH ) ss  
COUNTY OF CARBON )  
FILED AND RECORDED FOR

Carbon County

FEB 25 10 17 AM '92

BOOK 318 OF RECORDS

PAGE 14-5  
JAN 25 1992  
COURT RECORDER

33936

Entry No. \_\_\_\_\_

Indexed

Abstracted

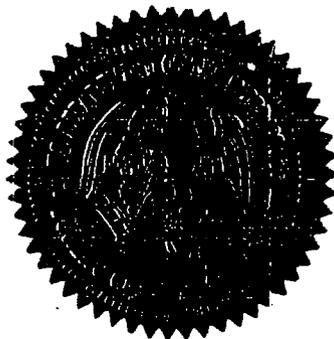
Recd. Fee \_\_\_\_\_

43-92-6003

Patent Number

SUBJECT TO:

1. A right-of-way, serial number UTU-46511, issued to Mountain Bell for a telephone line located in T. 14 S., R. 10 E., SLM, sec. 23, S $\frac{1}{4}$ NE $\frac{1}{4}$ .
2. A right-of-way, serial number UTU-64162, to Price River Water Association for a water pipeline located in T. 14 S., R. 10 E., SLM, sec. 23, SE $\frac{1}{4}$ NE $\frac{1}{4}$ .
3. A right-of-way, serial number UTU-002283, to Pacificorp DBA UPL for a powerline located in T. 14 S., R. 10 E., SLM, sec. 14, SB $\frac{1}{4}$ SE $\frac{1}{4}$  and sec. 23, NE $\frac{1}{4}$ NE $\frac{1}{4}$ .
4. A right-of-way, serial number UTU-015341, to Pacificorp DBA UPL for a powerline located in T. 14 S., R. 10 E., SLM, sec. 14, SE $\frac{1}{4}$ SE $\frac{1}{4}$ , and sec. 23, NE $\frac{1}{4}$ NE $\frac{1}{4}$ .
5. A right-of-way, serial number UTU-46984, to Verdis Barker & Sons for a road located in T. 14 S., R. 10 E., SLM, sec. 23, SW $\frac{1}{4}$ NE $\frac{1}{4}$ .
6. A right-of-way, serial number UTU-54735, to Pacificorp DBA UPL, for a powerline located in T. 14 S., R. 10 E., SLM, sec. 23, S $\frac{1}{4}$ NE $\frac{1}{4}$ .



IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1948 (62 Stat. 476), has, in the name of the United States, caused these letters to be made Patent, and the Seal of the Bureau to be hereunto affixed:

GIVEN under my hand, in Salt Lake City, Utah  
the twenty-seventh day of January in the year  
of our Lord one thousand nine hundred and ninety-two  
and of the Independence of the United States the two hundred  
and sixtieth

By Paul R. Stahman  
Chief, Branch of Lands and Minerals, Operations

Patent Number 43-92-0003

Form 1860-9  
(January 1988)

# The United States of America

To all to whom these presents shall come, Greeting:

NOV 3 08 PM '93

Entry No. **41948**

BOOK 336  
PAGE 328-329  
RECORDS  
COUNTY CLERK

Serial: Utah 67449

Indexed   
Abstracted   
Recd. Fee

WHEREAS,

Carbon County, Utah

is entitled to a land patent pursuant to Section 203 of the Act of October 21, 1976 (43 U.S.C. 1713), for the following described land:

Salt Lake Meridian, Utah

T. 14 S., R. 10 E.,  
sec. 23, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ .

containing 20.00 acres.

NOW KNOW YE, that there is, therefore, granted by the UNITED STATES, unto Carbon County, Utah, the land described above; TO HAVE AND TO HOLD the said land with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto belonging, unto the said Carbon County, Utah and to its heirs and assigns, forever; and

EXCEPTING AND RESERVING TO THE UNITED STATES:

- See BK 314  
Pa 14-15  
V
1. A right-of-way thereon for ditches or canals constructed by the authority of the United States. Act of August 30, 1890 (43 U.S.C. 945).
  2. All the mineral deposits in the lands so patented pursuant to the Act of October 21, 1976 (43 U.S.C. 1719), including without limitation, substances subject to disposition under the general mining laws, the general mineral leasing laws, the Materials Act and the Geothermal Steam Act, and to it, its permittees, licensees, lessees, and mining claimants, the right to prospect for, mine, and remove the minerals owned by the United States under applicable law and such regulations as the Secretary of the Interior may prescribe. This reservation includes necessary access and exit rights and the right to conduct all necessary and incidental activities including, without limitation, all drilling, underground, open pit or surface mining operations, storage, and transportation facilities deemed reasonably necessary.

Unless otherwise provided by separate agreement with the surface owner, mining claimants, permittees, licensees and lessees of the United States shall reclaim disturbed areas to the extent prescribed by regulations issued by the Secretary of the Interior.

All causes of action brought to enforce the rights of the surface owner under the regulations above referred to shall be instituted against mining claimants, permittees, licensees and lessees of the United States; and the United States shall not be liable for the acts or omissions of its mining claimants, permittees, licensees and lessees.

Patent Number 43-94-0001

Form 1860-10  
(March 1985)

Utah 67449

SUBJECT TO:

1. Those rights for a power transmission line granted to PacifiCorp dba UP&L, its successors or assigns, by right-of-way No. UTU-002283, pursuant to the Act of March 4, 1911 (43 U.S.C. 961); and
2. Those rights for a power transmission line granted to PacifiCorp dba UP&L, its successors or assigns, by right-of-way No. UTU-015341, pursuant to the Act of March 4, 1911 (43 U.S.C. 961).



IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1948 (62 Stat. 476), has, in the name of the United States, caused these letters to be made Patent, and the Seal of the Bureau to be hereunto affixed:

GIVEN under my hand, in Salt Lake City, Utah  
the first day of November in the year  
of our Lord one thousand nine hundred and ninety-three  
and of the Independence of the United States the two hundred  
and eighteenth

By *John E. MacDonald*  
Acting Deputy State Director, Operations

Patent Number 43-94-0001

**CARBON COUNTY LANDFILL - VEHICLE INSPECTION FORM**

<p><b>1</b> Inspector: _____</p>	<p><b>2</b> Inspector: _____</p>
<p>Date: _____ Time: _____</p>	<p>Date: _____ Time: _____</p>
<p>Vehicle Type  <input type="checkbox"/> Car  <input type="checkbox"/> Pickup  <input type="checkbox"/> Trailer  <input type="checkbox"/> Dump Truck  <input type="checkbox"/> Other _____</p>	<p>Vehicle Type  <input type="checkbox"/> Car  <input type="checkbox"/> Pickup  <input type="checkbox"/> Trailer  <input type="checkbox"/> Dump Truck  <input type="checkbox"/> Other _____</p>
<p>Vehicle License: _____</p>	<p>Vehicle License: _____</p>
<p>Load Description:  <input type="checkbox"/> Residential      <input type="checkbox"/> Commercial  <input type="checkbox"/> Other _____</p>	<p>Load Description:  <input type="checkbox"/> Residential      <input type="checkbox"/> Commercial  <input type="checkbox"/> Other _____</p>
<p>Waste Description:  <input type="checkbox"/> C &amp; D      <input type="checkbox"/> Animals  <input type="checkbox"/> MSW      <input type="checkbox"/> Metal  <input type="checkbox"/> Tires      <input type="checkbox"/> Green Waste  <input type="checkbox"/> Batteries      <input type="checkbox"/> Other _____</p>	<p>Waste Description:  <input type="checkbox"/> C &amp; D      <input type="checkbox"/> Animals  <input type="checkbox"/> MSW      <input type="checkbox"/> Metal  <input type="checkbox"/> Tires      <input type="checkbox"/> Green Waste  <input type="checkbox"/> Batteries      <input type="checkbox"/> Other _____</p>
<p>Weight of Load:      Remarks:  Gross _____ lbs  Tare _____ lbs  Net _____ lbs</p>	<p>Weight of Load:      Remarks:  Gross _____ lbs  Tare _____ lbs  Net _____ lbs</p>
<p><b>3</b> Inspector: _____</p>	<p><b>4</b> Inspector: _____</p>
<p>Date: _____ Time: _____</p>	<p>Date: _____ Time: _____</p>
<p>Vehicle Type  <input type="checkbox"/> Car  <input type="checkbox"/> Pickup  <input type="checkbox"/> Trailer  <input type="checkbox"/> Dump Truck  <input type="checkbox"/> Other _____</p>	<p>Vehicle Type  <input type="checkbox"/> Car  <input type="checkbox"/> Pickup  <input type="checkbox"/> Trailer  <input type="checkbox"/> Dump Truck  <input type="checkbox"/> Other _____</p>
<p>Vehicle License: _____</p>	<p>Vehicle License: _____</p>
<p>Load Description:  <input type="checkbox"/> Residential      <input type="checkbox"/> Commercial  <input type="checkbox"/> Other _____</p>	<p>Load Description:  <input type="checkbox"/> Residential      <input type="checkbox"/> Commercial  <input type="checkbox"/> Other _____</p>
<p>Waste Description:  <input type="checkbox"/> C &amp; D      <input type="checkbox"/> Animals  <input type="checkbox"/> MSW      <input type="checkbox"/> Metal  <input type="checkbox"/> Tires      <input type="checkbox"/> Green Waste  <input type="checkbox"/> Batteries      <input type="checkbox"/> Other _____</p>	<p>Waste Description:  <input type="checkbox"/> C &amp; D      <input type="checkbox"/> Animals  <input type="checkbox"/> MSW      <input type="checkbox"/> Metal  <input type="checkbox"/> Tires      <input type="checkbox"/> Green Waste  <input type="checkbox"/> Batteries      <input type="checkbox"/> Other _____</p>
<p>Weight of Load:      Remarks:  Gross _____ lbs  Tare _____ lbs  Net _____ lbs</p>	<p>Weight of Load:      Remarks:  Gross _____ lbs  Tare _____ lbs  Net _____ lbs</p>

**CARBON COUNTY LANDFILL - WASTE INSPECTION FORM**

Inspector:		Date:		Time:	
Vehicle Description:				Lic. No.:	
Owner:			Phone No. (    )		
Address:		City:		State:	Zip:
Waste Generator:					
Load Description: <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Government					
<input type="checkbox"/> Other _____					
Waste Description:					
<input type="checkbox"/> C & D <input type="checkbox"/> MSW <input type="checkbox"/> Tires <input type="checkbox"/> Batteries <input type="checkbox"/> Animals <input type="checkbox"/> Metal <input type="checkbox"/> Green Waste <input type="checkbox"/> Other _____					
Hazardous and Restricted Waste:					
<u>Type</u>			<u>Charactoristics</u>		
<input type="checkbox"/> Asbestos			<input type="checkbox"/> Corrosive		
<input type="checkbox"/> Contaminated Soil			<input type="checkbox"/> Flammable		
<input type="checkbox"/> Medical			<input type="checkbox"/> Reactive		
<input type="checkbox"/> PCB			<input type="checkbox"/> Toxic		
<input type="checkbox"/> Other _____			<input type="checkbox"/> Radioactive		
			<input type="checkbox"/> Other _____		
Reason for Inspection:					
<input type="checkbox"/> Random <input type="checkbox"/> Suspect <input type="checkbox"/> Other _____					
If Suspect, Reason for Suspicion:					
<input type="checkbox"/> Previous Offense <input type="checkbox"/> Sealed Container <input type="checkbox"/> Unknown Material <input type="checkbox"/> Commercial Placard					
<input type="checkbox"/> Other _____					
Was Generator Notified?                      Yes <input type="checkbox"/> No <input type="checkbox"/> Date: (if Yes) _____					
Was Hauler Notified?                      Yes <input type="checkbox"/> No <input type="checkbox"/> Date: (if Yes) _____					
Was State Regulating Agency Notified?                      Yes <input type="checkbox"/> No <input type="checkbox"/>					
Regulator: _____				Date: _____	
Instructions Given by Regulator: _____					
_____					
_____					
Was HAZMAT Notified?    Yes <input type="checkbox"/> No <input type="checkbox"/> Instructions Given by HAZMAT: _____					
_____					
_____					
Was Landfill Supervisor Notified?    Yes <input type="checkbox"/> No <input type="checkbox"/>					
Instructions Given by Landfill Supervisor: _____					
_____					
_____					
Was Waste Accepted?    Yes <input type="checkbox"/> No <input type="checkbox"/> _____					
Inspector's Signature					

**CARBON COUNTY LANDFILL - LANDFILL MONITORING FORM**

<b>Landfill Quarterly Inspection</b>	Quarter:
--------------------------------------	----------

Inspector:	Date:	Time:
------------	-------	-------

**Inspection Checklist**

Dust Control:                       1-Poor       2-Fair       3-Good       4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

Disease Vector Control:                       1-Poor       2-Fair       3-Good       4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

Cover Material Condition:                       1-Poor       2-Fair       3-Good       4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

Run-On / Run-Off Control:                       1-Poor       2-Fair       3-Good       4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

Waste Control:                       1-Poor       2-Fair       3-Good       4-Excellent

Unacceptable Waste:                       Yes       No

Type of Unacceptable Waste (if any) \_\_\_\_\_

\_\_\_\_\_

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

**Signatories:**

Inspector	Date
Landfill Supervisor	Date

**CARBON COUNTY LANDFILL - CONTACT RECORD FORM**

1	Inspector:	2	Inspector:
Date:	Time:	Date:	Time:
Name of Contact:		Name of Contact:	
Phone No. of Contact:		Phone No. of Contact:	
Agency of Contact:		Agency of Contact:	
Reason for Contact:		Reason for Contact:	
Instructions Received:		Instructions Received:	
Action Taken:		Action Taken:	
3	Inspector:	4	Inspector:
Date:	Time:	Date:	Time:
Name of Contact:		Name of Contact:	
Phone No. of Contact:		Phone No. of Contact:	
Agency of Contact:		Agency of Contact:	
Reason for Contact:		Reason for Contact:	
Instructions Received:		Instructions Received:	
Action Taken:		Action Taken:	

## APPENDIX B

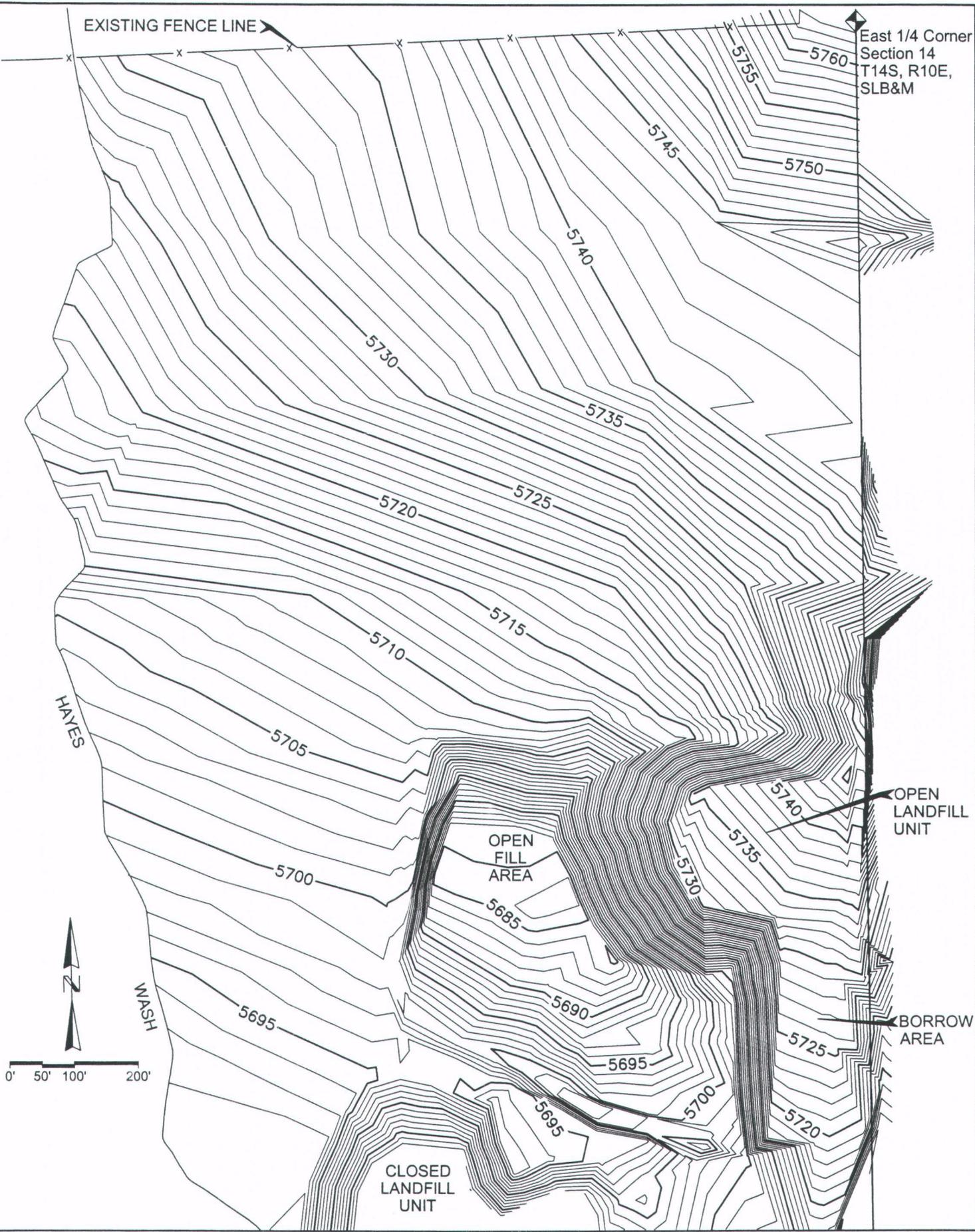
## APPENDIX B

### TABLE OF CONTENTS

<u>Exhibit</u>	<u>Description</u>	<u>Reference</u>
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B2	U.S.G.S. Topographical Map	Section IIa.2
B3	Landfill Unit Typical Cross Section	Section IIc.1
B4	Landfill Unit Final Grading Plan	Section IIc.1
B5	Run-on Channel Location Map	Section IIc.2
B6	Run-on Channel Typical Sections	Section IIc.2
B7	Run-on Control Calculations	Section IIc.2
B8	Landfill Life Projection Table	Section IIc.3
B9	Final Cover Design	Section IId.3
B10	Post-Closure Inspection Form	Section IIe.1
B11	Landfill Closure Cost and Post-Closure Care Cost Estimate	Section II f.1
B12	Financial Assurance Mechanism	Section II f.3

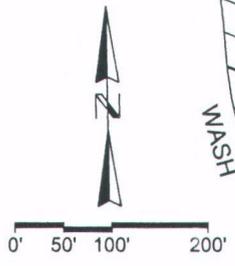
EXISTING FENCE LINE

East 1/4 Corner  
Section 14  
T14S, R10E,  
SLB&M



HAYES

WASH



OPEN  
FILL  
AREA

CLOSED  
LANDFILL  
UNIT

OPEN  
LANDFILL  
UNIT

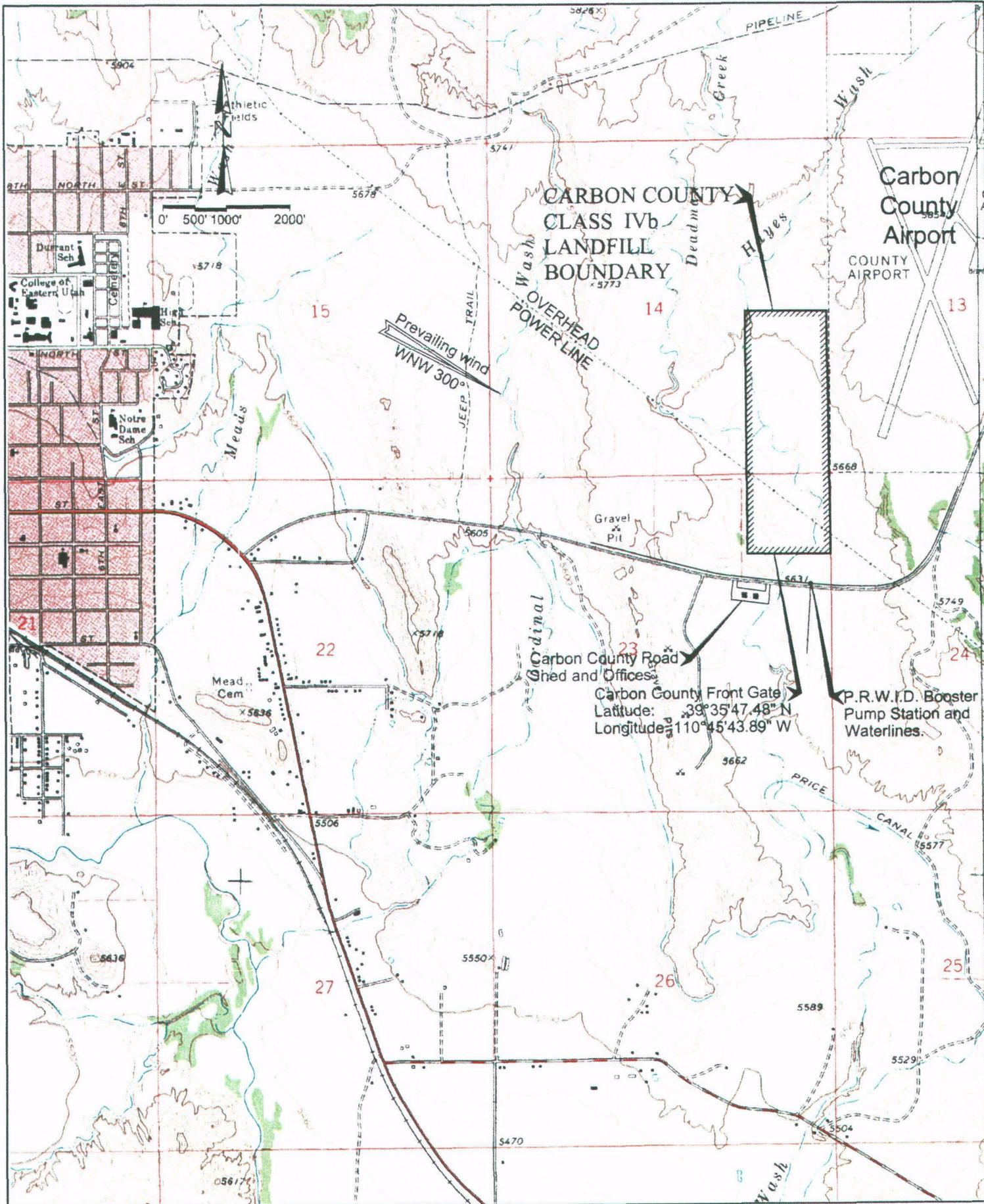
BORROW  
AREA

CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

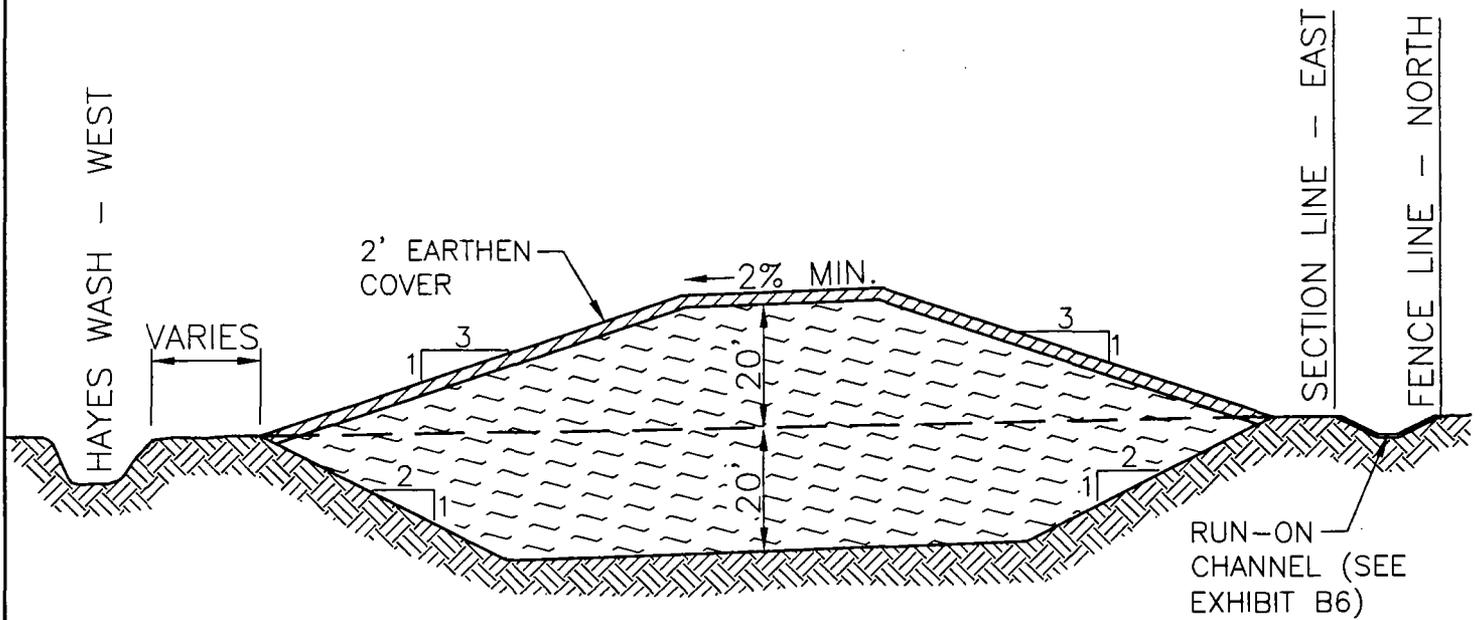
EXISTING LANDFILL UNIT TOPOGRAPHIC MAP

EXHIBIT NO.: B1



**CARBON COUNTY  
 CLASS IVb LANDFILL  
 PERMIT RENEWAL APPLICATION**

**CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH**



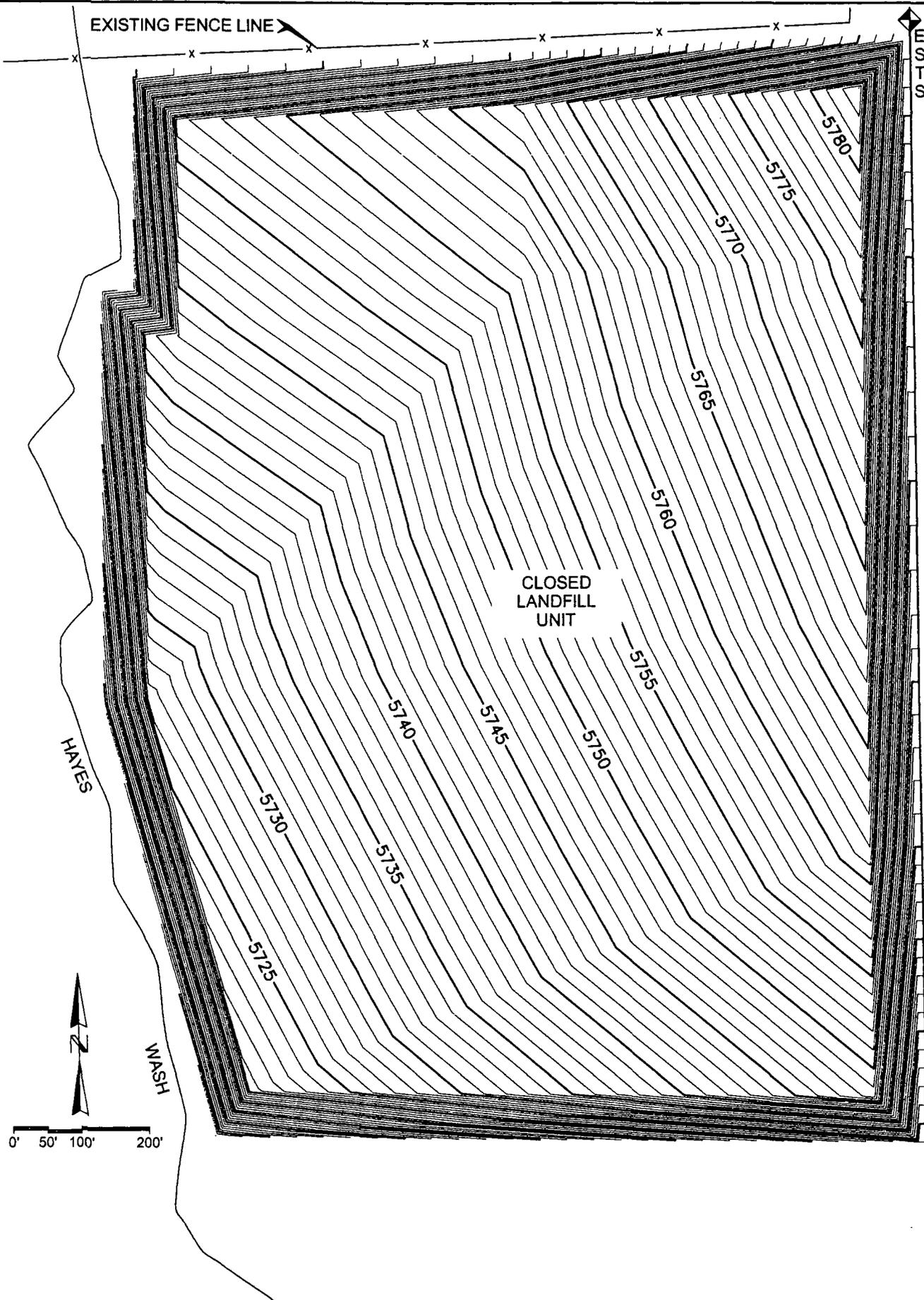
TYPICAL SECTION

CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

EXISTING FENCE LINE

East 1/4 Corner  
Section 14  
T14S, R10E,  
SLB&M

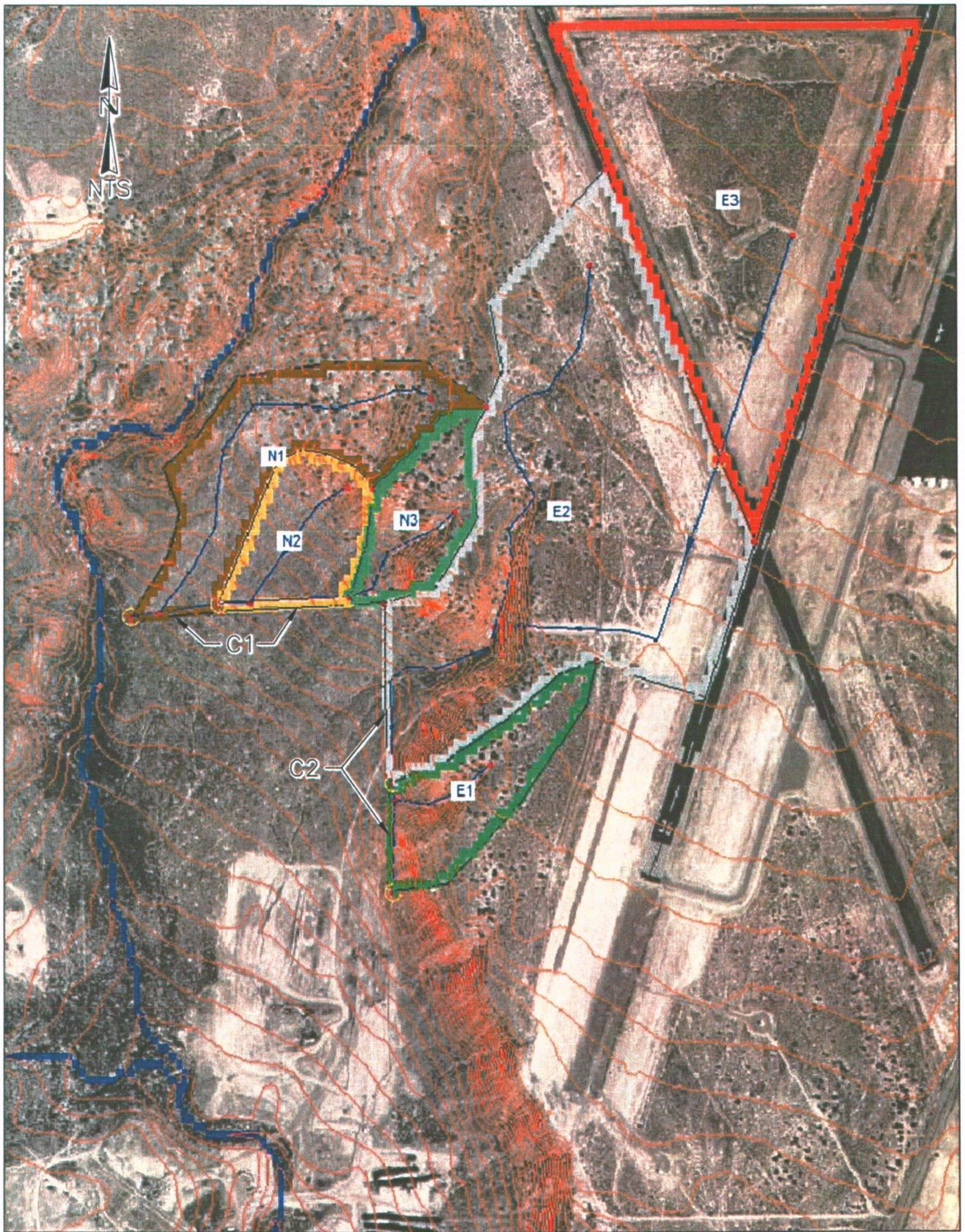


CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

LANDFILL UNIT FINAL GRADING PLAN

EXHIBIT NO.: B4

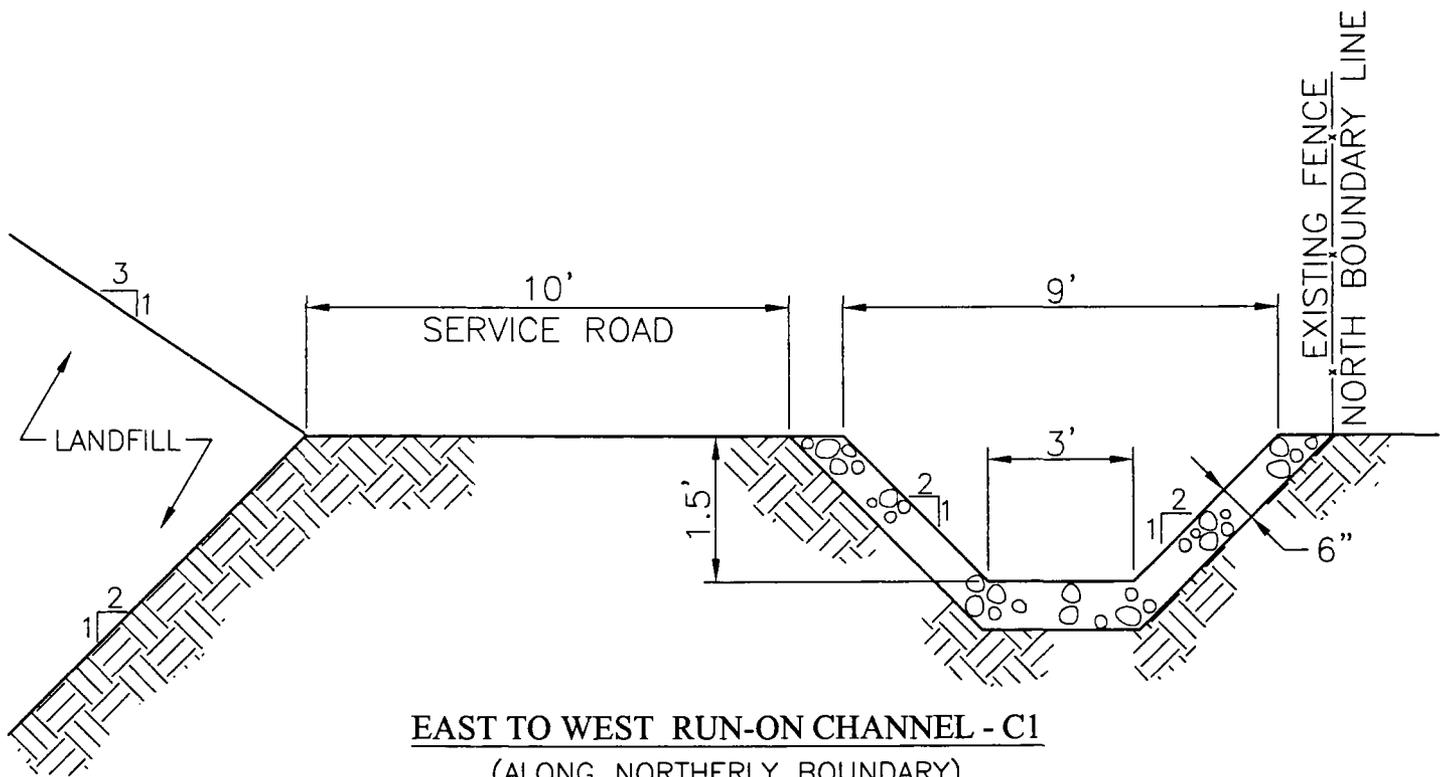


CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

RUN-ON CHANNEL LOCATION MAP

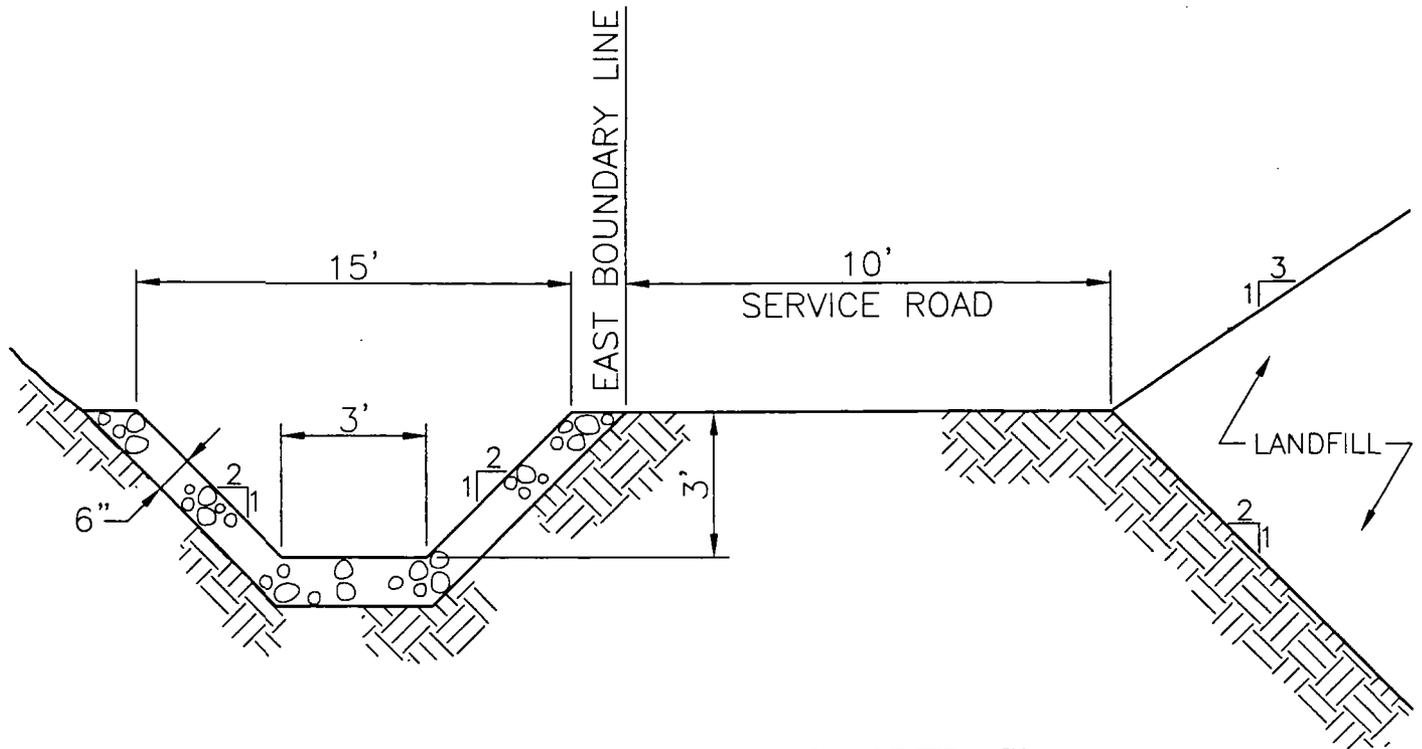
EXHIBIT NO.: B5



**EAST TO WEST RUN-ON CHANNEL - C1**

(ALONG NORTHERLY BOUNDARY)

S=3.00% MIN.



**NORTH TO SOUTH RUN-ON CHANNEL - C2**

(ALONG EASTERLY BOUNDARY)

S=1.05% MIN.

CARBON COUNTY  
CLASS IV<sub>b</sub> LANDFILL  
PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
ENGINEERS  
ST. GEORGE, UTAH

**Run-On Channel Designs**

	Section	SideSlope	b (ft)	S	Lining	Q <sub>25</sub> (cfs)	V (fps)	d (ft)	Stability
North Channel	N3->N2	2to1	3	4.50%	Riprap 6"	7	4.8	0.4	1.8
	N2->N1	2to1	3	3.10%	Riprap 6"	15	5.3	0.7	1.6
	Below N1	2to1	3	3.00%	Riprap 6"	27	6.2	0.9	1.2
East Channel	Above E2	2to1	3	1.50%	Unlined	3	2.8	0.3	1.3
	E2->E3	2to1	3	1.05%	Riprap 6"	91	5.8	2.1	1.4
	Below E3	2to1	3	1.05%	Riprap 6"	100	6.3	2.4	1.3

**Contributing Basin Characteristics**

	Basin	A (ac)	CN	tc (min)	i (in/hr)	Lag (hr)	p <sub>25</sub> (in)	Q <sub>25</sub> (cfs)	Q <sub>tot</sub> (cfs)	C <sub>effective</sub>
North Basins	N1	15.2	86.0	16	2.61	0.16	1.9	13	27	0.33
	N2	7.5	86.0	8	2.61	0.08	1.9	8	15	0.41
	N3	6.7	86.0	7	2.61	0.07	1.9	7	7	0.40
East Basins	E1	8.6	86.0	10	2.15	0.10	1.9	9	100	0.49
	E2	51.5	87.9	23	2.15	0.24	1.9	43	91	0.39
	E3	42.2	90.4	11	2.15	0.12	1.9	55	55	0.61

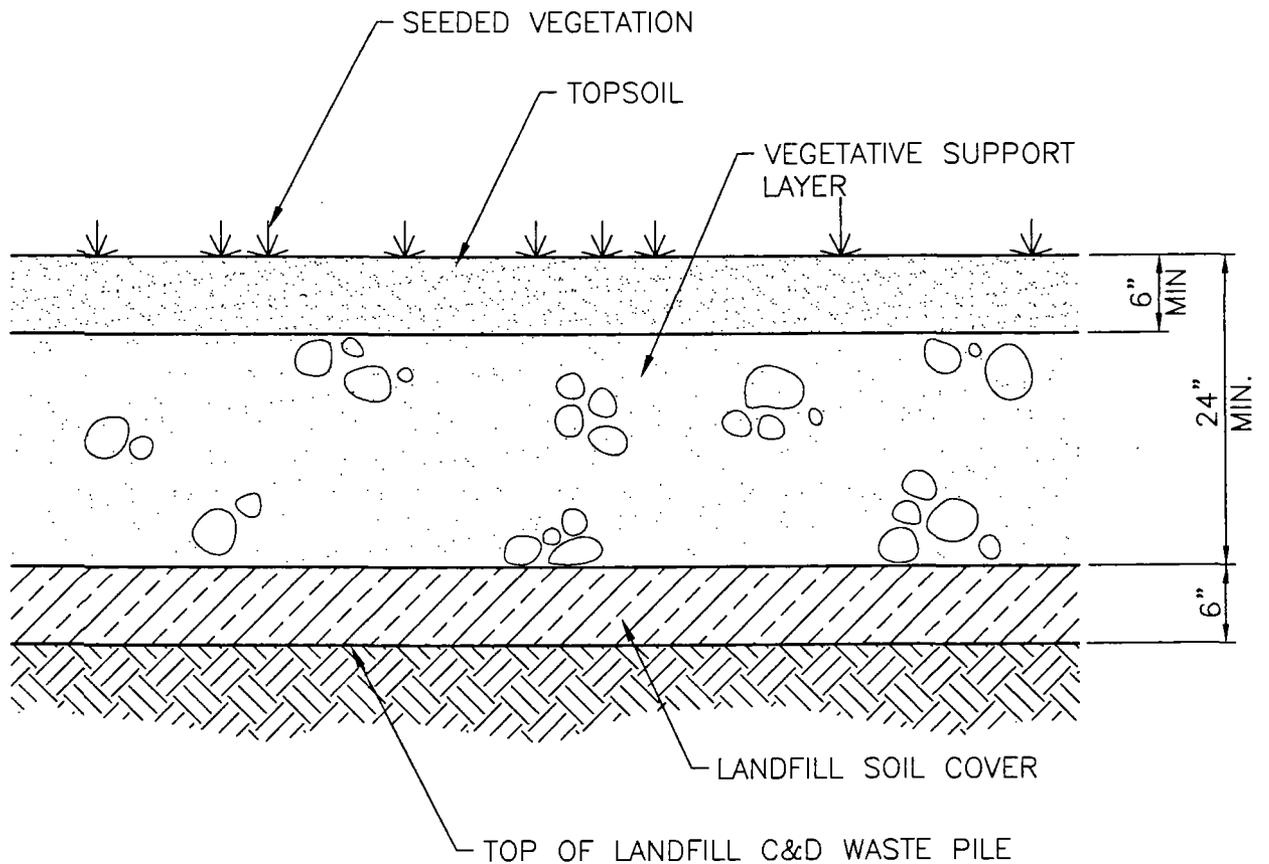
CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

Year	Projected Annual C&D Waste Landfilled by Weight	Compaction	Projected Annual C&D Waste Landfilled by Volume	Projected Annual Soil Use	Annual Airspace Consumed	Cumulative Airspace Consumed	Remaining Landfill Capacity
	TONS	LBS/CY	CU YDS	CU YDS	CU YDS	CU YDS	CU YDS
2011	22,786	2,000	22,786	1,139	23,925	23,925	2,400,000
2012	23,014	2,000	23,014	1,151	24,165	48,090	2,351,910
2013	23,244	2,000	23,244	1,162	24,406	72,496	2,327,504
2014	23,476	2,000	23,476	1,174	24,650	97,146	2,302,854
2015	23,711	2,000	23,711	1,186	24,897	122,043	2,277,957
2016	23,948	2,000	23,948	1,197	25,146	147,189	2,252,811
2017	24,188	2,000	24,188	1,209	25,397	172,586	2,227,414
2018	24,430	2,000	24,430	1,221	25,651	198,237	2,201,763
2019	24,674	2,000	24,674	1,234	25,908	224,145	2,175,855
2020	24,921	2,000	24,921	1,246	26,167	250,311	2,149,689
2021	25,170	2,000	25,170	1,258	26,428	276,740	2,123,260
2022	25,422	2,000	25,422	1,271	26,693	303,432	2,096,568
2023	25,676	2,000	25,676	1,284	26,960	330,392	2,069,608
2024	25,933	2,000	25,933	1,297	27,229	357,621	2,042,379
2025	26,192	2,000	26,192	1,310	27,502	385,123	2,014,877
2026	26,454	2,000	26,454	1,323	27,777	412,899	1,987,101
2027	26,718	2,000	26,718	1,336	28,054	440,954	1,959,046
2028	26,986	2,000	26,986	1,349	28,335	469,288	1,930,712
2029	27,255	2,000	27,255	1,363	28,618	497,907	1,902,093
2030	27,528	2,000	27,528	1,376	28,904	526,811	1,873,189
2031	27,803	2,000	27,803	1,390	29,193	556,004	1,843,996
2032	28,081	2,000	28,081	1,404	29,485	585,490	1,814,510
2033	28,362	2,000	28,362	1,418	29,780	615,270	1,784,730
2034	28,646	2,000	28,646	1,432	30,078	645,348	1,754,652
2035	28,932	2,000	28,932	1,447	30,379	675,727	1,724,273
2036	29,221	2,000	29,221	1,461	30,683	706,409	1,693,591
2037	29,514	2,000	29,514	1,476	30,989	737,399	1,662,601
2038	29,809	2,000	29,809	1,490	31,299	768,698	1,631,302
2039	30,107	2,000	30,107	1,505	31,612	800,310	1,599,690
2040	30,408	2,000	30,408	1,520	31,928	832,239	1,567,761
2041	30,712	2,000	30,712	1,536	32,248	864,486	1,535,514
2042	31,019	2,000	31,019	1,551	32,570	897,057	1,502,943
2043	31,329	2,000	31,329	1,566	32,896	929,952	1,470,048
2044	31,643	2,000	31,643	1,582	33,225	963,177	1,436,823
2045	31,959	2,000	31,959	1,598	33,557	996,734	1,403,266
2046	32,279	2,000	32,279	1,614	33,893	1,030,627	1,369,373
2047	32,601	2,000	32,601	1,630	34,232	1,064,859	1,335,141
2048	32,928	2,000	32,928	1,646	34,574	1,099,432	1,300,568
2049	33,257	2,000	33,257	1,663	34,920	1,134,352	1,265,648
2050	33,589	2,000	33,589	1,679	35,269	1,169,621	1,230,379
2051	33,925	2,000	33,925	1,696	35,622	1,205,242	1,194,758
2052	34,265	2,000	34,265	1,713	35,978	1,241,220	1,158,780
2053	34,607	2,000	34,607	1,730	36,338	1,277,558	1,122,442
2054	34,953	2,000	34,953	1,748	36,701	1,314,258	1,085,742
2055	35,303	2,000	35,303	1,765	37,068	1,351,326	1,048,674
2056	35,656	2,000	35,656	1,783	37,439	1,388,765	1,011,235
2057	36,012	2,000	36,012	1,801	37,813	1,426,578	973,422
2058	36,372	2,000	36,372	1,819	38,191	1,464,769	935,231
2059	36,736	2,000	36,736	1,837	38,573	1,503,342	896,658
2060	37,104	2,000	37,104	1,855	38,959	1,542,301	857,699
2061	37,475	2,000	37,475	1,874	39,348	1,581,649	818,351
2062	37,849	2,000	37,849	1,892	39,742	1,621,391	778,609
2063	38,228	2,000	38,228	1,911	40,139	1,661,530	738,470
2064	38,610	2,000	38,610	1,931	40,541	1,702,071	697,929
2065	38,996	2,000	38,996	1,950	40,946	1,743,017	656,983
2066	39,386	2,000	39,386	1,969	41,355	1,784,372	615,628
2067	39,780	2,000	39,780	1,989	41,769	1,826,141	573,859
2068	40,178	2,000	40,178	2,009	42,187	1,868,328	531,672
2069	40,580	2,000	40,580	2,029	42,609	1,910,936	489,064
2070	40,985	2,000	40,985	2,049	43,035	1,953,971	446,029
2071	41,395	2,000	41,395	2,070	43,465	1,997,436	402,564
2072	41,809	2,000	41,809	2,090	43,900	2,041,336	358,664
2073	42,227	2,000	42,227	2,111	44,339	2,085,674	314,326
2074	42,650	2,000	42,650	2,132	44,782	2,130,456	269,544
2075	43,076	2,000	43,076	2,154	45,230	2,175,686	224,314
2076	43,507	2,000	43,507	2,175	45,682	2,221,368	178,632
2077	43,942	2,000	43,942	2,197	46,139	2,267,507	132,493
2078	44,381	2,000	44,381	2,219	46,600	2,314,108	85,892
2079	44,825	2,000	44,825	2,241	47,066	2,361,174	38,826
2080	45,273	2,000	45,273	2,264	47,537	2,408,711	0

CARBON COUNTY  
CLASS IV<sub>b</sub> LANDFILL  
PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
ENGINEERS  
ST. GEORGE, UTAH



CARBON COUNTY  
 CLASS IV<sub>b</sub> LANDFILL  
 PERMIT RENEWAL APPLICATION

CREAMER & NOBLE  
 ENGINEERS  
 ST. GEORGE, UTAH

FINAL COVER DESIGN

EXHIBIT NO.:

B9

CARBON COUNTY LANDFILL - POST-CLOSURE INSPECTION FORM

Landfill Quarterly Post-Closure Inspection

Quarter:

Inspector:

Date:

Time:

Inspection Checklist

Perimeter Fence Condition:  1-Poor  2-Fair  3-Good  4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Final Cover Condition:  1-Poor  2-Fair  3-Good  4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Run-On / Run-Off Control Condition:  1-Poor  2-Fair  3-Good  4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Service Road Condition:  1-Poor  2-Fair  3-Good  4-Excellent

Deficiencies and Locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signatories:

\_\_\_\_\_  
Inspector

\_\_\_\_\_  
Date

\_\_\_\_\_  
Landfill Supervisor

\_\_\_\_\_  
Date

Exhibit B11  
LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Closure Cost Estimate Worksheet**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
1.0 Engineering and Preliminary Site Work						
1.1 Topographic Survey	HR	\$ 125.00	4	\$ 500.00		
1.2 Boundary Survey for Closure	HR	\$ 125.00	4	\$ 500.00		
1.3 Site Evaluation	HR	\$ 50.00	6	\$ 300.00		
1.4 Development of Plans	HR	\$ 50.00	50	\$ 2,500.00		
1.5 Contract Administration Bidding and Award	LS	\$ 3,000.00	1	\$ 3,000.00		
1.6 Administrative Costs for the Certification of Final Cover and Closure Notice	LS	\$ 500.00	1	\$ 500.00		
1.7 Project Management: Construction Observation and Testing	LS	\$ 3,000.00	1	\$ 2,600.00		
1.8 Monitor Well Consultant Cost						
1.9 Other Environmental Permit Costs						
1.10 Disposal of Final Wastes						
1.10.1 Disposal Cost						
1.11 Remove Temporary Buildings						
1.12 Remove Equipment						
1.13 Repair/Replace Perimeter Fencing						
1.14 Clean Leachate Lines						
<b>Subtotal</b>				\$ 9,900.00		
<b>10% Contingency</b>				\$ 990.00		
<b>Engineering Total</b>				\$ 10,890.00		

LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Closure Cost Estimate Worksheet (cont'd)**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
2.0	Construction					
2.1	Final Cover System					
2.1.1	Completion of Sidewall Liner					
2.1.1a	Soil Placement	CU YD	\$ 2.52	3,400	\$ 8,568.00	
2.1.1b	Soil Processing					
2.1.1c	Soil Amendment					
2.1.1d	Soil Purchase					
2.1.1e	Soil Transportation					
2.1.2	Drainage Layer on Sidewall					
2.1.2a	Geotextile Filter Fabric					
2.1.2b	Geonet/Geotextile Composite					
2.1.2c	Geomembrane Sidewall Liner					
2.2	Completion of Top Cover					
2.2.1	Infiltration Layer (Compacted Clay)					
2.2.1a	Soil Placement (Compacted)					
2.2.1b	Soil Processing					
2.2.1c	Soil Amendment					
2.2.1d	Soil Purchase					
2.2.1e	Transportation					
2.2.2	Geosynthetic Clay Layer					
2.2.2a	Geosynthetic Clay Installation					
2.2.3	Flexible Membrane Cover					
2.2.3a	Flexible Membrane Installation					
2.2.4	Drainage Layer					
2.2.4a	Geonet/Geotextile					
2.2.4b	Sand Layer					
2.2.4c	Soil Cover					
2.2.4d	Geonet/Geotextile Composite					

LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Closure Cost Estimate Worksheet (cont'd)**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
2.3 Erosion Layer Placement						
2.3.1 Soil Purchase						
2.3.2 Soil Transportation						
2.3.3 Soil Processing						
2.3.4 Soil Amendment						
2.3.5 Soil Placement						
2.4 Revegetation						
2.4.1 Seeding	ACRE	\$ 505.00	1.10	\$ 555.50		
2.4.2 Fertilize	ACRE	\$ 505.00	1.10	\$ 555.50		
2.4.3 Mulch						
2.5 Site Grading and Drainage						
2.6 Site Fencing and Security	LIN FT	\$ 8.08	300	\$ 2,424.00		
2.7 Leachate Collection System						
<b>Subtotal</b>				\$ 12,103.00		
<b>10% Contingency</b>				\$ 1,210.30		
<b>Construction Total</b>				\$ 13,313.30		

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
3.0 Gas Collection System						
3.1 System Design						
3.2 Completion of Gas Collection System						
3.3 Equipment and Installation						
3.3.1 Place Sand						
3.3.2 Install Geonet and Geotextile						
3.3.3 Install Passive Vents						
3.3.4 Install. Rework or Replace Gas Control Equipment						
<b>Subtotal</b>						
<b>10% Contingency</b>						
<b>Gas Collection Total</b>						

LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Closure Cost Estimate Worksheet (cont'd)**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
4.0	Monitor Well Installation Cost					
4.1	Ground Water Monitoring, Well Installation, Reworking or Replacement					
4.2	Install. Rework or Replace Methane Probe/s					
4.3	Monitor Well or Methane Probe Plugging					
	<b>Subtotal</b>					
	<b>10% Contingency</b>					
	<b>Monitor Well Installation Total</b>					

Calculation of Total Closure Costs

Engineering Total:	\$	10,890.00
Construction Total:	\$	13,313.30
Gas Collection Total N.A.		
Ground Water Total N.A.		
5% Contract Performance Bond	\$	<u>1,210.17</u>
<b>SUBTOTAL</b>	\$	25,413.47
Legal Fees (15% of Subtotal):	\$	<u>3,812.02</u>
<b>TOTAL CLOSURE COSTS:</b>	\$	<b>29,225.49</b>

LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Post-Closure Care Cost Estimate Worksheet**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
1.0	Engineering Costs					
1.1	Post-Closure Plan and Post-Closure Permits	LS	\$ 1,000.00	1	\$ 1,000.00	
1.2	Site Inspection and Recordkeeping (annual)	HR	\$ 50.00	10	\$ 500.00	
1.3	Correctional Plans and Specifications (annual)	HR	\$ 50.00	10	\$ 500.00	
1.4	Administrative Costs	LS	\$ 500.00	1	\$ 500.00	
1.5	Site Monitoring					
1.5.1	Ground Water Monitoring					
1.5.1a	Ground Water Sample Collection					
1.5.1b	Ground Water Sample Analysis					
1.5.1c	Ground Water Sample Analysis Review and Reporting					
1.5.2	Landfill Gas Monitoring					
1.5.2a	Gas Monitoring Data Collection					
1.5.2b	Gas Monitoring Data Review and Reporting					
2.0	Maintenance Costs					
2.1	Cover Maintenance Costs					
2.1.1	Soil Replacement	CU YD	\$2.52	260	\$ 655.20	
2.1.2	Vegetation Reseeding	ACRE	\$505.00	0.4	\$ 202.00	

LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Post-Closure Care Cost Estimate Worksheet**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
2.2 Equipment Maintenance						
2.2.1 Ground Water Well Maintenance and Replacement						
2.2.2 Methane Probe Maintenance and Replacement						
2.2.3 Gas Collection System Operation						
2.2.4 Gas Collection System Maintenance and Repair						
2.2.5 Leachate Collection System						
2.2.5a Leachate Collection System Repair and Maintenance						
2.2.5b Clean Leachate Lines						
3.0 Final Plugging of Monitoring Wells						
3.1 Final Plugging of Methane Probes						
3.2 Final Plugging of Ground Water Monitoring Wells						
3.3 Gas Control Equipment Removal						
4.0 Leachate Disposal						

LANDFILL CLOSURE AND POST-CLOSURE CARE COSTS

**Landfill Post-Closure Care Cost Estimate Worksheet**

Item	Unit Measure	Cost/Unit	No. Units	Total Cost	Source	Note
5.0 Site Maintenance						
5.1 Repair of Surface Water Diversion Structures	HR	\$ 125.00	4	\$ 500.00		
5.2 Repair of Fences and Gates	LN FT	\$ 5.00	100	\$ 500.00		
5.3 General Maintenance	HR	\$ 125.00	3	\$ 375.00		
6.0 Demonstration of Stability						
<b>Subtotal</b>				\$ 4,732.20		
<b>10% Contingency</b>				\$ 473.22		
<b>Annual Post-Closure Care Total</b>				\$ 5,205.42		

**Total Closure and Post-Closure Costs**

Total Closure Costs:	\$ 29,225.49
Total Post-Closure Care Costs:	\$ <u>5,205.42</u>
<b>Total Cost:</b>	<b>\$ 34,430.91</b>



Primary Account 048618714

0054510 01 AV 0 312 \*\*AUTO T6 0 1401 84501-305099

LANDFILL RECLAMATION  
CARBON COUNTY TREASURE  
120 E MAIN ST  
PRICE UT 84501-3050



For 24-hour account information, please contact:

1-800-789-BANK (2265)



Price Office  
45 South Carbon Ave  
Price, UT 84501-2826

WE HAVEN'T FORGOTTEN WHO KEEPS US IN BUSINESS. ©

Beginning February 9, 2011, the following fee changes will be effective:

- Deposited Item Returned: \$10 each
- Statement Copy Fee: \$5 copy
- Wire Transfer Fees (each): Incoming Domestic \$12; Outgoing Domestic \$18; Incoming Foreign \$16

**SUMMARY OF ACCOUNT BALANCE**

Account Type	Account Number	Checking/Savings Ending Balance	Outstanding Balances Owed
Business Gold Money Market	048618714	\$27,394.29	

**BUSINESS GOLD MONEY MARKET 048618714**

Previous Balance	Deposits/Credits	Charges/Debits	Checks Processed	Ending Balance
27,384.99	9.30	0.00	0.00	27,394.29

**1 DEPOSIT/CREDIT**

Date	Amount	Description
12/31	9.30	INTEREST PAYMENT 0002738499

**0 CHARGES/DEBITS**

There were no transactions this period.

**0 CHECKS PROCESSED**

There were no transactions this period.

**AGGREGATE OVERDRAFT AND RETURNED ITEM FEES**

	Total for This Period	Total Year-to-Date
Total Overdraft Fees	\$0.00	\$0.00
Total Returned Item Fees	\$0.00	\$0.00

**DAILY BALANCES**

Date	Balance
12/31	27,394.29

Exhibit B12

