Lighthouse
RESOURCES INC

Lease By Application

Presented To:

United States Department of the Interior
Bureau of Land Management
5001 Southgate Drive
Billings, MT 59101-4669

Prepared By:
Decker Coal Company, LLC
P. O. Box 12
Decker, MT 59025

December 3, 2015

DECKER COAL COMPANY, LLC
DECKER SOUTH EXTENSION LEASE APPLICATION (LBA)

TABLE OF CONTENTS

LIST OF TABLES:

LIST OF EXHIBITS:

LIST OF APPENDIX:

1.0 INTRODUCTION

The land being applied for, the Decker South Extension area is currently not being mined and is located adjacent to the West Decker mining operation. Decker Coal Company, LLC (DCC), the applicant, is a Montana limited liability company, formerly known as Decker Coal Company. DCC is a wholly-owned subsidiary of Decker Holding Co., LLC; which is a wholly-owned subsidiary of LHR Coal, LLC; which is a wholly-owned subsidiary of Lighthouse Resources Inc. Decker Coal Company, LLC is anticipating opening a pit within the Decker South Extension area (Table 1) that would utilize the West Decker coal facilities to economically mine recoverable coal from the application area and several adjacent privately owned sections. The following Table 2 is a breakdown of in place tons as well as recoverable tons expected to be found in the Decker South Extension area.

This application includes information from the West Decker surface mining permit and other sources to fulfill the requirements of 43CFR3425.

The application area is described as follows (see Exhibit 1):

1.1 LEASE APPLICATION

TABLE 1 - BLM LEASE BY APPLICATION (LBA Application)

Township 9 South, Range 39 East	Description	Acres
Section 13	Lot 4, W½SE¼, SW¼	280.23
Section 14	S½SE¼	80.00
Section 23	NE¼, NE¼SE¼	200.00
Section 24	Lot 1, Lot 2, Lot 3, Lot 4, W1/2E1/2, W1/2	642.76
Section 25	Lots 1-2, W½NE¼, NE¼NW¼	201.74
Township 9 South, Range 40 East	**Description**	**Acres**
Section 19	Lots 1-3, E½, E½W½	592.84
Section 20	W½SW¼NE¼, W½	340.00
Section 30	Lot 2	37.75
	Total Acreage:	**2,375.32**

- Acres described above and illustrated on the following exhibits were generated with ESRI, ArcGIS - ArcMap software using the BLM Geographic Coordinate Data Base (GCDB) and may vary slightly from the BLM coal plats.

TABLE 2 – IN PLACE TONS *VS.* RECOVERABLE TONS

MINABLE TONNAGE BREAKOUT

Section	Acres	IN PLACE TONS @ 100%	RECOVERABLE TONS @ Ex%
13	Exe	[redacted]	[redacted]
14	Ex		
19	Exe		
20	Ex		
23	Exe		
24	Exe		
25	Exe		
30	Ex		
	Exemption 4	**203,421,573 Tons**	Exemption 4

CONFIDENTIAL

1.2 PURPOSE AND NEED

The purpose of the application is to provide access for the extraction of Federal coal resources. The coal resources are needed by DCC to maintain mine operations and provide high-quality, low-cost fuel in support of electrical generation to the domestic and foreign markets.

The proposed Decker South Extension Tract will be mined as a logical extension and an integral part of the permitted mining operation of the West Decker Mine. The proposed addition of the Decker South Extension would increase the recoverable coal reserve base and would allow the West Decker Operation to increase production above current levels and extend the life of the mine by approximately 20 years. The permitting process that follows the lease-by-application approval takes approximately 2 to 3 years to complete. Decker Coal Company, LLC is applying for the Federal coal reserves in the proposed tract now so that it can secure coal resources to market, enter into new contracts, and complete the permitting process in time to mine the new lease in a logical progression. The projected annual coal and overburden production is shown in Table 3.

The need for the Proposed Action is established by BLM responsibility under the Mineral Leasing Act of 1920, as amended (MLA) by the Federal Coal Leasing Amendments Act of 1976 and the Federal Land Policy Management Act of 1976 (FLPMA) to respond to a request for a Federal Coal Lease. Part of this responsibility includes encouraging development of domestic coal reserves to meet future energy needs and reduced dependence on foreign sources of energy.

TABLE 3 – PROJECTED ANNUAL COAL AND OVERBURDEN PRODUCTION

Year	Tons Mined	Overburden Removed (bcy)	Effective Strip Ratio
2022	Exemption 4	[redacted]	[redacted]
2023	Exemption 4	[redacted]	[redacted]
2024	Exemption 4	[redacted]	[redacted]
2025	Exemption 4	[redacted]	[redacted]
2026	Exemption 4	[redacted]	[redacted]
2027-Pit Life	Exemption 4	Exemption 4	[redacted]

2.0 QUALIFICATIONS

Decker Coal Company, LLC hereby certifies as follows:

That neither Decker Coal Company, LLC nor any subsidiary or affiliate hold, won, or control federal coal leases, lease or lease modification applications or bids on more than 75,000 acres in any one state and in no case more than 150,000 acres in the United States.

Dated this 3 day of December, 2015

By: _____

Bruce Parker
General Manager
Decker Coal Company, LLC

Sole Party Interest
(43CFR3472.2-1)

Decker Coal Company, LLC hereby certifies it is the sole party in interest for this application and this lease, if issued.

Dated this 3 day of December, 2015

By: _____

Bruce Parker
General Manager
Decker Coal Company, LLC

COMPLIANCE

Section 2 (a) (2) (A)

Decker Coal Company, LLC hereby certifies as follows:

That neither Decker Coal Company, LLC nor any entity controlled by or under common control with Decker Coal Company, LLC holds or has held for ten years any federal coal lease from which coal is not being produced in commercial quantities or which is not otherwise in compliance with Section 2 (a) (2) (A) of the Mineral Leasing Act.

Dated this 3 day of December, 2015

By: _____

Bruce Parker
General Manager
Decker Coal Company, LLC

QUALIFICATION STATEMENT (3472.2)

Listed below are the officers and directors of Decker Coal Company, LLC. Officers and directors of parent entities up to and including the ultimate parent entity are provided each year in the West Decker Coal Company Annual Report to the Montana Department of Environmental Quality and are located in Appendix A. Decker Coal Company, LLC is authorized to hold leases and licenses to mine.

Decker Coal Company, LLC
P. O. Box 12
Decker, MT 59025

Member	Manager
Decker Holding Co., LLC 170 S. Main Street, Suite 700 Salt Lake City, UT 84101	Everett King

Registered Agent for
Decker Coal Company, LLC — CT Corporation System
3011 American Way
Missoula, MT 59808

Incorporated: — Decker Coal Company, LLC — September 22, 2014

Annual Meeting: — Date designated by the Manager.

Decker Coal Company, LLC **Federal Identification No. 47-0533731**				
Title	Person	Begin Date	End Date	Entity No.
PRS	Everett King	09/12/2014		252553
TRS	Darin Adlard	09/12/2014		254417
DIR	Everett King	09/12/2014		252553
SEC	Michael Klein	8/31/2015		

3.0 APPLICATION DATA

3.1 APPLICATION SITE MAPS

Exhibit 1 depicts the Decker South Extension lease application area, topography, existing civil and physical features, and location of the proposed mining operation. Environmental surveys have been conducted on a large portion of the area that encompasses the Decker South Extension lease application area. A surface ownership map is shown as Exhibit 2, a coal ownership map is shown as Exhibit 3, a map depicting the existing drill holes are shown on Exhibit 4, and the proposed mining progression is shown on Exhibit 5.

3.2 AREA COAL DEVELOPMENT HISTORY

From the early 1900's though the 1930's, small drift-type mines (also known as "wagon mines") were developed by local ranchers for home heating purposes in the Squirrel Creek area. These small mines were developed in the outcrops of the Smith Seams, were limited in scale (20' to 40' into the hillsides), and lacked evidence of tunnels or timber supports.

Approximately 15 miles southwest of Decker, Montana and the Decker South Extension area, the Big Horn Mine was opened in 1944 and operated until 2000. The Big Horn Mine produced up to 4.5 million tons per year at the height of it productivity capacity and served the domestic coal market. Today, the mine is fully reclaimed with the exception of a rail load out spur, a solid waste disposal site and a shop-office-warehouse facility. No coal production occurs from the mine.

North of the Decker South Extension area, the Decker Coal Mine was developed by Peter Kiewit Sons', Inc. (PKS) and Pacific Power and Light (PP&L) in 1970. Each company contributed their respective lease holdings to the joint venture, and PKS was selected to manage and operate the mine. In August and September of 1970, PKS opened a test pit and after a successful test burn a contract was signed with Commonwealth Edison Co. of Chicago. Construction of the mine facilities, including the Burlington Northern railroad spur, continued throughout the remainder of 1971 and early 1972. The first 10,000 ton trainload of coal left the mine in late 1972 and Decker was able to sign several contracts by 1974. DCC continues production out of the East and West Pits today, supplying coal to domestic customers.

Currently, Spring Creek Coal Company operates the Spring Creek Coal Mine located about 11 miles north of Decker, Montana. An initial permit to operate a coal processing and handling facility was issued on May 11, 1979 with subsequential permit revisions since. Today the mine is owned and operated by Cloud Peak Energy and is permitted to produce up to 24 million tons of coal per year. Including the centralized coal processing and handling facility, Spring Creek operates an in-pit truck dump and crusher, an overland conveyor system, and additional equipment such as draglines, trucks, dozers, etc. in order to meet both domestic and international orders.

In 2012, Cloud Peak Energy purchased the undeveloped Young's Creek Coal Mine along the Wyoming- Montana border approximately three miles south west of the Decker South Extension. The Young's Creek Coal Mine is currently permitted, although facility construction and mining activities have not been initiated.

3.3 EXPLORATION PROGRAM

Methods of Exploration

The following narrative is a typical, but certainly not an all-inclusive, description of methods utilized to conduct coal exploration, reclamation and abandonment procedures under this application. A rotary drill rig similar to a Midway 1500, one water truck, a crew truck and either cargo trailer or water trailer, a 4-wheel drive crew/geologist pickup truck and a Geophysicist truck will be required to drill each site. A backhoe or tractor may be used for site preparation and reclamation.

Access routes and/or road construction will vary depending on the proposed drill site. Due to rough terrain in some locations, a small number of sites may require limited road construction; however, for the most part existing ranch type roads will be utilized with some travel over relatively flat terrain. Access to drill sites will be limited where possible to times of no danger to soil compaction and efforts will be made to minimize vegetative impacts. Minor disturbance impacts on the sagebrush grassland habitat will be mitigated by tilling and seeding with the Montana Department of Environmental Quality approved vegetation species mix.

Number, Size and Depth of Holes

An extensive amount of drilling has occurred in the past within the Decker South Extension area. A map of the existing drill holes within the Decker South Extension is shown in Exhibit 4. There are a total of 153 modeled drill holes out of which, 36 are quality holes that have been previously drilled within the Decker South Extension area. Decker Coal Company, LLC anticipates additional drill holes will be proposed inside the Decker South Extension application area to be drilled. Anticipated size of the drill holes is 6 ¼" (rotary drilling) and 5 1/8" (core drilling). The estimated depth of the drill holes ranges from approximately 150 feet to 650 feet.

Timetable for Exploration

Drilling activity is anticipated to begin in 2017 contingent on the issuance of the Exploration License.

3.4 METHOD OF MINING

The Decker South Extension will be a dragline/truck & shovel/dozer strip surface coal mine. Dozers, front-end-loaders, trucks, and/or scrapers will be used to remove topsoil in accordance with all MDEQ regulations in advance of mining operations. It is anticipated that both overburden and coal will require blasting or ripping prior to removal. Coal extraction will be accomplished with front-end-loaders, electric shovels or hydraulic excavators loading trucks. The proposed mining sequence for the Decker South Extension is shown in Exhibit 5. Please note that the mine plan information enclosed in this application is CONFIDENTIAL AND MAY NOT BE DISCLOSED UNDER THE FREEDOM OF INFOMRATION ACT OR THE DEPARTMENT OF INTERIOR REGULATIONS. Various sediment ponds, diversion channels, or alternate sediment control structures, will be used to provide surface water control within disturbed areas. Final grading and topsoil distribution will be accomplished primarily with scrapers, dozers, front-end-loaders, and trucks.

3.5 RELATIONSHIP TO EXISTING MINING OPERATIONS

The relationship between anticipated mining operations in the Decker South Extension lease application area and existing mining operations on adjacent lands can be seen on Exhibit 5. Mining operations at the West Decker Coal Company property to the north provide an opportunity for the logical and feasible expansion of mining operations into the lease application area.

3.6 DESCRIPTION OF LAND USE

The area within the Decker South Extension has historically been used for rangeland with a secondary use as wildlife habitat. The predominate status of surface ownership within the Decker South Extension is privately controlled by Cloud Peak Energy, which acquired the CX Ranch property from Consolidation Coal Company during July of 2012. Portions of Decker South Extension are also within the current West Decker Mine Permit Boundary, and have therefore been closed to public access since the early 1970's. This closure has prohibited any big game or upland bird hunting, artifact hunting or other public use of the land during this time period. The area around the Decker South Extension has also seen considerable development of Coal Bed Methane in recent years.

Areas Unsuitable for Mining

No known lands within the Decker South Extension lease application area have been designated unsuitable for mining. The criterion for this determination includes areas containing natural ecologic, scientific or aesthetic resources, or historic lands which could be damaged or destroyed by mining. In addition, natural hazards, those that pose a threat to the health, safety, or welfare of people, property or the environment, do not exist in the application area.

3.7 TOPOGRAPHY, GEOLOGY AND OVERBURDEN

Topography

The Decker South Extension area highland rises over 850 feet above the Squirrel Creek valley floor. The highlands within the extension area are commonly dissected by deep, v-shaped valleys and separated from one another by steep, eroding escarpments 100 feet or more high. The highland slopes are characteristically steep and subject to rapid erosion.

Geology

The Decker South Extension area lies in the northwest margin of the Powder River Basin. This large structural depression formed near the end of the Cretaceous period during the Laramide Orogeny, and was subsequently filled by sedimentary deposits of Tertiary age. These Tertiary formations constitute a total thickness of some 5,400 feet. The uppermost lithologic unit is the

Wasatch Formation. Beneath this is the Fort Union Formation which has been divided into the Tongue River, Lebo Shale and Tullock Members. Only the Tongue River Member contains the thick coal seams of present economic interest. Overlying these bedrock units are unconsolidated deposits of alluvium arid colluvium of Quaternary age.

Stratigraphy

The Fort Union Formation of Paleocene age is generally 3,400 feet thick throughout the Decker South Extension area. The upper 1,600 feet of the Fort Union Formation has been designated as the Tongue River Member. Generally, this member consists of cyclic sequences of interbedded buff to light gray, medium to very fine grained sandstone, greenish gray silty to clayey shale, brown carbonaceous shale and coal. These strata vary in thickness and tend to be poorly cemented. Portions of the Tongue River Formation weather readily to form broad, sheet-washed slopes, while the more resistant sandstone beds form low plateaus and ridges. The clastic sediments were deposited on paleo floodplains of large meandering rivers as overbank splay, channel fill, levee or lacustrine swamp deposits. As a result, these strata are inclined to be lenticular in shape and limited in areal extent. Thus, sediments often change rapidly over short vertical and horizontal distances.

These rapid successions of sedimentary beds make correlation of overburden and interburden sediments extremely difficult. Coal seams within the Tongue River Member are very persistent laterally and range in thickness from a few inches to about 80 feet. Coal beds which outcrop or sub crop beneath the colluvium are generally poorly exposed and are inferred from drilling or areas of burned coal or clinker.

Overlying the Fort Union Formation is the Wasatch Formation of Eocene age. This formation consists of interbedded light gray shales, siltstones, sandstones and coal seams which crop out within the Badger Hills, east of, the Decker South Extension area. Lithologic units are similar in composition and depositional environment to those of the Fort Union Formation, except for the presence of numerous thin fossil beds (leaf prints, gastropods and pelecypods). The Wasatch Formation has a unit thickness of between 1,000 and 2,000 feet, however, only the bottom 200 to 400 feet are present in the Decker South Extension area. The Wasatch occupies those areas above the Roland coal seam.

Baked and fused "clinker" or simply "burn" is a resistant rock-type created by the thermal alteration of overlying strata as coal bed is consumed by fire. Depending on the heat intensity and the composition of the overlying sediments, the following general upward sequence of unaltered bedrock is formed: coal ash, huchite, weld breccia, and baked bedrock. Due to its resistant nature, clinker tends to occupy much of the topographic highs as a cap rock and is easily recognized by the characteristic reddish color.

Structure

Generally, the dip of the bedrock of the Decker South Extension area is to the east-southeast of one to three degrees. Gentle fixtures, faulting and the collapse of overburden from burned coal seams also influences local dips. The two primary factors affecting the structure of this region are the Big Horn Uplift and the axis of the Powder River Basin.

A series of northeast-southwest trending normal and scissor faults are prominent features throughout the Decker South Extension application area. Because surface exposures tend to be covered, faulting is inferred from drillhole data. Displacement along the faults can be as much as 250 feet, but is usually considerably less. These faults range from three to five miles in length, with the southeast side usually being the downthrown block.

Designation and Correlation

At least nine different coal seams have been identified through the drilling program. Three of these coal seams, D1 Upper, D1 Lower and D2, are within minable depths. Two other coal beds that are higher in the stratigraphic section, Roland and Smith, crop out in the hills along the edge of the property. Four additional coal seams, which are lower in the stratigraphic section, D3, D4, D5 and D6, were encountered during drilling but are at depths which preclude them from surface development. Collectively, these coal seams have an average total thickness of 120 to 130 feet. There are, perhaps, an equal number of thin, less persistent stringers throughout the area. Correlation and coal seam designation are as follows:

U.S.G.S Designation	Decker Coal Company, LLC Designation
Roland of Baker	Roland
Smith	Smith
Anderson/Dietz 1	D1 (Upper)
Dietz 2	D1 (Lower)
Dietz 3	D2
Canyon	D3
Cook/Wall	D4
Brewster-Arnold?	D5
King?	D6

The upper two beds in this area have surface expressions as either weathered coal or as zones of clinker. The Roland bed is present on the outskirts of the application area, forming the clinker-capped ridges in the surrounding hills. The Smith seam is found only along the very edge of the application area. Its thickness can be as much as 10 feet.

D1 Upper D1 Lower and D2 seams are found consistently throughout the application area. Due to their convergence, the D1 Upper, D1 Lower and D2 coal seams would be mined as a single 70 to 80 foot seam of coal. Slight variations of thickness are due to the thickening of intermittent

partings between these seams. Interburden varies from zero to two feet between the D1 Upper and D1 Lower seams and from 2 to 10 feet between the D1 Lower and the D2 seams.
The D3 seam lies between 75 and 140 feet below the D2 and averages 20 feet in thickness over the permit area. The D4 seam lies at a minimum depth of 500 feet and averages 20 feet in thickness. The D5 seam normally occurs one to 4 feet below the D4 seam and is approximately 6 feet in thickness. The D6 seam occurs four to 5 feet below the D5 and is also approximately 6 feet in thickness.

Coal Quality

The 70 to 80 foot combined D1 Upper, D1 Lower and D2 coal seams was cored during the 70's within the application area. This coal is classified as subbituminous and is generally a hard, black coal which exhibits banding and a conchoidal fracture. The coal is usually clean of any visible pyrite, although thin zones of pyrite scale are scattered throughout the seam.

3.8 CULTURAL FEATURES

A Class I cultural resources inventory was conducted for the Decker Coal Company Drilling Program, which included the Decker South Extension lease area in July of 2012. The report was completed and submitted to the Miles City BLM office on February 7, 2013. This study identified previously mapped sites that may require further investigation.

If, during the course of mining operations, previously undiscovered cultural resources are discovered, Decker Coal Company, LLC will insure that the site is not further disturbed and will notify the Montana DEQ, Office of Surface Mining, State Historic Preservation Office (SHPO) and Bureau of Land Management (where the site is located on Federal surface). If the resource is deemed eligible for the National Register and will be affected by further mining operations, Decker Coal Company, LLC will confer with the DEQ and the SHPO regarding the development and implementation of approved mitigation measures, and authorization to resume the affected operations, in compliance with the provisions of Section 106.

3.9 PALEONTOLOGICAL FEATURES

No important paleontological (fossil) resources have been identified in the Decker region, although significant fossil plant remains are known to exist elsewhere in the Tongue River Member of the Fort Union Formation (Brown, 1962).

Any unanticipated discoveries of archaeological, cultural or paleontological remains will be reported to the Administrator and to the Montana Department of Environmental Quality, within five days. No land disturbing activities will take place within 100 feet of such remains until they have been evaluated by the regulatory authority and salvaged, if warranted. Such actions as needed will be decided by MDEQ within 24 hours of official notification by the operator.

Decker Coal Company, LLC is committed to the preservation of significant historical, archaeological and paleontological resources as they reflect local, state and national heritage.

3.10 WETLANDS AND FLOODPLAINS

No known jurisdictional or non-jurisdictional wetlands are found in the Decker South Extension area.

3.11 FISH AND WILDLIFE RESOURCES

Decker Coal Company has collected extensive wildlife data. The baseline inventory on the area that includes the West Pits began in 1974 in relation to the C1987001C permit application for the present West Decker Mine. The following information is derived from the baseline data and the subsequent studies and MDEQ Annual Reports that have been completed for the West Pits area of Decker Coal, which include the Decker South Extension Area.

The West Decker wildlife data, current and historic, is verified and supplemented with studies related to CBNG development.

Big Game

Pronghorn, antelope and mule deer are the big game species which are common year round residents of the West Pits area. The white tailed deer is considered a year round uncommon resident. Mule deer, white tailed deer and pronghorn data was gathered from previous surveys which consisted of systematic aerial surveys and ground observations. An aerial survey was conducted over the West Pits study area for big game numbers in 2014.

Mule Deer

The total number of mule deer observed in 2014 during the West Side February-March aerial survey was 304 (Table 4). Annual counts from the previous three years of aerial surveys are shown in Table 5.

Habitat use for mule deer observed during 2014 aerial surveys over the West side survey areas are presented in Table 6. Nearly 15% of the Mule Deer observed during the survey were utilizing habitat created in reclamation. Mule deer winter habitat in the West Pits sub region is generally characterized by south-facing slopes dominated by juniper or ponderosa pine, and co-dominated by an understory of grasses, mixed shrubs and half shrub species. North-facing slopes that support a denser stand of conifers serve as a major source of cover. An understory of sagebrush species, skunkbush and rubber rabbitbrush provide winter browse for mule deer.

No areas in the Decker South Extension Area have been determined to be unsuitable for mining under Criterion 15. The primary habitat considerations in the Decker South Extension Area are winter range for antelope and deer.

TABLE 4 - AERIAL SURVEY RESULTS FOR 2014

Date	Mule Deer	Pronghorn	White Tailed Deer	Coyotes
3-12-2014	304	97	16	1

TABLE 5 - AERIAL SURVEY RESULTS FOR MULE DEER AND PRONGHORN - WEST PITS AREA

Year	Total Mule Deer	Total Pronghorn
2011	168	143
2012	Aerial Survey Not Conducted in 2012	
2013	69	229
2014	304	97

Note: Mule Deer and Pronghorn Total – based on one survey.

Antelope

The pronghorn antelope, as stated above, are a year round common resident of the South Extension area. The results of the 2014 West Pits pronghorn aerial surveys are presented in Table 4. A total of 97 pronghorn were observed during the 2014 West Pits survey. The West Pits survey area is on the fringe of a pronghorn use area and as such, pronghorn tend to move in and out of the area. Pronghorn habitat usage observed during the 2014 survey is shown in Table 6.

TABLE 6 - WEST SIDE MULE DEER AND PRONGHORN HABITAT USE OBSERVED DURING 2014

Habitat	Mule Deer	Pronghorn
Deciduous	3(1)	
Ponderosa Pine/Juniper		
Big Sagebrush	116(8)	9(1)
Silver Sagebrush		
Mixed Shrub	16(2)	61(4)
Halophytic Shrub		
Floodplain/Mudflat		
Grassland	119(4)	25(1)
Cultivated	7(2)	
Disturbance		
Reclamation	43(3)	2(1)
Total	304(20)	97(7)

Note: Number of animals and number of observations (in parentheses)

Migration routes to and from pronghorn winter ranges have not been fully substantiated. Amstrup (1976) noted considerable movement of neckbanded and radio collared pronghorns between winter ranges. Some interchange between the Spring Creek unit and the Young's Creek unit approximately 8 miles southwest was also documented. Amstrup's (1976) study in the Young's Creek-Ash Creek area indicated instrumented pronghorns shift their activity areas and make long, erratic movements during spring and fall. Specific movements of antelope during the spring through fall seasons of the year are highly variable. Seasonal weather patterns, vegetative composition and human disturbance apparently alter these movements on a year to year basis.

White-Tailed Deer

The White-Tailed Deer is considered an uncommon resident of the West Pits area. The southern end of the Tongue River Reservoir provides about one square mile of habitat (food and cover) for white-tails on a year round basis.

White tailed deer counts for 2014 are shown in Table 4. Population estimates for white-tailed deer are low since most occur along the Tongue River in the thick deciduous streambank vegetation habitat that is difficult to survey from the air.

Upland Game Birds

Four species of game birds have been observed in the West Pits area. These include the sage grouse, sharp-tailed grouse, ring-necked pheasant, and the gray partridge. Sage grouse leks and sharp-tail grouse dancing grousing are monitored by Decker Coal annually. All active sage-grouse strutting grounds monitored by DCC are located east of the Tongue River Reservoir.

Incidental observations of wild turkeys along the Tongue River and associated drainages remained stable in 2014. Observations in northern Wyoming indicated that numbers of turkeys are stable region-wide.

Raptors

The baseline studies completed for the West Pits area show that twenty-four species of raptors either nest, winter, or migrate through the general area of the Decker West Pits. Peter Kiewit Sons biologists and Fish and Wildlife biologists documented visual sittings of all twenty-four species between 1975 and 1978.

The baseline studies showed that the wintering population consists of approximately six to eight species. The goshawk, sharp shinned hawk, Coopers hawk and screech owl are all considered year-round rare residents of the area. The red-tailed hawk is a year-round common resident, and the golden eagle and prairie falcon are considered year round uncommon residents. Kestrels are an abundant year round species. The American roughleg, gyr falcon, and bald eagle were the only wintering species known not to nest in the area.

During baseline studies, active raptor nest sites were occupied by a pair of ospreys which nested on the study area, along with great horned owls, and kestrels. Great horned owls nested in the abandoned Tongue River mine tipple (which no longer exists) and in a cottonwood tree along the Tongue River. All kestrels nested in artificial nest boxes. Marsh hawks were seen in the West Pits area during the nesting season, but nest sites were not located. The West Pits area offers both good nesting and hunting habitat for raptors.

In 1977, thirty-four kestrel nest boxes were erected on both sides of the Tongue River Reservoir. These boxes were placed on and adjacent to the present East and West Decker mine sites. Occupation of these boxes by nesting kestrels was 52% in 1977, 85% in 1978, and 88% in 1979. Several of the nest boxes are still in use today.

The 2014 annual survey confirmed the following two active raptor nests within the south extension area: nest No. 111 – prairie falcon and nest no. 287 – golden eagle.

Four bald eagles were observed during the four 2014 big game aerial surveys conducted in March. The eagles were restricted to the area along the Tongue River Reservoir and Tongue River and greater than two miles from the Decker South Extension area.

Waterfowl and Shorebirds

Decker Coal currently monitors waterfowl and shorebirds annually. Waterfowl and shorebird use of the Decker West Pits area has been seasonal with greatest abundance and diversity occurring in the spring and fall.

Water fowl and shorebirds usage in the Decker South Extension area is low, with the majority of the activity occurring in the vicinity of the Tongue River, Tongue River Reservoir, and impoundments within the Decker Mine Permit Boundary.

Small Mammals and Predators

Year round common mammals to the Decker West Pits area include the striped skunk, yellow bellied marmot, cottontail rabbit, white tailed jack rabbit, deer mouse, vole house mouse, and the thirteen lined ground squirrel. The coyote, red fox, bobcat and badger are considered year round uncommon residents.

Small mammal trapping was not conducted in 2014 according to the approved monitoring plan. The locations of prairies dog town with the Decker South Extension area have been previously mapped.

Medium Sized Mammals and Predators

Medium-sized and predators were not systematically surveyed in 2014. Incidental sightings of coyotes and red fox were recorded. One coyote was observed during the big game survey conducted over the combined West Side study areas (Table 4).

The number of incidental sightings of desert cottontails and white-tailed jackrabbits remained low in 2014, continuing the trend from the previous year.

Passerine Birds

A total of 117 species of passerine birds were identified in walking transects used to determine avian species diversity and abundance indices in the baseline studies performed for the Decker West Pits. Species counts were made weekly while avian census routes were conducted twice weekly.

Passerine bird species abundance was determined for reclaimed grasslands and shrublands and comparable native areas in 2014 using circular plots. The abundance calculations were based on observation with 50 m of each sampling point.

Species abundance was similar between the native and reclaimed habitats. The average number of individuals observed per plot was higher on reclaimed habitats.

Amphibians and Reptiles

In 1979, DCC initiated a study of reptiles in NE Wyoming and SE Montana. Survey objectives were to 1) document species occurrence; 2) determine community diversity; and 3) determine species relative abundance. Both walking transects and road surveys were conducted. The most

common reptiles observed in these studies were the prairie rattlesnake, bull snake, yellow-bellied racer, garter snake, northern sagebrush lizard, and the eastern short-horned lizard. The habitat of the study area was broken down into 6 types; sagebrush/grass, improved pasture, mixed shrub, rimrock, cultivated field, and streamside. The prairie rattlesnake occurred in all six habitat types, the yellow-bellied racer in sagebrush/grass, mixed shrub, and streamside, the bull snake in sagebrush/grass, improved pasture, cultivated field and streamside, the garter snake in streamside, the northern sagebrush lizard in rimrock, and the eastern short-horned lizard in sagebrush/grass and rimrock.

Systematic surveys for reptiles and amphibians were not conducted in 2014.

Threatened or Endangered Species and Other Species of High Federal or State Interest
The only endangered species observed during the baseline studies in the Decker West Pits area was the bald eagle. Its occurrence is discussed under the Raptors section.

Aquatic Biota
Extensive baseline aquatic inventory studies were performed in Squirrel Creek during 1978 and 1979 in preparation for the CX-Ranch and Wolf Mountain mining permits. The upper and middle reaches of Squirrel Creek were dominated by various minnow species with an occasional sucker. All game-fish species were located at the mouth of Squirrel Creek near the Tongue River confluence. These species consisted of Smallmouth bass, rock bass and cat fish.

Since the 1978 and 1979 a considerable amount of activity, i.e. cattle grazing and CBNG development, has occurred that could have affected the aquatic ecosystem.

3.12 SOILS

A soil survey of the Decker South Extension lease application area and surrounding vicinity was completed by Camp Dresser and McKee Inc. and Kiewit Mining & Engineering Co. during the years of 1979 and again in 1981. The soils mapping, description, classification, and sampling was conducted in accordance with the procedures and standards of the National Cooperative Soil Survey. The soil sampling specifications were also reviewed by the Department of State Lands prior to sampling.

A total of 42 different mapping units were identified in the soil survey. The soil samples were analyzes by Camp Dresser and McKee Analytical Services Laboratory, Kiewit Mining & Engineering Co. Environmental Laboratory, and Inter-Mountain Laboratories. The laboratory analyses included: pH, electrical conductivity; saturation percent; calcium, magnesium, and

sodium; Sodium Adsorption Ratio; percent organic matter, percent calcium carbonate equivalent, and soil texture.

Based on the detailed soil survey, soil sampling in the proposed affected areas, soil suitability evaluation, and salvage recommendations for all soil map units, DCC is confident that sufficient suitable soil resources are available for salvage and reapplication in order to ensure successful reclamation of the Decker South Extension lease application area.

3.13 PRIME FARMLAND

The land included in the Decker South Extension lease application area is not considered prime farmland.

3.14 VEGETATION

The Decker South Extension vegetation is characteristic of the Northern Great Plains. Western wheatgrass and bluebunch wheatgrass are the two dominate grasses. Big sagebrush, silver sagebrush, and greasewood are the major shrub species. On some slopes, ponderosa pine and Rocky Mountain juniper are found in association with the wheatgrasses and shrubs. A discontinuous, narrow band of deciduous woodland, visually dominated by box elder and plains cottonwood, grows along the margins of Squirrel Creek. Historical land use patterns (e.g. grazing, farming) have altered some of the natural communities to what they are today.

Plant species of concern to state or federal agencies due to rarity have not been observed in the study area.

3.15 HYDROLOGY

Extensive hydrogeological investigations of the Decker, Montana area have addressed the occurrence of groundwater and identified the stratigraphic units which can be classified as aquifers. These units are: significantly thick deposits of unconsolidated alluvium along the main watercourses, coal seams of the Tongue River Member of the Fort Union Formation, and clinker from burned coal beds. The regional geologic gradient of the bedrock strata in the Decker area is generally downward to the south-southeast at a dip of 2 degrees or less with local gradients toward the Tongue River Reservoir forming a broad synclinal structure. Several major northeast-trending normal faults of non-uniform displacement have been mapped east and southeast of the Decker South Extension area with the southeastern side being downthrown. The regional groundwater flow patterns of the major coal seam aquifers are controlled by the geologic gradients, the northeast-trending structural faults, directional and differential secondary

permeability's, burned edges of the seams, and more recently by the mining activities in the Decker area. Recharge to these aquifers enters mainly along outcrops in the highlands and certain alluvial subcrops surrounding the Decker/Tongue River Reservoir/Squirrel Creek area. Groundwater then moves to the areas of discharge, namely the subcrops beneath the Tongue River Reservoir and adjacent tributary valleys.

In summary, the coal beds are really the most extensive aquifers in common use. The clinker, on the other hand, is the most permeable and thus permits higher individual well yields. Lenses of sandstone in the overburden and interburden are the least predictable and least used sources of groundwater owing to their limited aerial extent and near isolation in the subsurface by surrounding fine-grained rocks that have relatively low permeability.

Effects of Area Coal Bed Methane Development

As discussed above, mining activities in the Decker area have had a limited influence on the groundwater resources. The most pronounced effects of mining are declines in hydrostatic pressure in the coal seam aquifers that are being mined. Groundwater levels, hydraulic characteristics, and water quality of the reclaimed spoils aquifer continue to be closely monitored. Historic extensive monitoring and assessments of the groundwater levels and flow characteristics of the mine affected coal seam aquifers and the backfilled spoils has led to the sound prediction that after final backfilling and reclamation of the mine pits, coal aquifer groundwater should approximate pre-mining conditions.

Extensive coal bed methane development on adjacent lands in both Montana and Wyoming since 1999 has demonstrated regionally extensive non-mine related dewatering of the coal seam aquifers. In the Decker South Extension area, the historic mine related temporary drawdown in monitoring wells of the affected coal seam aquifers was on the order of 0 to 30 feet. Recent monitored levels (2003) from the same monitoring well locations show much more widespread non-mine related drawdown from 50 feet to as much as 400 feet. Dry monitoring wells have been observed in the Decker South Extension area. Coal aquifer dewatering by the CBM operators has successfully liberated significant fractions of methane gas and many local monitoring wells now show erratic water levels. Significant shifts in groundwater movement have been observed in regional monitoring wells due to local mining and CBM dewatering.

Groundwater Quality

Baseline data on the quality of groundwater in the Decker area was reported in a study by Van Voast, et. al. (1974-78). In general, the chemical quality of groundwater in the Decker area differs markedly from one type of aquifer to another and can often differ significantly within the same aquifer. A wide range in the kind and concentration of dissolved constituents exists in the waters of the different types of aquifers, and the concentration of dissolved constituents can differ in the groundwater of a given type of aquifer from one area to another.

Water from the coal aquifers is characteristically a sodium bicarbonate type. The concentration of dissolved constituents ranges from about 675 to 3,400 mg/l with common values of between 1,500 and 2,500 mg/l being typical. Water from sandstone aquifers in the overburden is the most highly mineralized groundwater in the area, suggesting that there is an abundance of soluble minerals in the overburden material and that groundwater circulation through these aquifers may be relatively slow. Based on specific-conductance data, the concentration of dissolved constituents in the sandstone aquifers appears to range from about 2,100 to 7,200 mg/l. The median concentration exceeds 5,000 mg/l. Owing to its high mineralization and high sulfate content, water from the overburden is rarely used for anything other than watering livestock.

Water in the clinker differs considerably in its chemical quality from place to place. Differences usually can be related to the chemical quality of the water entering the clinker as recharge rather than to differences in clinker type or time of travel in the aquifer.

Surface Water Hydrology

The Decker area is drained by the Tongue River, the major perennial stream in this vicinity, which flows northeast from Decker and empties into the Yellowstone River. The Tongue River watershed has a drainage area of 1770 square miles above the U.S.G.S. gaging station at the north end of the Tongue River Reservoir. A dam was constructed on the Tongue River in the 1930's primarily for the purpose of storing water for irrigation. As a result, the river valley adjacent to the Decker mines has been inundated by the Tongue River Reservoir. Ephemeral tributaries of the Tongue River include Pond Creek, Pearson Creek, and Spring Creek. Squirrel Creek is also a tributary of the Tongue River but is considered to be perennial.

Flow events which occur in the tributaries of the Tongue River near the Decker mines are monitored by DCC. An extensive network of parshall flumes is present to record flow events in and around the Decker area. Additional flow data is collected from the crest stage gages also located in the drainages. Discharge of the Tongue River is continuously monitored at two locations near Decker by the U. S. Geological Survey. Gaging stations equipped with continuous stage recorders are present on the Tongue River near the Wyoming state line and at the Tongue River below the Tongue River Dam. Discharge records for these two sites are published annually in the U.S.G.S. Water Resources Data - Montana, Volume 1.

Samples collected upstream and downstream of the Tongue River Reservoir indicate that concentrations of most parameters are unpredictably variable, some higher and some lower downstream of the reservoir than mine discharges from West Decker, East Decker and Spring Creek mines.

Surface Water Quality

TSS concentrations in the range of 10,000+ mg/l are not unusual for the highly erosive ephemeral streams in the Decker area. Whenever an intense storm is observed over the watershed of an erosive ephemeral drainage, such as those around Decker, high TSS concentrations will result if the soils are not frozen when runoff occurs. However, the mass of delivered sediment is usually low since the volume of runoff in these storm types is usually very low. In general, the predominant cation in the runoff waters is calcium and the predominant anions are sulfate and bicarbonate.

3.16 FIRE CONTROL

Coal fires can occur in exposed coal seams, and the Decker South Extension operation proposes to limit the extent of these fires by removing the burning coal, or covering the fire. Coal fires will be extinguished as quickly as possible to limit the loss of coal. The Decker South Extension operation will have a water truck and a variety of earthmoving equipment available for use.

3.17 SOIL EROSION MITIGATION

DCC proposes to minimize soil erosion by using the following measures:

1. Topsoil stockpiles will be planted with a suitable seed mixture.
2. Seeding of reclaimed areas will occur after topsoil has been applied.
3. Approved sediment control measures will be used when applicable.
4. Surface disturbance will be limited to those areas required by the operation.
5. Extra caution will be used during wet weather to prevent excessive rutting.
6. Any erosion occurring within the active area will be mitigated as necessary.

3.18 WATER POLLUTION MITIGATION

Several groundwater monitoring wells are located within close proximity of the proposed Decker South Extension lease application area. A plan for monitoring during and after mining will be developed with MDEQ-IEM and WPB consultation. Impacts to surface water will also be minimized by timely reclamation of disturbed areas and by construction of ditches and berms to divert the flow of water off of disturbed land back into the pit. Alternate sediment control measures or sediment ponds will also be developed in consultation with the MDEQ -IEM.

3.19 WILDLIFE MITIGATION

Big Game

The Decker South Extension operation proposes to limit the impact of mining on big game (antelope, mule deer and white-tail deer) by reclaiming the land for a post-mining use of range

land for livestock and wildlife. The seed mix will consist of native perennial grasses, forbs and shrubs which support the post-mine land use.

The Decker South Extension operation will also conduct monitoring surveys as required by the MDEQ - IEM and the Montana Game and Fish Department. Results of annual monitoring studies, existing baseline surveys and future baseline surveys will be used to further define areas of concern and to identify developing mitigation needs.

Upland Game Birds

No known sage grouse leks were found in the Decker South Extension lease application area during recent baseline surveys. Should any be found during additional field surveys or should any new leks become established, appropriate mitigation steps will be taken. These steps may include any or all of the following techniques; reestablishment of shrubs on reclaimed lands; grading of reclaimed lands to include swales and depressions; monitoring of sage grouse leks in the area before, during and after mining. These and other measures will be further developed in the MDEQ Surface Mining Permit Amendment.

Raptors

The raptors with active nests on, or within, two miles of the Decker South Extension lease application area include nest No. 111 – prairie falcon and nest No. 287 – golden eagle (see section 3.11).

State and federal regulations limit surface activities near active raptor nests. The size of the restrictive radius and the timing restriction may be modified depending on species of raptor and whether or not the nest is within the line of sight to construction activities. These nests may be relocated under the appropriate state and federal permits if warranted. The mine plan would include a raptor monitoring and mitigation plan approved by the USFWS and state and other federal agencies as required. Following current mitigation and avoidance techniques, impacts to breeding raptors should be minimal.

3.20 AIR QUALITY

The semiarid climate at the Decker South Extension lease application area is typical of the Northern Powder River Basin. Moisture is insufficient to support dense vegetative growth (Critchfield, 1966, p. 168). Precipitation is low, falling primarily during late spring and early summer. Precipitation and temperature exhibit large seasonal and annual ranges. Prevailing wind speeds are low, and surface humidity is moderate.

Road watering, road maintenance and the possible application of a chemical dust suppressant on haulroads and access roads will limit air quality impacts by fugitive dust emissions. A permit will be secured from the MDEQ-APCR prior to disturbance.

3.21 NOISE IMPACTS

The effects of noise on the area will be limited. The nearest towns are located over 15 miles from the proposed Decker South Extension application area. The nearest inhabited dwelling is adjacent to the eastern boundary of the Decker South Extension application area. Visitors to the area may be exposed to occasional blast noise; however, it is very unlikely that the public will be exposed to high decibel mine noise. Mine employees will be required to wear hearing protection in areas where the noise level may cause hearing damage.

3.22 SOCIAL AND ECONOMIC IMPACTS

The Decker South Extension mine operation proposes to remove approximately 8- 14 million tons per year of coal reserves from the tract. This will benefit the local, regional and national economy by adding significant tax revenue to the Federal, State and Local tax bases. Development of these reserves will result in the extension of the West Decker Coal Mine, thereby improving the economic well-being of the employees of that operation.

3.23 PUBLIC HEALTH AND SAFETY

DCC will conduct all operations on the Decker South Extension lease application area in accordance with Mine Safety and Health Administration regulations and procedures. Mining activity will be adjacent to the Decker Highway FAS314. Active areas of Decker South Extension will be bermed or signed to prevent accidental entrance. Blasting areas within the mine and blasting schedules will be posted in area newspapers. All applicable laws concerning the handling and disposal of hazardous wastes will be followed. Spill Prevention Control Countermeasure Plans (SPCC) will be updated periodically and kept on file at the mine for use in case of spills.

3.24 SURFACE RECLAMATION

DCC will develop a site specific, detailed reclamation plan in consultation with the MDEQ-IEM. The plan will be included in the future mine permit application. The plan must include grading the surface to an acceptable contour and reapplying salvaged soil to an acceptable depth over suitable overburden. A detailed channel restoration plan will also be developed for the major drainages disturbed. The seed mix will be a diverse mix of grasses, forbs and shrubs. The resulting reclaimed plant community will contain many of the species in the native plant

communities. These species will support the post-mining land use by stabilizing the soil, providing livestock and wildlife forage, and providing thermal, nesting and parturition cover for wildlife. The Decker South Extension mine operation will use seed, equipment and methods that are appropriate for and plains conditions. These methods have been successful for revegetation on other mines in the area.

APPENDIX A
To

Lease By Application

ORGANIZATIONAL CHART

OFFICERS AND DIRECTORS

17.24.303 (g) - LEGAL, FINANCIAL, COMPLIANCE, AND RELATED INFORMATION

Shareholders:

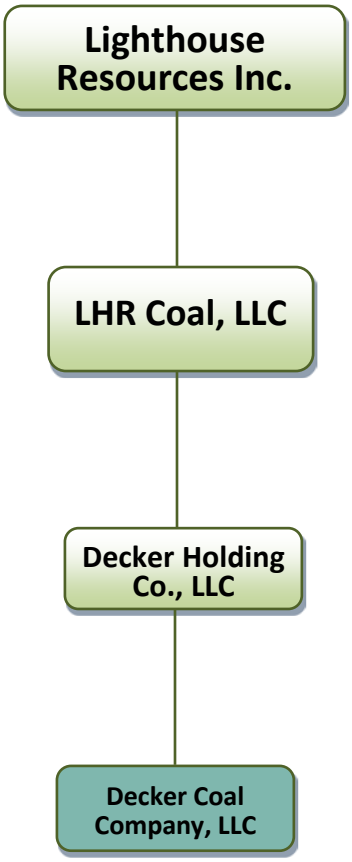
Decker Coal Company, LLC ("Applicant"), a Montana limited liability company, formerly known as Decker Coal Company, is a wholly-owned subsidiary of Decker Holding Co., LLC; which is a wholly-owned subsidiary of LHR Coal, LLC; which is a wholly-owned subsidiary of Lighthouse Resources Inc. Lighthouse Resources, Inc. is a private company incorporated under the laws of Delaware. Lighthouse Resources Inc., formerly known as Ambre Energy North America, Inc., was acquired by private equity funds managed by Resource Capital Funds, on December 2nd, 2014. Resource Capital Funds is based in Denver, Colorado.

17.24.303 (7) (i) (ii) (iii)

The names and addresses of applicant and its principal shareholders are:

NAME	ADDRESS	OWNERSHIP
Decker Coal Company, LLC	P. O. Box 12 Decker, MT 59025	(Operator)
Decker Holding Co., LLC	170 S. Main Street, Suite 700 Salt Lake City, UT 84101	Owns Decker Coal Company, LLC – 100%
LHR Coal, LLC	170 S. Main Street, Suite 700 Salt Lake City, UT 84101	Owns Decker Holding Co., LLC – 100%
Lighthouse Resources Inc.	170 S. Main Street, Suite 700 Salt Lake City, UT 84101	Owns LHR Coal, LLC – 100%

Corporate Organization of
Decker Coal Company, LLC and Affiliates
December 3, 2015



OFFICER AND DIRECTORS:

The names of each officer, director or other persons performing a function similar to a director to the applicant and its upstream shareholders are listed in the following tables.

Decker Coal Company, LLC **Federal Identification No. 47-0533731** **AVS Entity No. 255589 – As of August 31, 2015**				
Title	Person	Begin Date	End Date	Entity No.
President	Everett King	09/22/2014		252553
Treasurer	Darin Adlard	09/22/2014		254417
Secretary	Michael Klein	08/31/2015		
Director	Everett King	09/22/2014		252553

Decker Holding Co., LLC **Federal Identification No. 80-0908881** **AVS Entity No. 255980– As of August 31, 2015**				
Title	Person	Begin Date	End Date	Entity No.
President	Everett King	03/19/2013		252553
Treasurer	Darin Adlard	03/19/2013		254417
Secretary	Michael Klein	08/31/2015		
Director	Everett King	03/19/2013		252553

LHR Coal, LLC **Federal Identification No. 27-3184799** **AVS Entity No. 255981– As of August 31, 2015**				
Title	Person	Begin Date	End Date	Entity No.
President	Everett King	03/19/2013		252553
Treasurer	Darin Adlard	03/19/2013		254417
Secretary	Michael Klein	08/31/2015		
Director	Everett King	03/19/2013		252553

Lighthouse Resources Inc. Federal Identification No. 27-3184713 AVS Entity No. 255982– As of August 31, 2015				
Title	Person	Begin Date	End Date	Entity No.
President	Everett King	03/19/2013		252553
Treasurer	Darin Adlard	03/19/2013		254417
Secretary	Michael Klein	08/31/2015		
Director	Everett King	03/19/2013		252553