

# Environmental Assessment

## High Plains Ventures, LLC Sand and Gravel Mine

**BLM**

**Pinedale Field Office**

July 2013



The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

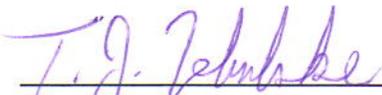
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**WY-100-EA12-158**

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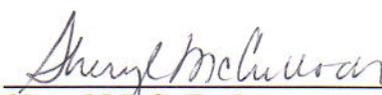
  
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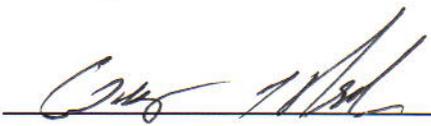
  
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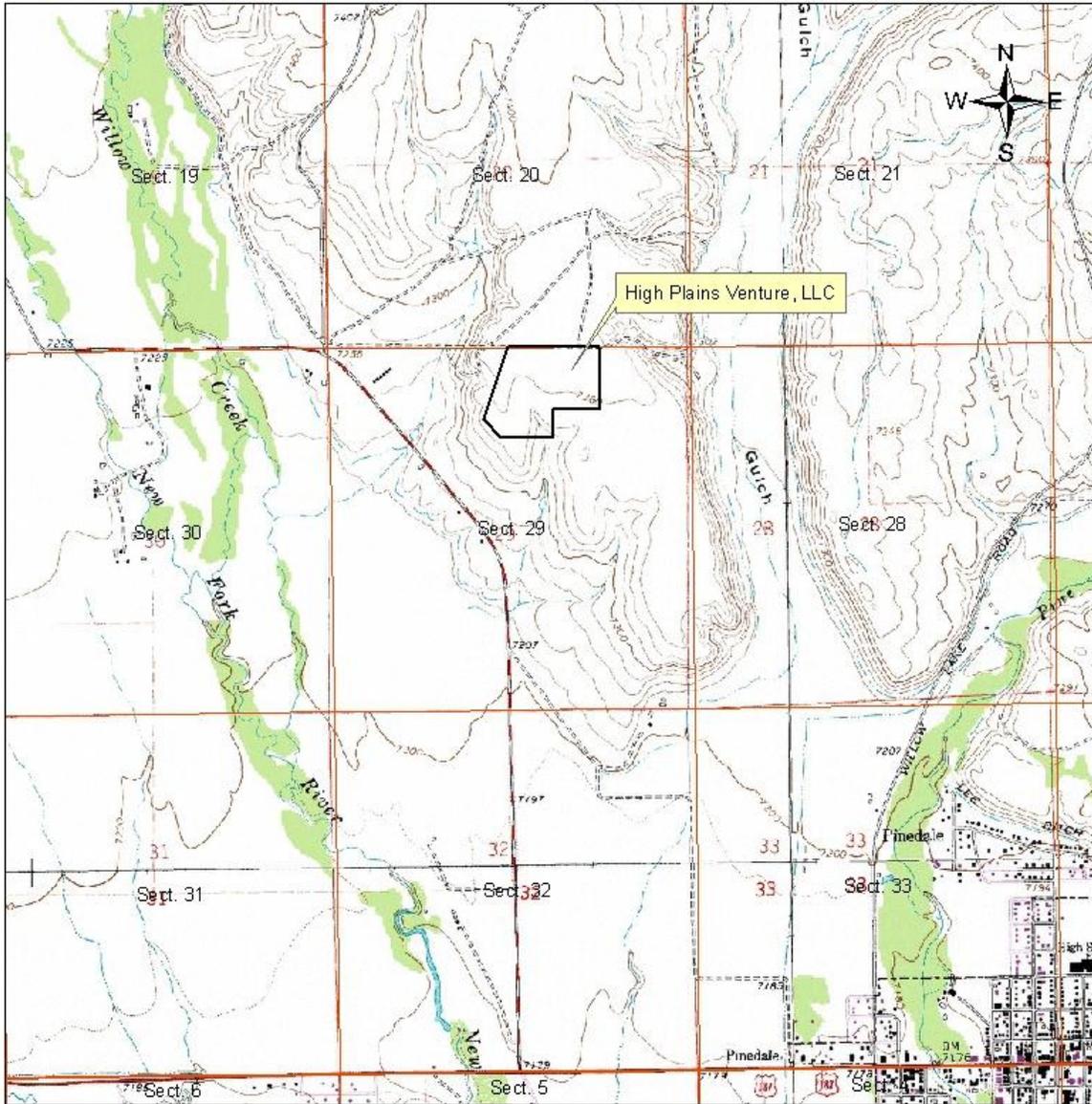
## 1.0 INTRODUCTION

High Plains Ventures, LLC (Operator) proposes to submit a Mining and Reclamation Plan to the Bureau of Land Management (BLM) Pinedale Field Office (PFO) to continue operation of an existing 39.9 acre aggregate mine. The subject property is a total 40.11 acres. The Operator proposes to add a mobile asphalt plant to the operation. The aggregate mine will operate as the markets demand. The proposed mobile asphalt plant would operate intermittently within the existing mining operation for about thirty days, between May 15 and October 15 of each year. Sand and gravel mining would occur year round and could coincide with operation of the asphalt plant; the two operations could occur intermittently. This schedule would also depend on market demand. All minerals are reserved to the U.S. Government under the Stock Raising Homestead Act of 1916 (Patent number 1100050) while the surface is owned by Randy Archer of High Plains Ventures, LLC.

The site of the sand and gravel operation (the Pit) is within the administrative boundary of the BLM Pinedale Field Office (Figure 1). High Plains Ventures, LLC is located approximately 2.5 miles northwest of Pinedale, Wyoming. The site can be reached by traveling 1.5 miles north of US Highway 191 on County Road 23-144 (Ehman Lane) to BD Boulevard, and 0.5 miles northeast on BD Boulevard (Figure 2). A private road belonging to the surrounding subdivision joins the private road that enters the Pit at 35 BD Boulevard. The legal location for the project is: NW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 29, Township 34 North, Range 109 West of the 6th Principal Meridian, in Sublette County, Wyoming.

Figure 1 - Proposed Project Area

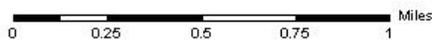
### High Plains Ventures, LLC Aggregate Mine



Map 1

#### High Plains Venture, LLC Mobile Asphalt Plant Proposal

T34N, R109W, Sec. 29: NWNE(PT), NENW(PT)  
35 BD Boulevard, Pinedale Wyoming



\* No warranty is made by the Bureau of Land Management for use of map data for purposes otherwise intended by the BLM.

Map Produced By:  
Cristi Eicheberry  
Environmental Protection Specialist

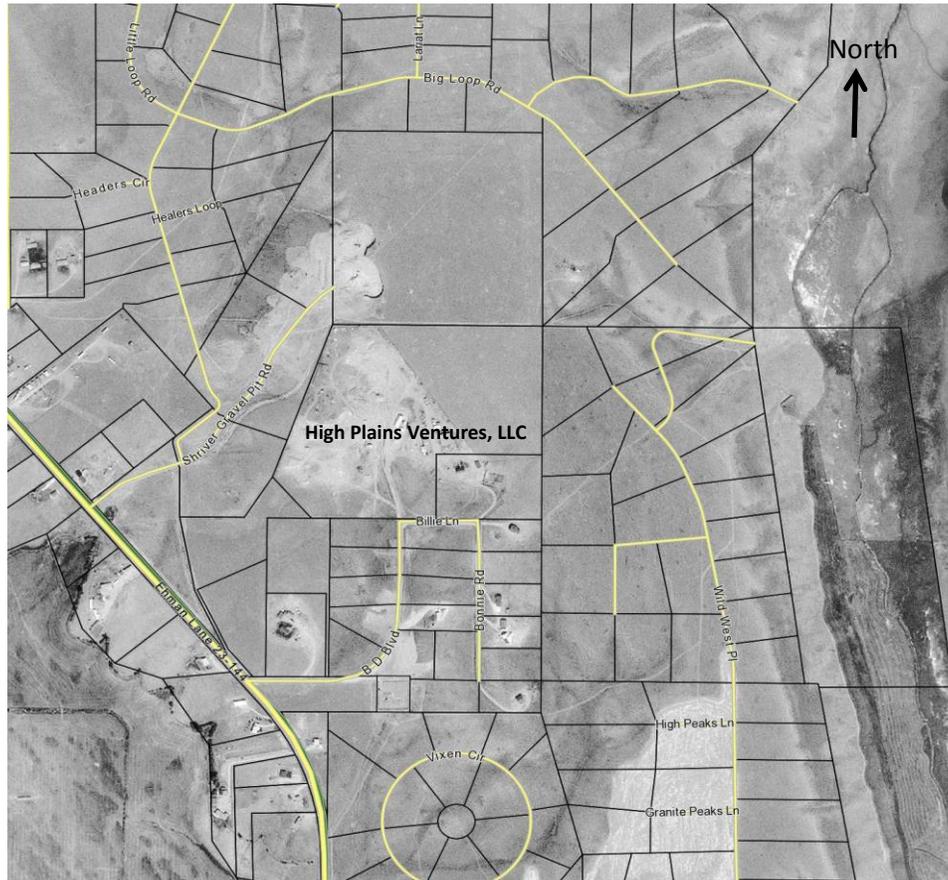
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## 1.1 Background

The surface was originally separated from the U.S. Government, November 16, 1938 under the Stock Raising Homestead Act (39 Stat. 862) to Laurence G. McLoughlin. All of the minerals are reserved to the U.S. Government under patent number 110050), while the private surface is owned by Randy Archer. At the time of the patent, the U.S. Government reserved all of the mineral rights, ditches and canals, and the associated rights-of-way. There are no active oil and gas leases on the parcel.

The Pit was established in 1979 with periodic extraction, processing, occasional mobile asphalt plant operation, and hauling of sand and gravel over the past 34 years. The Sublette County Planning and Zoning Commission issued Mr. Burleigh Binning a Conditional Use Permit (009-97) in March 1979, to allow mining of sand and gravel. The BLM completed an EA (WY-041-EA9-63) in February 1979. The Sublette County Planning and Zoning Commission issued a Limited Mining Operation, also known as an ET, or Ten Acre Exemption permit by Wyoming Department of Environmental Quality (DEQ), in February 1997. In 1981, Sublette County Planning and Zoning Commission issued a variance (191-81) to allow operation of a concrete business, including manufacturing of concrete products. In 1983, Sublette County Planning and Zoning issued a permit (000105-83) to allow the installation of a portable asphalt plant and related facilities in the Pit.

**Figure 1.1.a - Sublette County Aerial Photography 1994**



In July 2009, Archer Construction submitted a written request, to the BLM, to dig a series of test holes, to explore and determine the amount of material remaining in the 40.11 acre property. They also applied to the DEQ for a small mine permit and to BLM for a contract, to allow High Plains Ventures LLC to mine 39.9 acres. The BLM analyzed these two actions in EA WY-100-EA10-528, case numbers WYW178646 for the test holes and WYW178622 for the mine expansion.

In February 2010, an initial Mining and Reclamation Plan was submitted to the PFO, for the removal of sand and gravel from the pit, and the EA was signed. Sublette County Planning and Zoning Commission also issued a new Conditional Use Permit, to replace permit numbers 009-97, 191-81, and 000105-83. Conditions of the County permit no longer allowed a concrete or asphalt plant as a permitted use. In December 2011, the BLMs' Contract for the sale of Mineral Materials, to allow mining of the sand and gravel, expired and the pit remained inactive.

In March 2012, High Plains Ventures, LLC submitted a request to PFO proposing to operate a mobile asphalt plant within the aggregate mine. On September 30, 2012, Sublette County Planning and Zoning Commission revoked High Plains Ventures, LLC 2010 Conditional Use Permit citing that the permit had been issued in error because the county had no actual authority to issue the permit for an operation of that size; rather, DEQ should have been the permitting authority. Sublette County Planning and Zoning Commission then declared that the previous

sand and gravel pit permits (009-79), for the operation of a concrete batch plant (191-81), and for the installation and operation of portable asphalt plant and related equipment (000105-83), were the current valid operating permits.

To date, approximately 242,000 cubic yards of material have been removed from the existing 40.11 acre project area with sales contracts documented in BLM’s case file numbers WYW-175503 and WYW-089574.

**Figure 1.1.b - Sublette County Arial Photography 2012**



## 1.2 Purpose and Need for the Proposed Action

### **Purpose of Proposed Action:**

The purpose of the proposed action is to provide HPV, the landowner and project proponent, an opportunity to develop federal mineral estate in the proposed project area, as provided for in federal laws and regulations, and the Pinedale Resource Management Plan (RMP) Record of Decision (ROD) approved November 26, 2008.

### **Need for Proposed Action:**

The need for the proposed action is established by the BLM’s responsibility, under Section 302 of the Federal Land Policy Management Act (FLPMA) and the Pinedale RMP to respond to the applications filed by High Plains Ventures, LLC for permits to extract the gravel underlying their property.

### **1.3 Decision to be Made**

The BLM must determine through this analysis if the proposed action, as modified to include the asphalt plant and the application of conditions of approval designed to mitigate impacts of the modified proposal, will result in significant impacts or not. In the Environmental Assessment and Decision Record that analyzed the original mining proposal (EA WY-100-EA10-528, dated December 9, 2010) the Pinedale Field Office issued a finding of no significant impact. If the modified proposal is determined to result in significant impacts, an Environmental Impact Statement would need to be developed for the proposal before the BLM could issue contracts for the sale of the mineral materials from this pit. If the BLM finds that the modified proposal results in no significant impacts, the BLM can issue mineral material sale contracts for the removal of mineral materials from this pit as before.

So while the BLM does not have the authority to regulate the use of private lands, they do have the responsibility to assess impacts associated with authorized activity, in this case the mining of sand and gravel from the federal mineral estate. The BLM cannot make the decision that the operator cannot place an asphalt plant on their private property but the BLM is responsible for determining the impacts of the asphalt plant since it is a connected action to the mining of the Federal minerals.

### **1.4 Relationship to Statutes, Regulations, Plans or Other Environmental Analyses**

**Name of Plan:** Pinedale Resource Management Plan

**Date Approved:** November 26, 2008

The Code of Federal Regulations (CFR) Part 1610.5-3 requires actions to be in conformance with the approved land use plan. The proposed action conforms to the decisions made in the Pinedale RMP, section 2.3.6 Minerals Management. The management goal is to provide opportunities for mineral extraction, to meet national and local needs, while avoiding or otherwise mitigating significant impacts on other resources.

Decision Record, Environmental Assessment for Test Holes and Sand and Gravel Pit: EA WY-100-EA10-528, approved December 9, 2010.

Decision Record, Environmental Assessment for Mining of Sand and Gravel: EA WY-041-EA9-63, approved in February 1979.

#### **Materials Act of 1947**

The objectives of this Act allow for the disposal of mineral materials, including common varieties of sand, stone, gravel, pumice, pumicite, cinder, and clay, if disposal would not be detrimental to the public interest. This Act authorizes the BLM to sell mineral materials at fair market value.

#### **Federal Land Policy and Management Act of 1976**

The Act, as amended, is the Bureau of Land Management act that establishes the agency's multiple-use mandate to serve present and future generations. The objectives of FLPMA are to

provide direction for public lands and minerals to be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from public lands including implementation of the Mining and Minerals Policy Act of 1970 (84 Stat. 1876, 30 U.S.C. 21a) . To establish public land policy; to establish guidelines for its administration; to provide for the management, protection, development, and enhancement of the public lands; and for other purposes, while protecting the quality of important resource values (e.g., scientific, scenic, historical, archeological, etc.).

### **National Environmental Policy Act (NEPA) of 1969**

Under the National Environmental Policy Act (NEPA), the BLM, is mandated by the Council on Environmental Quality (CEQ) and federal regulations (Title 43 CFR §46 and Title 40 CFR §1500-1508), to analyze actions involving federal lands, as well as the mineral estate, to determine the proposed action's impact on the human environment.

Before issuing a decision on this proposal or any proposal, the BLM must comply with NEPA requirements. This process requires a systematic, interdisciplinary approach to ensure an integrated use of natural and social sciences in planning and decision making. NEPA directs that an environmental analysis of proposed actions must be completed. An Environmental Assessment (EA) document is not a decisional document. An EA documents the process used to identify and analyze the potential effects of the proposed action and all the alternatives. It also discloses the anticipated effects of the proposed action and alternatives of that action. A Decision Record (DR) is signed by the responsible official, which documents the final decision regarding the selected alternative. Based on the EA, the responsible official will make a statement, finding that either significant impacts would occur or no significant impacts would occur should the proposed action or another action alternative be implemented. If significant impacts are not anticipated, a Finding of No Significant Impacts (FONSI) would also conclude that an environmental impact statement (EIS) would not be prepared. The responsible official would then document the choice of an alternative and decision to implement it, in the DR.

### **Other Authorities**

This EA fulfills the NEPA requirement for site-specific analysis. The Proposed Action is in accordance with 43 CFR 1610.5-3(a); FLPMA of 1976, as amended; The Clean Air Act (CAA) as amended; Clean Water Act (CWA) of 1977; National Historic Preservation Act (NHPA), as amended; Migratory Bird Treaty Act (MBTA) of 1918, as amended; and the Wyoming Environmental Quality Act.

## **1.5 Scoping, Public Involvement and Issues**

The BLM decision-making process meets the requirements of the CEQ regulations implementing NEPA, and the United States Department of Interior (USDI) and BLM policies and procedures implementing NEPA. NEPA and the associated regulatory and policy framework require federal agencies to involve the interested public in their decision-making.

This EA has been developed in consultation and coordination with the state and local agency personnel, other affected parties, and interested members of the public-at-large.

Internal scoping was performed by the BLM staff, to help determine the resources to be analyzed. An interdisciplinary team evaluated the proposed action and the alternatives (see List

of Preparers page 41). The team also evaluated whether the proposal and the alternatives conform to BLM policies, regulations, and approved resource management plan direction.

External scoping was conducted by sending letters to 147 property owners located within one mile of the proposed project site. The public provided 11 comments to the PFO. Additional external scoping included press releases, local newspapers notices, and an internet posting on May 10, 2012.

The web link to the internet posting of the proposed action is:

<http://www.pinedaleonline.com/news/2012/05/BLMseekspubliccomment.htm>.

Public comments were accepted from May 10, 2012 until June 11, 2012. BLM received comments from (11) individual or groups. These comments are found in Appendix II, as well as where BLM's responses to these comments can be found in this EA. The following issues, concerns, and suggested mitigation measures were identified from those public comments:

- Restrict hours of mining and asphalt mixing operations.
- Potential impact of toxic air pollution from operations.
- Potential impacts of dust, odors, and noise pollution from operations.
- Potential impact on health from the asphalt plant.
- Potential impact on property values.
- Potential impact from hazardous spills.
- Potential impact to the subdivision road.
- Potential for impact to viewshed by the presence of excess debris and construction materials.
- Increased truck traffic.
- Possible relocation of asphalt plant.

BLM has evaluated resources and impacts to resources as identified in the public's relevant and substantive comments and have incorporated mitigation designs into this assessment.

## **2.0 PROPOSED ACTION AND ALTERNATIVES**

### **2.1 Alternative 1 – No Action Alternative**

Section 1502.14(d) of the NEPA requires that the alternative analysis in the EA include the alternative of No Action. No Action would include the continuation of the proposed action, sand and gravel extraction would continue without the use of the mobile asphalt plant. Figure 2.1 shows the No Action Alternative, existing High Plains Ventures, LLC aggregate mine.

In accordance with 43 CFR 3601.11, "BLM would not dispose of mineral materials if BLM determines that the aggregate damage to public lands and resources would exceed the public benefits expected from the proposed disposition." Proposed sand and gravel sales as described by 43 CFR 3600 are "discretionary actions," therefore; the selection of the No Action Alternative would be consistent with current regulations.

Figure 2.1 – Alternative 1, No Action Alternative

High Plains Ventures, LLC Existing Project – Alternative One



High Plains Ventures, LLC  
Sand and Gravel Mine  
39.9 acres of permitted mine area



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Cindi Eicheberry  
Environmental Protection Specialist

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## 2.2 Alternative 2 – Proposed Action

The BLM would complete a NEPA analysis as described previously. The CFR (43 CFR 3601.6) requires the BLM “to make mineral material available unless it is detrimental to the public interest to do so,” and “to protect public land resources and the environment and minimize damage to public health and safety during the exploration for and the removal of such minerals.” High Plains Ventures, LLC proposes to obtain a contract for Sale of Mineral Materials to include a mobile asphalt plant on site, in accordance with the BLM prescribed conditions of approval, other restrictions, and required mitigation measures.

The proposed action involves mining sand and gravel, within the existing 40.11 acre property. Sand and gravel would be extracted and processed in five acre increments from west to east. A mobile asphalt plant would utilize crushed gravel to mix asphalt for up to thirty days per year, from May 15 through October 15.

In accordance with 43 CFR 3602.31(c), because the High Plains Ventures, LLC pit is a non-competitive mineral materials sale, the BLM may sell at fair market value, mineral materials not greater than 200,000 cubic yards per year. If High Plains Ventures were to extract 125,000 cubic yards per year, the available 887,325 cubic yards of mineral material would be exhausted in approximately 7 years. Once mineral materials are exhausted High Plains Ventures, LLC plans to reclaim the pit in a manner that would the land to be used for residential development.

For purposes of this EA, reference to High Plains Ventures, LLC, as the Operator and project proponent, includes all contractors, subcontractors, or other parties that would be involved in the design, layout, and operation of the aggregate mine and proposed asphalt plant. Full implementation of the proposed action would include:

### Sand and Gravel Operations

- Three to five employees would be on site during operating hours.
- Operating hours would be from 8:00 a.m. to 5:00 p.m., Monday through Friday.
- Occasional weekend hauling of four to five truckloads of sand or gravel might occur between 8:00 a.m. and 5:00 p.m.
- An average of 125,000 cubic yards of sand and gravel is estimated to be mined each year.
- Sand and gravel reserves are determined to reach up to 22 feet deep and approximately 887,325 cubic yards of material is expected to be available for extraction.
- Extraction has occurred in the northwest portion of the pit and would continue eastward to the pit boundaries.
- A 90C Cat Loader, Komatsu 93U01588 loader, or a D-6 or D-8 Cat bulldozer, or Volvo excavator would be used to remove mineral material.
- A SES 5 x 12 screening unit would be used to classify the mined mineral material.
- Materials would be processed by crushing the larger gravel using an El-Jay 1330 crusher.
- Conveyor belts would place the crushed materials into various stacks according to size.
- A crusher and screener would be brought into the pit periodically on a temporary basis, when needed to produce material and would remain in the pit until all of the needed material has been excavated, processed, and stockpiled.
- A front-end loader would be used to load trucks for transportation of the material.

- Either belly dump, side dump or end dump haul trucks would be used during hauling operations.
- A typical end dump holds 10 cubic yards of material.
- A typical side and belly dump trailer could haul up to 22 tons of material.
- Four to five trucks would be used daily throughout the year.
- Around 20 loads of sand or gravel per day would be leaving the operation.
- Weigh slips will be obtained from a state certified scale and submitted monthly to BLM along with payment for material removed from the pit.

### **Asphalt Mixing**

- The mobile hot mix asphalt plant would be brought in to the pit between May 15 and October 15 of each year and would operate intermittently for up to 30 days each year.
- Three to five employees would be on site during operating hours.
- The operating hours of the asphalt operations would be from 7:00 a.m. to 7:00 p.m. Monday through Friday.
- Occasional weekend hauling of four to five truckloads of asphalt might occur between 7:00 a.m. and 7:00 p.m.
- The exception to these operating hours would be personnel arriving as early as 6 a.m. to start the asphalt plant and heat the mix to have it ready when the trucks start hauling at 7:00 a.m.
- The asphalt would be processed by using a liquid petroleum gas (LPG) heated Cedarapids 8828 Drum Drier Plant with pollution controls to dry the gravel.
- The asphalt plant would be capable of producing up to 200 tons per hour and 1,500 tons in a day.
- Either belly dump, side dump or end dump haul trucks would be used during hauling operations.
- A typical end dump holds 10 cubic yards of material.
- Typical side and belly dump trailers could haul up to 22 tons of material.
- Four to five trucks would be used daily while transporting asphalt.
- The trailers would haul up to 68 loads of asphalt from the operations each day.
- The trailer trucks would be dedicated to hauling asphalt. If necessary, environmentally friendly citrus cleaner would be used to clean the haul trucks after use and the waste would be contained for disposal at an appropriately permitted facility.
- The asphalt plant would be set in the northwest corner of the original Binning Pit where an asphalt plant has operated previously.
- Two projects of 10,000 tons of asphalt are projected for each year.
- To process asphalt, the gravel would be washed by being placed into a lined water pit to remove the sand and soil from the gravel.
- The water will come from a well on site. A large elevated water storage tank would be filled and water would be transferred with a pump and line or with the water truck on site to the water pit. The water would be recycled into a storage tank and lined water pit.
- Once the gravel is rinsed it would be conveyed to a dryer that removes the moisture and heats the gravel to approximately 300 degrees Fahrenheit.
- When the gravel reached the specified temperature it would be conveyed to a mixer where the asphalt material is mixed in with the gravel. The asphalt mixture would be

immediately conveyed to a higher point so that a semi-truck can be loaded for transport to a construction site.

- Additional equipment that would be used to support the asphalt plant would include 2 front end loaders, water truck (for dust control), generator, and possibly a backhoe and skidsteer.
- If new sections of the permitted area were ready to be utilized, topsoil would be stripped to a depth of eight inches across the entire area to be stockpiled on the eastern high wall area.

Project design features would include the following to reduce or avoid negative environmental effects of the proposed action on resources:

- Mining boundaries would be limited to a 300 foot setback from adjoining properties per DEQ's regulations.
- A 50-foot setback could be allowed with the adjacent landowners' permission.
- DEQ AQD permits would be issued to all equipment requiring air permits and the equipment would meet or exceed the permit requirements to minimize negative impacts to the air.
- Dust suppression would be applied on an hourly or more frequent basis as required by the air permit when crushing operations take place.
- Dust suppression would be applied as needed on roads, haul routes within the operation, and during loading operations.
- Topsoil would be stockpiled along the eastern edge of the property line and configured to reduce noise impacts and minimize the view of the pit by surrounding property owners.
- The stockpiles would be seeded with an approved seed mix while the pit is active with sand and gravel extraction.
- Erosion controls would be put in place to prevent the topsoil from blowing away or eroding during storm events.
- The Operator would maintain BD Boulevard, which would include grading, snow plowing, and applying magnesium chloride solution on the road surface when necessary to reduce fugitive dust and maintain safe driving conditions for their operation.
- Speed limit signs of 20 miles per hour are posted at various points along BD Boulevard.
- Hazardous chemicals would be stored on site in approved containers and appropriately disposed of in a permitted hazardous waste facility.
- Solid waste would be stored in containers and appropriately disposed of in a permitted solid waste facility.
- Any waste construction material such as concrete, asphalt, or soil would be removed from the project site.
- Topsoil would remain in the high wall area until all mineral resources were exhausted and reclamation occurred.
- Operator would mine the mineral resources in compliance with the DEQ Land Quality Division's Mining and Reclamation Plan.

The general layout of the current sand and gravel mine is shown in Figure 2.2 below and includes the proposed placement of the mobile asphalt plant. The property consists of a residence, outbuildings, concrete and other stockpiles to be recycled or disposed of, heavy

equipment, active mining area, proposed future mining area, and proposed asphalt plant placement.

Figure 2.2 - Alternative 2, Proposed Action

### High Plains Ventures, LLC Proposed Project – Alternative Two



0 62.5 125 250 Yards

High Plains Ventures, LLC  
Sand and Gravel Mine  
39.9 acres of permitted mine area



\* No warranty is made by the Bureau of Land Management for use of map data for purposes other than intended by the BLM.

Map Produced By:  
Cristi Eide-Henry  
Environmental Protection Specialist

Path: Z:\Site of Project\Sand and Gravel\High Plains Ventures, LLC\Maps

## **2.3 Alternatives Considered but Eliminated from Detailed Analysis**

Other alternatives considered but not analyzed in detail include approval of sand and gravel mining while denying the use of a mobile asphalt plant. The mineral materials are the estate of the U.S. Government; the current and proposed project is on land owned by the project proponent. Consideration of a non-federal connected action such as the proposed asphalt plant is limited in NEPA analysis, because the NEPA process is focused on agency decision making (40 CFR 1500.1(c), 40 CFR 1508.18, 40 CFR 1508.23). In this case, the authority to approve the asphalt plant lies with the DEQ and BLM has no regulatory authority to deny use of the asphalt plant. Therefore this alternative was eliminated because it did not meet the purpose and need of the federal government to analyze the Operator's request to mine and process mineral materials by use of an asphalt plant at the project area.

## **3.0 AFFECTED ENVIRONMENT**

The High Plains Ventures, LLC proposal is located 2.5 miles northwest of the town of Pinedale city limit. The gravel mine is characterized by hilltop topography lying above and between Willow Creek and Hay Gulch. Pit production is from an outwash fan emanating from the Wind River Mountains, composed of six to eight inches of top soil, three to five feet of glacial till, with the remaining a composite of mostly mixed sand and gravel. According to the Natural Resources Conservation Service (NRCS), this project area receives an average annual precipitation of about 13 inches per year (USDA 2006).

Housing subdivisions surround the project on the north, south, east, and west sides of its property boundaries. The elevation of the project site is relatively uniform at 7,380 feet above mean sea level. The town of Pinedale elevation ranges from 7,160 to 7,269 feet above mean sea level. The aggregate mine has been in existence since 1979 and on occasions an asphalt plant has operated within the pit.

The project is located within two miles of Murdock Mesa sage-grouse lek. The lek itself is within the sage-grouse core area but the project is outside of the core area. Current wildlife review indicates the entire sage brush habitat on location and much of the surrounding area has been mowed and no longer provides adequate nesting habitat.

The following elements of the human environment have been reviewed and it has been determined that these elements are either not present or would not be affected by the proposed action and alternatives, and will not be discussed further in this document:

- Areas of Critical Environmental Concern
- Environmental Justice
- Flood Plains
- Forests
- Fuels and Fire Management
- Wilderness Areas or Lands with Wilderness Characteristics
- Native American Religious Concerns
- Prime or Unique Farmlands

- Range Lands
- Recreation
- Wild Horses and Burros
- Wild and Scenic Rivers
- Fish Habitat
- Threatened/Endangered/BLM Sensitive Species
- Wildlife Study Areas
- Wetlands and Riparian Areas

Elements of the human environment and/or resource elements that could potentially be affected are:

- Air Quality, Ozone, Visibility, Global Climate Change, Noise and Odor
- Cultural Resources
- Socio-Economic
- Soils and Geology
- Vegetation, Invasive Non-native Species, and Noxious Weeds
- Visual Resource Management
- Solid and Hazardous Waste
- Wildlife, Migratory Birds
- Water Quality; Drinking/Groundwater

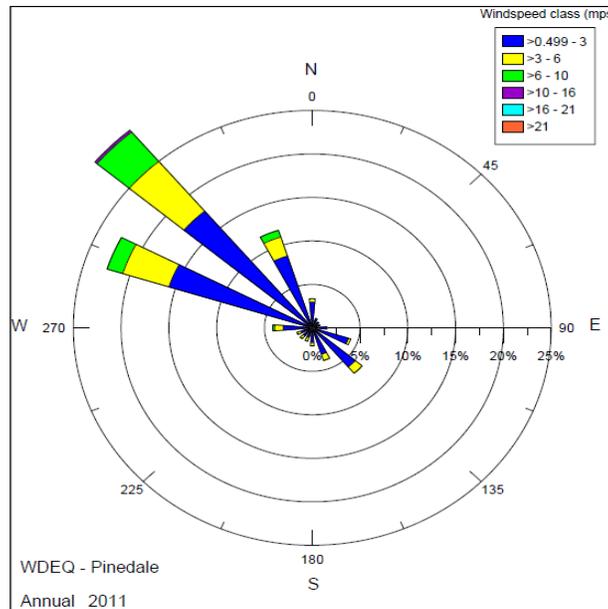
### **3.1 Air Quality, Ozone, Visibility, Global Climate Change, Noise and Odor**

#### **3.1.1 Air Quality**

Air quality regulatory authority lies with the DEQ, however, general air quality, air quality related value (AQRV), such as visibility and atmospheric deposition, and climate change are the components of air resources which the BLM must consider and analyze to address the potential effects of authorized activities on air resources as part of the planning and decision making process. The Pinedale RMP addresses air quality issues, impacts, and potential mitigations ((RMP 2008) Sec.2.3.1, Air Quality Management, p. 2-10).

Regional air quality is influenced by the interaction of weather, climate, the magnitude and spatial distribution of local and regional air pollutant sources, and the physical and chemical properties of emitted air pollutants. The impact of emitted air pollutants locally is particularly influenced by the distribution of local and regional air pollutants by wind directions and speed. According to the DEQ AQD *Annual Summary of Meteorological and Air Quality Data at the Wyoming Department of Environmental Quality, Sublette County Wyoming Pinedale Monitoring Site January 1 – December 31, 2011* (AQD 2011), the most frequent (and predominant) winds during the monitoring year were from the northwest. The second most frequent wind direction was from the west-northwest followed by the north-northwest.

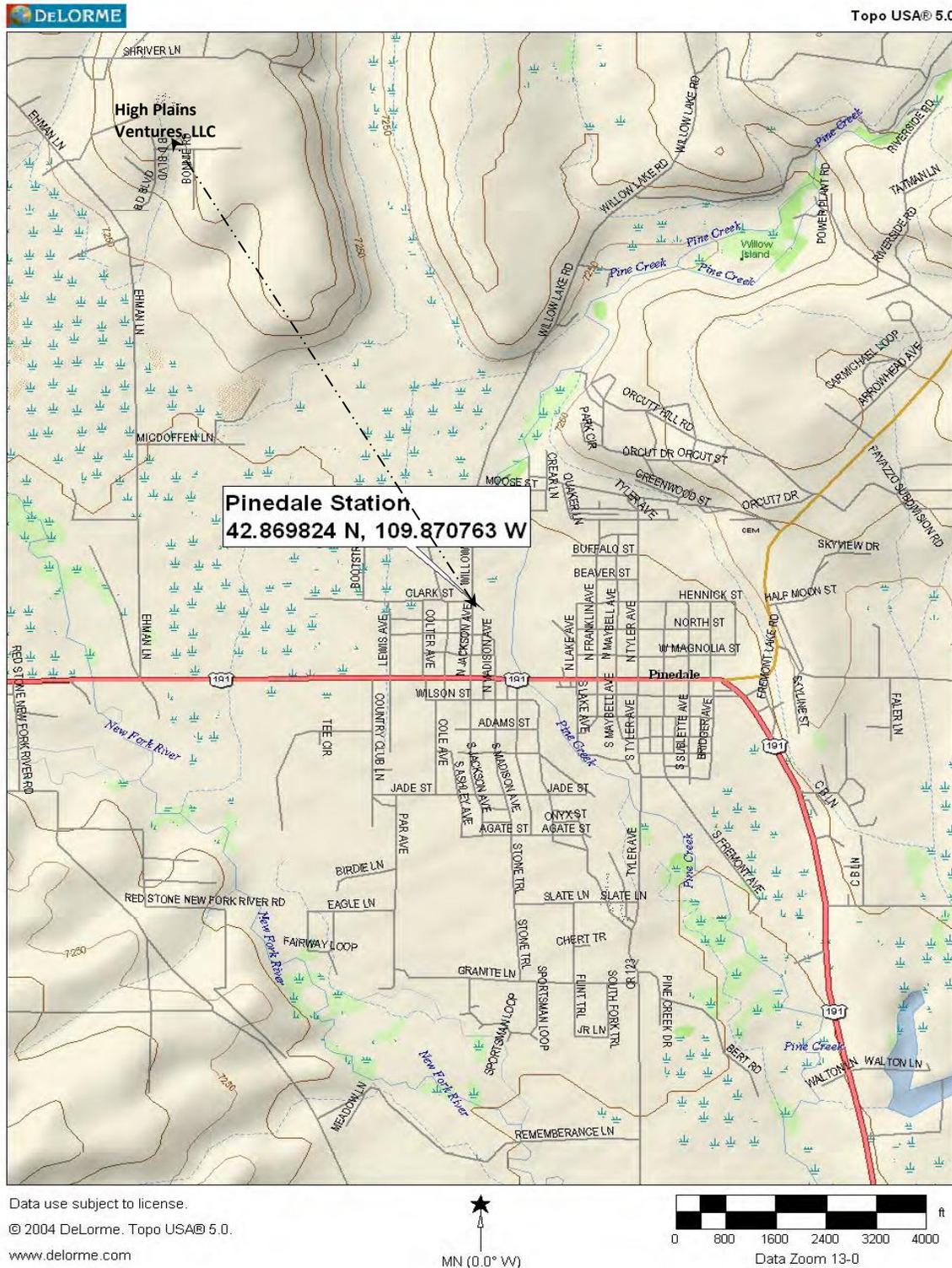
**Figure 3.1.1.a** – DEQ Wind Rose. (AQD 2011) Figure 2.5 Annual Wind Rose, January 1 through December 31, 2011.



The monitoring and enforcement of air-quality standards are the responsibility of the DEQ AQD. Wyoming Ambient Air Quality Standards (WAAQS) and National Ambient Air Quality Standards (NAAQS) identify maximum limits for concentrations of criteria air pollutants at all locations to which the public has access. The WAAQS and NAAQS are legally enforceable standards. Concentrations above the WAAQS and NAAQS represent a risk to human health that, by law, require public safeguards be implemented. State standards must be at least as protective of human health as federal standards, and may be more restrictive than federal standards, as allowed by the CAA. Currently, the DEQ AQD does not have regulations regarding greenhouse gas emissions, although these emissions are regulated indirectly by various other regulations.

Pollutant concentration can be defined as the mass of pollutants present in a volume of air and is reported in units of micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), parts per million (ppm), or parts per billion (ppb). The state of Wyoming has used monitoring and modeling to determine compliance with WAAQS and NAAQS. In addition, other monitoring systems are operating in the Pinedale area, including the Environmental Protection Agency's (EPA) Clean Air Status and Trends Air monitoring data. Figure 3.1.1.b in this document provides the location of the nearest air monitoring station. The proposed asphalt, sand and gravel mine is located approximately one mile north northwest of the monitoring station.

**Figure 3.1.1.b – DEQ Monitoring Station.** Location of DEQ’s Pinedale Meteorological and Air Quality Monitoring Station (AQD 2011) Figure 1.1



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## Criteria Air Pollutants

Criteria air Pollutants are those for which national concentration standards have been established. Pollutant concentrations that are greater than the established standards pose a risk to human health and/or welfare. Five of the six criteria pollutants for which the EPA has established NAAQs are:

Carbon monoxide (CO): CO is a colorless, odorless gas emitted from combustion processes. Nationally and, particularly in urban areas, the majority of CO emissions to ambient air come from mobile sources. Because carbon monoxide data are generally collected only in urban areas where automobile traffic levels are high, recent data are often unavailable for rural areas.

Nitrogen dioxide (NO<sub>2</sub>): NO<sub>2</sub> is one of a group of highly reactive gasses known as "oxides of nitrogen," or "nitrogen oxides (NO<sub>x</sub>)." Other nitrogen oxides include nitrous acid and nitric acid. While EPA's NAAQS covers this entire group of NO<sub>x</sub>, NO<sub>2</sub> is the component of greatest interest and the indicator for the larger group of nitrogen oxides. NO<sub>2</sub> forms quickly from emissions from cars, trucks and buses, power plants, and off-road equipment. In addition to contributing to the formation of ground-level ozone and fine particle pollution, NO<sub>2</sub> is linked with a number of adverse effects on the respiratory system.

Ozone (O<sub>3</sub>): O<sub>3</sub> is a gaseous pollutant that is not emitted directly into the atmosphere but is formed in the atmosphere from complex photochemical reactions involving NO<sub>x</sub> and reactive volatile organic compounds (VOCs) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NO<sub>x</sub> and VOCs. Breathing ground level ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. Ground level ozone can have harmful effects on sensitive vegetation and ecosystems.

Particulate matter (PM): PM is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. EPA groups particle pollution into two categories:

- "Inhalable coarse particles," such as those found near roadways and dusty industries, are larger than 2.5 micrometers and smaller than 10 micrometers in diameter. Particles in this category are referred to as PM<sub>10</sub>.
- "Fine particles," such as those found in smoke and haze, are 2.5 micrometers in diameter and smaller (referred to as PM<sub>2.5</sub>). These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air.

Sulfur dioxide (SO<sub>2</sub>): SO<sub>2</sub> is one of a group of highly reactive gasses known as "oxides of sulfur." The largest sources of SO<sub>2</sub> emissions are from fossil fuel combustion at power plants (73%) and other industrial facilities (20%). Smaller sources of SO<sub>2</sub> emissions include industrial processes such as extracting metal from ore, and the burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment. SO<sub>2</sub> is linked with a number of adverse effects on the respiratory system.

## **Hazardous Air Pollutants**

Hazardous air pollutants (HAPs), also known as toxic air pollutants or air toxics, are those pollutants that are known to cause or may reasonably be anticipated to cause adverse human health or environmental effects. EPA is required to control 187 HAPs. The list of HAPs does include relatively common pollutants such as benzene, chlorine, methanol, and asbestos, as well as numerous less common substances.

Most HAPs originate from human sources, including mobile sources (e.g., cars, trucks, buses) and stationary sources (e.g., factories, refineries, power plants), as well as indoor sources (e.g., building materials and activities such as cleaning). In most areas, high concentrations of HAPs are primarily due to mobile sources or small businesses that have not had the same regulatory scrutiny as large industrial facilities.

Section 112 of the CAA governs the federal control program for hazardous air pollutants. "National emissions standards for hazardous air pollutants" (NESHAPs) are issued to limit the release of specified HAPs from specific industrial sectors. These standards are "technology-based," meaning that they represent the best available control technology an industrial sector could afford. The levels of emissions control required by NESHAPs are not based on health risk considerations: allowable releases and resulting concentrations have not been determined to be safe for the general public. The CAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

## **Volatile Organic Compounds**

VOCs are organic compounds that vaporize (become a gas) at room temperature. VOCs are the leading cause of ground-level ozone (air pollution, also known as "smog"). Common sources which may emit VOCs into the air include housekeeping and maintenance products; paints, solvents, coatings, inks; and building and furnishing materials. In sufficient quantities, VOCs can cause eye, nose, and throat irritations, headaches, dizziness, visual disorders, memory impairment; some are known to cause cancer in animals; some are suspected of causing, or are known to cause, cancer in humans.

Prevention of Significant Deterioration (PSD) Increments: PSD relates to Class I areas (wilderness areas with protected air quality status due to their pristine condition) and Class II areas (wilderness areas with protected air quality status due to their sensitive condition). The PSD program goal is to maintain pristine air quality required to protect and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic or historic value. The PSD Class I sensitive area located nearby is the Bridger Wilderness, toward the east.

### **3.1.2 Ozone**

Air quality in the Pinedale Field Office meets the WAAQS and the NAAQS, with the exception of ozone. According to the AQD 2011 Report, several of Sublette County's ambient air monitoring stations recorded ozone concentrations above the current ozone standard of 75 ppb over an eight-hour period on several occasions in 2005, 2006, 2008 and 2010. On April 30, 2012, the EPA formally designated the UGRB as a 'Marginal' ozone nonattainment area, effective July 20, 2012.

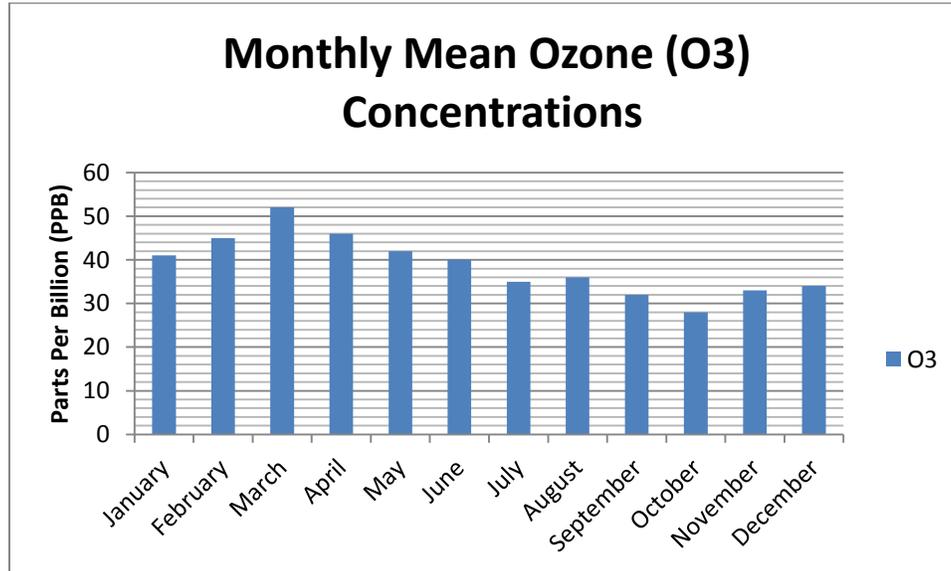
EPA's designation as marginal nonattainment has significant implications for both currently proposed private enterprise and oil and gas development projects in the area as well as other future BLM management actions. Upon designation as nonattainment area, the BLM must comply with General Conformity regulations in 40 CFR 93 subpart B and Chapter 8, Section 3 of the Wyoming Air Quality Standards and Regulations for any federal action within a designated nonattainment area. On August 7, 2012 DEQ confirmed that the one-year grace period, allowed under EPA's current general conformity regulation (40 CFR Part 93, Subpart B) before general conformity applies to newly designated non-attainment areas is allowed under its regulations. This grace period went into effect on July 20, 2012 and will expire on July 20, 2013.

Beginning no later than July 20, 2013, the BLM must conduct a General Conformity analysis and cannot approve any action that would cause or contribute to a new violation of the NAAQS or increase the frequency or severity of any existing violation. General Conformity must be determined for any action where the total of direct and indirect emissions for the proposed action exceeds the de minimis levels specified in 93.153(b). For projects located in a marginal ozone nonattainment area, this de minimis level is 100 tons per year (tpy) of VOCs or NO<sub>x</sub>. The proposed action cannot be implemented until a determination of conformity is achieved. For projects that are below the de minimis threshold level of 100 tpy for NO<sub>x</sub> or VOCs, the BLM must complete a conformity analysis and demonstrate that the proposed project would not exceed the de minimis threshold level and is therefore exempt from requiring a conformity determination.

Although elevated ozone occurs throughout the year, the occurrence of Upper Green River Basin (UGRB) high ozone events from early February to late March contrasts with the more typical summer occurrences in other areas of the United States. Winter ozone becomes elevated in the UGRB when there is a presence of ozone-forming precursor emissions including NO<sub>x</sub> and VOCs coupled with strong temperature inversions, low winds, snow cover, and bright sunlight. Ozone advisories are issued by the DEQ AQD when weather conditions appear conducive for the formation of ozone. Ozone levels are measured at five permanent monitoring stations in the UGRB: the Wyoming Range, Pinedale, Daniel, Boulder and Juel Spring.

The AQD 2011 report, below, shows the average monthly concentrations recorded at the Pinedale air monitoring station. The report shows highest average concentrations of ozone occurred in February, March and April. Additional information can be found on the DEQ website at: <http://www.wyvisnet.com/reports.aspx>

**Table 3.1.2** Average Monthly O<sub>3</sub> Concentrations



The DEQ currently requests that operators of oil and gas leases and other businesses that support the oil and gas operations in the area submit annual winter-specific emission inventories to help refine the state’s NO<sub>x</sub> and VOC emissions inventories. Beginning July 20, 2013, the BLM will require proponents to submit an emissions inventory for any proposed action in order to address conformity requirements.

In general, NO<sub>x</sub> emissions from oil and gas production and drilling have declined significantly from 2008 levels. These reductions are due to voluntary and mandatory emission reduction measures implemented by operators since 2008 and a reduction in oil and gas exploration and production. The BLM continues to work collaboratively with the DEQ, the U.S. Forest Service, EPA, and local communities to address and mitigate air-quality impacts from its proposed management actions.

### 3.1.3 Visibility

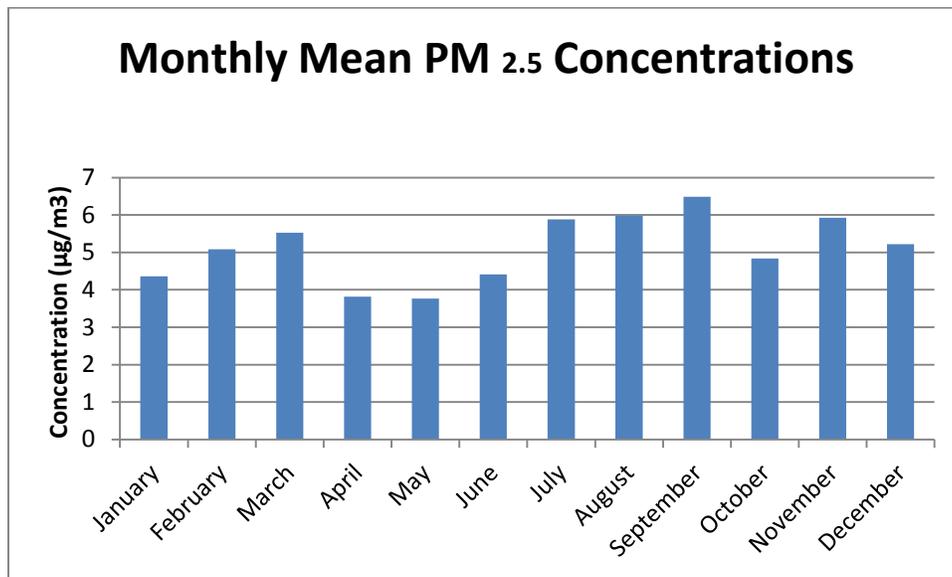
Visibility is reduced by particles in the air that scatter and absorb light. The EPA 1997 CAA Amendment declared “as a National goal the prevention of any futures, and the remedying of any existing, impairment of visibility in mandatory Class 1 federal areas in which impairment results from manmade air pollution.” The CAA gives federal managers the affirmative responsibility, but no regulatory authority, to protect air quality-related values, including visibility, from degradation. Regulatory authority to protect air quality-related values was assigned to the states. As a part of the state reporting program to the EPA, the DEQ placed air quality monitors throughout the state.

These monitors measure the levels of criteria pollutants in the atmosphere as well as visibility in the nearby Bridger Wilderness Class I Area. The document that DEQ AQD is providing EPA may be found at <http://deq.state.wy.us/aqd/Monitoring%20Data.asp>. A wide variety of pollutants

can impact visibility, including PM, NO<sub>2</sub>, NO<sub>3</sub>, and SO<sub>4</sub>. Fine particles suspended in the atmosphere decrease visibility by blocking, reflecting, or absorbing light. Regional haze occurs when pollutants from widespread emission sources become mixed in the atmosphere and travel long distances.

The Wyoming Visibility Monitoring Network recorded concentrations of PM at the monitoring station in Pinedale, Wyoming and reported the monthly mean average PM<sub>2.5</sub> concentration data in the AQD 2011 report. The report showed the highest concentrations occurred in July, August, September, and November. The table below summarizes the monthly averages. The annual NAAQS and WAAQS concentration limits are both 15 µg/m<sup>3</sup>. Additional information can be found on the DEQ website at: <http://www.wyvisnet.com/reports.aspx>

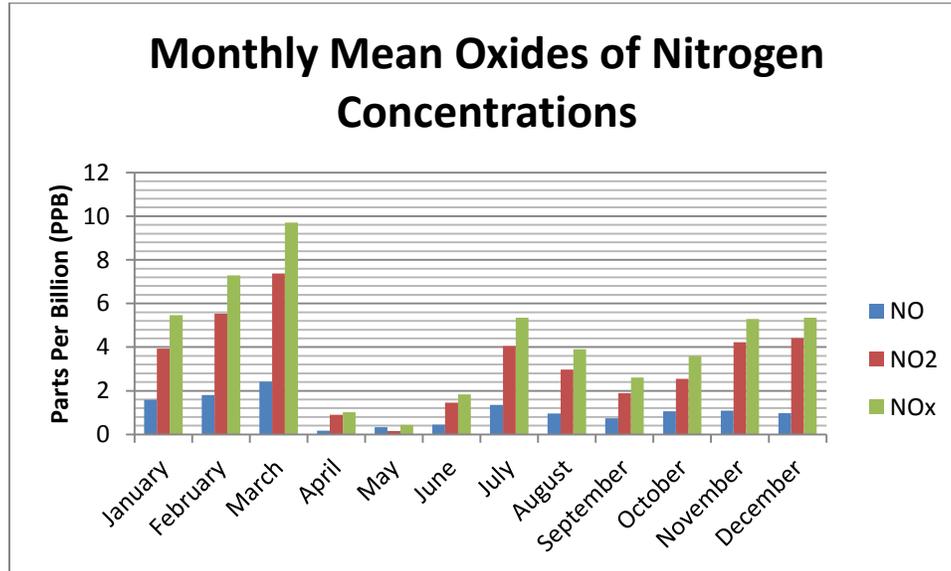
**Table 3.1.3.a - Monthly Average PM<sub>2.5</sub> Concentrations**



The Wyoming Visibility Monitoring Network also recorded ambient NO, NO<sub>2</sub>, and NO<sub>x</sub> at the monitoring station in Pinedale, Wyoming. The table below shows monthly average concentrations in the 2011 monitoring year. According to the AQD 2011 report, the highest monthly averages occurred January, February and March. In January 2010, EPA established an additional primary standard at 100 ppb for NO<sub>2</sub>, averaged over one hour. The EPA standard annual mean concentration is 53 ppb. Together the primary standards protect public health, including the health of sensitive populations - people with asthma, children, and the elderly. No area of the country has been found to be out of compliance with the current NO<sub>2</sub> standards.

Additional information can be found on the DEQ website at: <http://www.wyvisnet.com/reports.aspx>

**Table 3.1.3.b - Monthly Average Oxides of Nitrogen Concentrations**



### 3.1.4 Deposition

Through a process called atmospheric deposition, air pollutants fall out of the atmosphere and are deposited on terrestrial and aquatic ecosystems. These pollutants are deposited via wet deposition (precipitation) and dry deposition (gravitational settling of particles and gaseous pollutants that adhere to soil, water, and vegetation). Substances deposited include:

- Acids, such as sulfuric acid and nitric acid ( $\text{HNO}_3$ ) (referred to as “acid rain”)
- Air toxins, such as pesticides, herbicides, and VOC’s
- Nutrients, such as nitrate and ammonium ( $\text{NH}_4^+$ )

Deposition is reported as the mass of material deposited on an area (kilogram per hectare per year). Total deposition refers to the sum of airborne material transferred to the earth’s surface by both wet and dry deposition.

Atmospheric deposition of nitrogen and sulfur compounds can cause acidification of lakes and streams. One expression of lake acidification is a change in acid neutralizing capacity (ANC), which is a lake’s ability to resist acidification from atmospheric deposition. ANC is expressed in units of micro-equivalents per liter ( $\mu\text{eq/l}$ ). Lakes with ANC values of 25 to 100  $\mu\text{eq/l}$  are considered sensitive to atmospheric deposition; lakes with ANC values of 10 to 25  $\mu\text{eq/l}$  are considered very sensitive; and lakes with ANC values of less than 10 are considered extremely sensitive.

Site-specific lake water chemistry background data (pH, ANC, total bulk deposition of nitrate, sulfate, etc.) have been collected by the U.S. Forest Service (USFS) in Hobbs and Black Joe lakes in the Bridger Wilderness area to determine the chemical deposition of particles in the air, which are washed out with precipitation. These sites are sampled every two weeks in the summer, and every four weeks in the winter. Rocky Mountain Research Station analyzes

samples and the USFS reviews and summarizes the data to complete an annual report for the DEQ and industry. These sample sites are co-located with long-term lake sampling sites to allow study of the cause and effect of pollutants. The USFS has identified a specific methodology to determine acceptable changes in ANC, which are used to evaluate potential air quality impacts from deposition at acid sensitive lakes. They have established a level of acceptable change (LAC) of no greater than a 1 µeq/l change in ANC (from human causes) for lakes with existing ANC levels less than or equal to 25 µeq/l. A limit of 10 percent change in ANC reduction was adopted for lakes with an ANC greater than 25 µeq/l.

### **3.1.5 Global Climate Change**

Climate change refers to any significant change in the measure of climate, such as precipitation and temperature, lasting for an extended period (decades or longer). Temperatures in western Wyoming are expected to increase by 0.25°F to 0.4°F per decade and precipitation is expected to decrease by 0.1 to 0.6 inches per decade.

Several activities that occur in PFO area contribute to climate change, including: large wildfires, activities using combustion engines, changes to the natural carbon cycle, changes to radioactive forces and reflectivity, and emissions of greenhouse gases (GHGs). Some GHGs, such as carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>), occur naturally or as a result of human activities. Other GHGs, including nitrous oxide (N<sub>2</sub>O) and fluorinated gases are created and emitted solely through human activities. Activities with the potential to contribute to climate changes in this area include oil and gas exploration and production, soil erosion from disturbed areas and fugitive dust from roads, which have the potential to darken snow-covered surfaces and cause faster snowmelt. Without additional meteorological monitoring systems, it is difficult to determine spatial and temporal variability and change of climatic conditions but increasing concentrations of GHGs are likely to accelerate the rate of climate change.

### **3.1.6 Noise**

The traditional definition of noise is “unwanted or disturbing sound.” Sound becomes unwanted when it either interferes with normal activities such as sleeping, conversation, or disrupts or diminishes one’s quality of life. Noise is measured in decibels. Zero decibels is the threshold of hearing; 140 decibels is the threshold of pain. A change of 1 decibel is detectable only under laboratory conditions. Typical noise levels generated by everyday activities are shown in the table below. Noise in the proposed project area consists mostly of vehicle traffic to and from residential homes at this time. The proposed project area and adjacent sand and gravel mine operate periodically. Heavy equipment, trucks, rock crushers, screens, and occasional asphalt plants are associated with the sand and gravel pits in this area.

The EPA has identified noise levels of up to 45 decibels are associated with indoor residential areas, hospitals and schools, whereas 55 decibels is identified for certain outdoor areas where human activity occurs. These levels of noise are considered those which will permit spoken conversation and other activities such as sleeping, working and recreation, which are part of the daily human condition (EPA 1974).

**Table 3.1.7 - Typical noise levels generated by everyday activities**

Description of Activity	Noise Level (dB(A))
Very quiet room	25
Rural night-time setting (no wind)	35
Daytime, busy road, approximately 1/3 mile away	55
Busy restaurant	70
Very busy pub, voice has to be raised to be heard	85
Disco or rock concert	100
Uncomfortably loud, conversation impossible	120

### **3.1.7 Odor**

Odors in this area could include odor from agricultural operations, and vehicle emissions. Odor is the property of a substance that activates the sense of smell. Odor is typically measured using a Barnebey-Cheney Company or other instrument that would produce the same results. Odors could occur from the mixing and transporting hot asphalt and from diesel engines within the mine. The BLM continues to work collaboratively with the DEQ to address and mitigate air-quality impacts from its proposed management actions.

## **3.2 Cultural Resources**

The proposed project area has been used as a sand and gravel mine since at least 1979. The majority (ca. 31 acres) of the 40.11 acre project area has been previously disturbed. A Class III cultural resource inventory was completed in 2010 (PFO# 046-11-013) to accommodate continued use, and potential expansion of the sand and gravel mine to 46 acres. Fifteen acres of undisturbed surface were subject to Class III cultural resource inventory. The remaining 31 acres of disturbed surface were exempt from Class III inventory according to the Wyoming Protocol, Appendix B, part 23, and were subject to cultural resource reconnaissance only. No cultural resources or historic properties were identified during the cultural resource inventory and accordingly, this project would have no impact on known historic properties. Compliance with Section 106 of the National Historic Preservation Act according to the Wyoming Protocol was achieved on September 2, 2010 when documentation of the cultural resource inventory and exemption was submitted to the Wyoming State Historic Preservation Office with a determination of No Historic Properties Identified.

## **3.3 Socio-Economic**

Effects to the socio-economics on the homes and lands adjacent to the project are nearly impossible to predict, especially with the current unpredictable and fluctuating market. This pit was established in 1979 with periodic extraction, processing, occasional mobile asphalt plant operations, and hauling of sand and gravel over the past 34 years. In that time several new

subdivisions and private residences have been built adjacent to the pit. Figure 1.1.a and Figure 1.1.b show the homes that existed in 1994 and homes that exist in 2012 near the project area.

The project, as proposed by High Plains Ventures, LLC would expect to employ three full time employees during the winter and 12 full time employees during the peak season. According to Simply Hired website, the average sand and gravel mining salary for this area is \$49,000 per year. If the proposed project ran full time during peak season, this could contribute nearly \$600,000 to the Pinedale economy. According to the American FactFinder, natural resources, construction, and maintenance occupations account for 21.1 percent of employment in Pinedale, second to management, business, science, and arts occupations at 35.3 percent.

The current economic state of the nation and oil and gas production has a dramatic effect on the Pinedale area economy. Numerous affordable housing developments as well as higher end home subdivisions within and around the Pinedale area have been approved by the Sublette County Commissioners and are currently under development (EA 2010). Should the local economy fluctuate as it has historically, local market demand for sand, gravel and asphalt could increase.

### **3.4 Soils and Geology**

The geology of the project site consists of an outwash fan emanating from the Wind River Mountains, composed of six to eight inches of topsoil, three to five feet of glacial till, with the remaining a composition of mostly mixed sand and gravel. The soils on this glacial outwash fan are a fine-grained smectitic mixed with fine-grained calcareous silt, sand and gravel. Soil classification types include: Typic Haplocambids and Typic Torrifuvents. This undulating glacial till covered outwash fan is composed of Wind River Mountain origin interbedded fine- to coarse-grained sands and gravels, with the main body of the Wasatch Bedrock Formation beneath (EA 2010).

### **3.5 Vegetation, Invasive Non-native Species, and Noxious Weeds**

Vegetation on the undisturbed portion of the mine is dominated by sagebrush steppe shrubland, and its associated community that includes various species of wheatgrass, needle-and-thread grass, ricegrass, Indian paintbrush, wildflowers, rabbitbrush, wild buckwheat, cushion phlox, and prickly pear cactus. Ground surface visibility in the inventory area ranges from 10 percent to 80 percent, averaging about 40 percent.

Invasive species are defined in Executive Order 13112 Invasive Species (EO 1999) as those “species whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Noxious weed species, when introduced to an area, are aggressive and often dominate natural communities. They are often able to establish in areas following disturbance. The state of Wyoming has designated 25 weeds as noxious, few of which are known to be a problem within the planning area. Current management includes annual monitoring and treatment of identified infestations (EA 2010).

Other weed species, although not officially designated noxious, are invasive and can be disruptive to native plant communities. These include cheatgrass, halogeton, and Russian thistle. Weeds are present nearby in areas of disturbance including housing subdivisions, well pads,

pipeline rights of way, and along roads. Survey efforts have not located noxious weeds or other weed species within the proposed project area.

### **3.6 Visual Resource Management**

The pit's location atop a relatively flat mesa means it is in a relatively infrequently viewed location. The mesa is about one-half mile wide in the area where the pit is located, with terrain dropping about 100 vertical feet to the east, south and west within a few hundred yards of the pit. About 17 properties zoned for "rural residential" use and ranging from roughly 2 to 10 acres abut the site's western, southern and eastern boundaries. The entire northern boundary is bordered by a property on which another gravel pit operates. Vegetation in the area consists mostly of sagebrush and grasses that vary seasonally from green in spring and early summer to brown, gold and gray in late summer and fall.

The views from the pit and surrounding residences include the surrounding mesa and homes in the foreground. Views from the edges of the mesa afford views of the town of Pinedale and surrounding rural subdivisions and agricultural lands in different directions. Though relatively distant, the mountain ranges surrounding the Green River Valley tend to attract the attention of most observers, due to their scale and perceived scenic qualities. These include the Wind River Mountains about 10 to 15 miles to the east, the Gros Ventre Mountains about 30 miles to the north and the Wyoming Range about 40 miles to the west.

The landscape on the mesa around the pit is open, high desert steppe comprised of hilltop topography lying above and between two drainages. The hilltop comprises two existing gravel mines and surrounding housing developments. Observers of the project area are generally limited to local residents in the area along BD Boulevard, BB Village and West Ridge Lane, West Ridge Estates. These roads do not provide connectivity to major routes or locations popular with tourists or others among the general public who might seek vantage points for sightseeing or scenic vistas.

The project area is visible from surrounding residences to a limited degree, depending on distance, observer elevation and visual screening created by structures and topography. Equipment, facilities and operations occurring in the project area are below the pit's rim and are visible only from the adjacent property located on the southeastern side of the pit where a residence is located about 100 feet from the pit property line.

The pit is not visible, but material stockpiles, modular home, and outbuildings are visible at distances up to about 200 yards when facing north on BD Boulevard. The project area is not visible from 1000 yards south on Wild West Road or from residences south of the project area at distances around 500 yards or greater. Soil topsoil stockpiles on the eastern edge of the project area dominate the view to the west for one residence just east of and adjacent to the property line. The home is around 100 feet from the 10 foot high topsoil berm. When looking from the west, from Ehman Lane, the project is not visible. Soil stockpiles and some of the outbuildings are barely visible and greater than 600 yards away while looking from the north on the closest road (Big Loop Road). From most vantage points, it is difficult to differentiate if the Shriver Pit or project area is visible, because the two pits appear similar and tend to blend together at such distances.

The project location is not visible from the town of Pinedale or from roads or roadside rest areas, designated scenic overlooks, wildlife viewing areas or places frequented by tourists, sightseers or recreationists.

The BLM's Visual Resource Management (VRM) classification and management objectives for this area do not apply because the surface is privately owned. If this were BLM surface, this area would be classified as VRM Class IV as described in the RMP 2008. When within BLM's authority, VRM Class IV areas are managed to allow activities that involve major modification of the existing character of the landscape. The level of change to the characteristic landscape could be high. These management activities may dominate the view and be the major focus of viewer attention. Every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repetition of the basic elements (RMP 2008, p. 2-40).

### **3.7 Solid and Hazardous Waste**

There are no known hazardous or solid waste dumping areas on or near the proposed project area. Hazardous materials are used during the operation and extraction of sand and gravel. The term hazardous materials as used here means: (1) any substance, pollutant, or contaminant (regardless of quantity) listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA, (2) any hazardous waste as defined in the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, and (3) any nuclear or nuclear byproduct as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2001 et seq. Hazardous materials used in any sand and gravel operation include: diesel, gasoline, and oil. The handling and treatment of hazardous materials would be covered in the Spill Prevention, Control, and Countermeasures (SPCC) Plan provided by the operator for review and approval before operating.

### **3.8 Wildlife, Migratory Birds**

Suitable raptor nesting habitat exists within one mile of the project along Hay Gulch, Willow Creek and the New Fork River. The project area is surrounded mostly by housing developments on the east, west and south and adjacent aggregate mine to the north. Much of these habitats lie on private property that has not been surveyed for nesting raptors so it is not known if additional nests exist in the area. Various historic raptor nests that used to exist within one-half mile of the project are no longer active. However, the review completed in 2013 indicated despite the addition of residential homes and operation of the proposed project a red-tail hawk nest is present and has been active within the last three years near the aggregate mine.

A one mile buffer of the New Fork River is also considered Bald Eagle winter habitat and wintering Bald Eagles have been seen in this area. The project is also within a known pronghorn migration corridor and pronghorn have not been deterred due to the presence of the project area or increase in residential development.

The proposed locations were analyzed using relative data on all sensitive species and species of concern identified in the Pinedale RMP ROD, and relevant species on the annual BLM Wyoming State Directors Sensitive Species List.

Table 3.8 lists the BLM Wyoming sensitive and T&E wildlife species typically found in the Jonah Field and their occurrence within the proposed locations. The BLM biologists reviewed and implemented *Instruction Memorandum No. WY-2012-019 for Greater Sage-Grouse Habitat Management Policy on Wyoming Bureau of Land Management (BLM) Administered Public Lands Including the Federal Mineral Estate* for analysis of this EA.

**Table 3.8** BLM Wyoming Sensitive and T&E wildlife species and migratory birds that most likely occur within or near the proposed location.

<b>Species</b>	<b>Status</b>	<b>Habitat</b>	<b>Presence/Absence</b>
<b>American kestrel</b> <i>(Falco sparverius)</i>	Migratory Bird	Grasslands, meadows, deserts, and other open to semi-open regions.	Known occupied nests do not exist within one-half mile of the proposed locations.
<b>Bald eagle</b> <i>(Haliaeetus leucocephalis)</i>	Threatened	Cliffs, sheltered canyons, River systems, and large trees	Habitat does not exist within the Jonah Field and this species only passes through the proposed locations.
<b>Brewer’s sparrow</b> <i>(Spizella breweri)</i>	BLM sensitive	Basin-prairie shrub	Habitat exists within the proposed location. Nests were not observed within the proposed locations.
<b>Burrowing owl</b> <i>(Athene cunicularia)</i>	BLM sensitive	Grasslands, basin-prairie shrub, prairie dog towns	Known occupied nests exist within one-half mile of the proposed SHB 36-22, 113-22 and 114-22 locations.
<b>Ferruginous hawk</b> <i>(Buteo regalis)</i>	BLM sensitive	Basin-prairie shrub, grassland, rock outcrops	Known occupied nests do not exist within one mile of the proposed locations.
<b>Golden eagle</b> <i>(Aquila chrysaetos)</i>	Migratory bird	Shrub steppe and grassland habitats interspersed with scattered hayfields and woodland	Known occupied nests do not exist within one-half mile of the proposed locations.
<b>Greater sage-grouse</b> <i>(Centrocercus urophasianus)</i>	Candidate T&E	Basin prairie shrub, mountain foothill shrub	The proposed SHB 36-22, 84-22 and 104-22 locations exist within two

<b>Reference Pinedale RMP FEIS 3.18. and throughout the Pinedale ROD, including Appendix 18</b>			miles of occupied sage-grouse leks and nesting/early brood-rearing habitat. The proposed locations do not exist within core habitat and the proposed locations is not connective habitat between core areas nor do birds from core areas use the proposed locations as habitat. The proposed locations do not exist within winter concentration areas.
<b>Loggerhead shrike (<i>Lanius ludovicianus</i>).</b>	BLM sensitive	Basin-prairie shrub, mountain-foothill shrub	Habitat exists within the proposed locations. Nests were not observed within the proposed locations.
<b>Long-billed curlew (<i>Numenius americanus</i>).</b>	BLM sensitive	Grasslands, plains, foothills, wet meadows	Habitat exists within the proposed locations. Nests were not observed within the proposed locations.
<b>Mountain plover (<i>Charadrius montanus</i>)</b>	BLM sensitive	Cushion plant communities; low sparse vegetation	Habitat does not exist within one-half mile of the proposed locations.
<b>Peregrine falcon (<i>Falco peregrinus</i>)</b>	BLM sensitive	Tall cliffs	Does not exist within the proposed locations.
<b>Sage sparrow (<i>Amphispiza belli</i>)</b>	BLM sensitive	Basin-prairie shrub, mountain-foothill shrub	Habitat exists within the proposed locations. Nests were not observed within the proposed locations.
<b>Sage thrasher (<i>Oreoscoptes montanus</i>)</b>	BLM sensitive	Basin-prairie shrub, mountain-foothill shrub	Habitat exists within the proposed locations. Nests

			were not observed within the proposed locations.
<b>Trumpeter swan</b> ( <i>Cygnus buccinators</i> )	BLM sensitive	Lakes, ponds, rivers, use reservoirs in wet season	The habitat for this species does not exist within the proposed locations.
<b>White faced ibis</b> ( <i>Plegadis chihi</i> )	BLM sensitive	Marshes, wet meadows, use reservoirs in wet season	The habitat for this species does not exist within the proposed locations.
<b>Black-footed ferret</b> ( <i>Mustela nigripes</i> )	Endangered	Prairie dog towns	Habitat exists within the Jonah Field but this species does not exist within the Jonah Field.
<b>Colorado River fish species</b>	Endangered	Yampa, Green and Colorado River systems downstream of Wyoming	Habitat for this species does not exist within the Jonah Field. The proposed locations exist within the Colorado River drainage basin.
<b>Gray wolf</b> ( <i>Canis lupus</i> )	Nonessential/experimental populations	Greater Yellowstone Ecosystem	Could pass through the proposed locations, but not likely.
<b>Idaho pocket gopher</b> ( <i>Thomomys idahoensis</i> )	BLM sensitive	Shallow stony soils	Does not exist within the proposed locations.
<b>Long-eared myotis</b> ( <i>Myotis evotis</i> )	BLM sensitive	Conifer and deciduous forests, caves, and mines	Could pass through the proposed locations but not likely.
<b>Pygmy rabbit</b> ( <i>Brachylagus idahoensis</i> )	BLM sensitive	Basin-prairie and riparian shrub	Current field sign or species do not exist within one-half mile of the proposed locations.
<b>White-tailed prairie dogs</b> ( <i>Cynomys leucurus</i> )	BLM sensitive	Basin-prairie shrub, grasslands	Known prairie dog towns do not exist within one-half mile of the proposed locations.

Refer to the Pinedale RMP FEIS 3.18 and throughout the Pinedale RMP ROD, including Appendix 18 for more information.

See Appendix V for wildlife biologist's input forms for additional information.

### **3.9 Water Quality; Drinking/Groundwater**

The major streams in the area are Willow Creek which drains into the New Fork River. This region is in the upper Colorado River Basin, for which special regulation has been enacted to control and mitigate river water salinity. The proposed site east of these water bodies and is higher in elevation. Surface water runoff occurs during precipitation events and spring snow melt.

## **4.0 ENVIRONMENTAL EFFECTS**

### **4.1 Air Quality, Ozone, Visibility, Global Climate Change, Noise, and Odor**

#### **4.1.1 Air Quality**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative there would be no additional effects to the current air quality. Aggregate mining and asphalt processing would no longer occur.

##### **Alternative 2 – Proposed Action**

Air quality impacts from the proposed action could continue to occur from pollutants emitted during the mining and crushing of the rock. Additional impacts from the asphalt plant would occur from pollutants emitted during the mixing of asphalt material with the crushed rock and hauling of asphalt, sand and gravel. Pollutants from these activities could include particulate matter and VOCs. Visibility reduction, odor and noise would occur to varying degrees.

Direct impacts to local air quality as a result of this project would be short term and intermittent. Asphalt plant operations are expected to occur not more than 30 days of the year. Mining and processing operations could occur year round. Air quality may be impacted by on and off-site dust generation, batch plant gases, and motor vehicle emissions from on-site mining, processing operations, and hauling.

Emissions from asphalt plants are measured and regulated under the DEQ AQD. Performance tests on hot mix asphalt plant emissions stacks are required for NO<sub>x</sub>, CO, SO<sub>2</sub>, and PM<sub>10</sub>. The most significant source of emissions in an asphalt plant is the mixer. Storage piles and transport may also emit pollutants. While these pollutants can be minimized by technology and proper emission control systems at the plant, and by requiring periodic inspection and reporting, such technology is by no means 100 percent effective. Emissions from the mining, processing, and batch plant operations would be required to meet air quality standards as directed by the DEQ AQD and would require permit approval. Regular maintenance of vehicles would reduce exhaust emissions.

#### **4.1.2 Ozone**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to the current air quality. Aggregate mining and asphalt processing would no longer occur.

#### **Alternative 2 – Proposed Action**

The proposed action lies within the Upper Green River Ozone Non-attainment area. It is the BLM's goal under these circumstances, to seek every reasonable opportunity to reduce emissions. The BLM is working with the DEQ to determine the best process for addressing Conformity for BLM management actions in the nonattainment area. Best available control technologies (BACT) are required in the UGRB. In addition, the proponent would be required to comply with all applicable local, state, and federal air quality laws, statutes, regulations, standards and implementation plans, including WAAQS and NAAQS.

#### **4.1.3 Visibility**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to the current air quality. Aggregate mining and asphalt processing would no longer occur. However, dust emissions could occur if the mine was not properly reclaimed.

##### **Alternative 2 – Proposed Action**

Visibility reduction due to dust, diesel exhaust, and water vapor generated from operations could occur. The main potential sources of dust would include the processing plant, stockpiles, traffic on internal and external haul roads, and overburden stripping and storage. The dust sources are generally dispersed sources rather than specific point sources. Diesel exhaust could occur while operating diesel engines. The diesel engines would be subject to DEQ air quality regulations. Water vapor that is emitted from the batch plant operation disperses rapidly. Any fugitive dust issues would be addressed in the mining plan and controlled using a variety of processing water sprays, haul road watering and paving of roads leading to and from the property. Water sprays and mists can be used as dust suppression measures as well as appropriate use of dust filter systems on asphalt plants. Preventing dust generation or capturing dust as it is generated is essential to successful dust management. The use of enclosed fixed conveyors, water sprays and mists, regular maintenance, and appropriate dust filter systems on asphalt plants would help control emissions from the plant. Opacity and PM<sub>10</sub> testing on hot mix asphalt plants is a requirement in the DEQ AQD permit.

#### **4.1.4 Deposition**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to the current air quality. Aggregate mining and asphalt processing would no longer occur.

##### **Alternative 2 – Proposed Action**

Sand and gravel mining and processing activities, by their nature generate dust. Dust arises predominantly from inert soil and rock materials. There are currently no EPA guidelines relating specifically to dust deposition thresholds for inert mineral dust. The EPA and DEQ set limits on emissions to air arising from asphalt plants. Deposition may impact dust-sensitive locations such as schools, retirement homes, industries or hospitals and deter the use of amenity areas by local residents. Once present in the open air, dust is extremely difficult to remove and the only

realistic option is to allow it settle back to the surface in its own time; however, it often travels long distances and is widely distributed and diluted as this settling occurs. The location at which settling occurs may be difficult to accurately predict and impossible to control. The AQD sets limit values for sulphur dioxide, nitrogen oxide particulate matter and lead in ambient air. Emissions from asphalt plants regulated under the AQD would limit atmospheric deposition of nitrogen and sulfur compounds.

#### **4.1.5 Global Climate Change**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to global climate change. Aggregate mining and asphalt processing would no longer occur.

##### **Alternative 2 – Proposed Action**

GHGs typically associated with climate change would be emitted during the mining/processing of sand and gravel, and from vehicular traffic, which is expected to last up to ten years; and during the roughly 30 days that the asphalt batch plant operations would occur each year. It is unknown what the net direct or indirect effects of the proposed action would have on climate.

Significant uncertainties are associated with estimates of Wyoming GHG emissions, compounded by the fact that no regulations require regional tracking of CO<sub>2</sub> or CH<sub>4</sub> emissions. Therefore, estimates based on GHG emissions from the proposed action measurements in Wyoming are not possible at this time.

#### **4.1.6 Noise**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to the current noise level.

##### **Alternative 2 – Proposed Action**

Noise attributed to the operations would include mining, crushing, and processing activities. Noise control can be achieved by use of berms for screening, internal traffic routing: optimizing vehicle reversing requirements which would reduce noise associated with alarms, minimizing height which material drops from plant and machinery and providing regular maintenance for plant and machinery. Enclosures, walls, or “blanket” type sound barriers can reduce the amount of noise that leaves the site. EPA’s guidance for noise in relation to quarry developments and ancillary activities recommends that 95% of all noise from the activities on site should not exceed 55dBA (EPA 2006). The project proponent would be subject to enforcement of state and local noise ordinances.

#### **4.1.7 Odor**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to the current odor level.

##### **Alternative 2 – Proposed Action**

Odor attributed to the operations would include odor from the diesel engines, hot mix asphalt plant, and during transportation of the hot asphalt. Asphalt odor can become an annoyance and even a concern for residents living near this operation. The perception of odors would vary with quantities of pollutants emitted, distance from the source to the receptor, wind speed and

direction, other atmospheric conditions and the range of sensitivity among receptors, i.e., certain individuals might have greater sensitivity or tolerance than others.

New technologies and improved business practices are capable of reducing the adverse impacts of odors more than in the past. Using the most advanced plant designs and locating the plant within the mine area, where practical, and taking into account prevailing wind directions can reduce impacts. The asphalt plant would be placed in the northwest corner of the original Binning Pit where an asphalt plant was previously placed, at a position that maximizes, to the extent possible, its distance from residences that may be downwind (assuming a prevailing westerly wind). Odor from the asphalt plant could occur for up to 30 days between May and October.

Emissions estimates for the proposed project could be prepared through modeling and the DEQ permitting process, but variables such as wind speed and direction, atmospheric conditions and timing of emissions and pit activities would likely produce unreliable projections. Odor is less measurable, being the product of actual emissions concentrations, atmospheric conditions and the sensitivity and perception of individual receptors. Actual effects of emissions/odors could be obtained solely through field measurements and observations during facility operations. The AQD sets limit values for odorous emissions in ambient air.

## **4.2 Cultural Resources**

### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no effects to known significant cultural resources.

### **Alternative 2 – Proposed Action**

The cultural resources staff reviewed the proposed action at an onsite inspection on August 27, 2010. Additionally, a class III cultural inventory and associated report assessed and evaluated the proposed undertaking's effect on cultural resources in the project's Area of Potential Effect (Kail 2010). Cultural resource sites were not identified or recorded within the inventoried area. It has been determined no adverse effects would occur to known National Register-eligible cultural resources by implementing the proposed action. Should cultural resources be discovered they would be managed under the Plan for Treating Unanticipated Discoveries for the BLM Pinedale Field Office, which can be found in Appendix V of this document.

A paleontological resource locality was discovered less than one mile north of the proposed gravel pit and there is a likelihood of paleontological materials at the pit. BLM staff would be granted access during regular business hours to inspect gravel sources for fossil material. Should paleontological resources be discovered they would be managed under the Potential Fossil Yield Classification System, in Appendix V of this document. The report of the paleontological inventory can also be reviewed in Appendix V of this EA.

### **4.3 Socio-Economic**

#### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no contributions to the economics in the Sublette County area.

#### **Alternative 2 – Proposed Action**

Effects to the socio-economics of the homes and lands adjacent to the project are nearly impossible to predict, especially with the current unpredictable and fluctuating market. This pit was established in 1979 with periodic extraction, processing, occasional mobile asphalt plant operations, and hauling of sand and gravel over the past 34 years. The proposed activity would be similar in scope and duration to the activity that has been occurring in the pit since its inception in 1979 and during the residential development of the surrounding area. Within this time span, several new subdivisions and private residences have been built adjacent to the pit. Figure 1.1.a and Figure 1.1.b show the homes that existed in 1994 and homes that exist in 2012 near the project area.

The project, as proposed by High Plains Ventures, LLC would expect to employ three full time employees during the winter months and 12 full time employees during their peak season. According to Simply Hired website the average sand and gravel mining salary for this area is \$49,000 per year. If the proposed project ran full time during peak season, this could contribute nearly \$600,000 to the Pinedale economy. According to the American FactFinder, natural resources, construction, and maintenance occupations account for 21.1 percent of employment in Pinedale, second to management, business, science, and arts occupations at 35.3 percent.

The current economic state of the nation and oil and gas production has a dramatic effect on the Pinedale area economy. Numerous affordable housing developments as well as higher end home subdivisions within and around the Pinedale area have been approved by the Sublette County Commissioners and are currently under development (EA 2010). Should the local economy fluctuate as it has historically, local market demand for sand, gravel and asphalt could increase. It is also likely that if the demand for these products remains, other nearby gravel sources would likely be explored.

### **4.4 Soils and Geology**

#### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no effects to soil and geological resources.

#### **Alternative 2 – Proposed Action**

Most of the soil on site would be stockpiled and used as visual screening material. Erosion controls would be installed where the topsoil has the potential to wash down slopes and vegetation would be established on the topsoil to also minimize topsoil loss during mining operations. Topsoil stockpiles would be seeded annually if needed. As the mine develops, concurrent reclamation of the pit high walls would occur. The topsoil would be used for later application during the reclamation phases of this project. Re-introduction of permanent vegetation would provide native species preference, suitable slope control, and enhance wildlife habitat.

Geologically, approximately 887,325 cubic yards of sand and gravel would be removed from the project. This non-renewable resource eventually would be exhausted and no further mining would take place. This would change the surface topography. The portion of the project area that was previously undulated would become depressed. The depression would be contoured to soften the depression and allow homes to be built, although economic conditions could change the type and timing of future land uses. Drainage from the site would be designed so that it would not affect the surrounding properties with respect to runoff or potential erosion.

#### **4.5 Vegetation, Invasive Non-native Species, and Noxious Weeds**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no further effects to vegetation resources.

##### **Alternative 2 – Proposed Action**

Vegetation from the pit area would be stripped and stockpiled within the topsoil along the east wall of the pit and would later contribute to the seed source and organic material in the soil during reclamation. Disturbances in similar areas have been reclaimed successfully with the techniques proposed in the project's reclamation plan and there would be no reason to doubt success at this location. However, it could take more than 30 years for the sagebrush species to return to its pre-disturbance height. Ultimately, the landowner's preferences and management approach would determine the types and extent of vegetation on the property.

Soil disturbance in the project site could allow the establishment of weeds including cheatgrass and other invasive species. These weeds, once established, could spread from the project site into adjacent undisturbed areas. Mitigation measures to reduce any possible affects to the population of noxious weeds and invasive non-native species would include regular inspection for any noxious or invasive non-native species. Vehicle travel into the project site from other areas that may contain noxious and invasive non-native species throughout the county could introduce noxious or invasive non-native species into the site. Monitoring the project area would ensure early detection of any noxious and invasive species in the project area and provide an opportunity to implement controls. Sublette County Weed & Pest District personnel periodically monitor gravel pits for weed infestations. Aggressive treatment of these species, should they occur, would ensure minimal chance of these plants spreading.

#### **4.6 Visual Resource Management**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no further effects to visual resources.

##### **Alternative 2 – Proposed Action**

The project completed as designed would affect the views experienced by homeowners adjacent to, south and east of the project area. Homeowners on BD Boulevard would see trucks driving to and from the pit on BD Boulevard, possible dust being kicked up from the truck traffic, and steam rising from trucks transporting mixed asphalt. Most of the homeowners at BD Boulevard that live within a few hundred yards south and southeast of the pit will continue to have a view of the entrance of the pit, stockpiles of material, shops, and any heavy equipment that is not within the pit. They may also observe steam rising from the hot mix asphalt plant, or dust

emanating from the operations. Homeowners who live further than 200 yards south of the pit and south of BD Boulevard would not be able to see the pit but may observe a steam plume from the hot mix asphalt plant, or dust emanating from the operations if dust controls are not properly implemented.

Residents who live north of the project area would most likely be drawn to look at the mountains and not toward the south at the project area. There is substantial distance (about 2700 feet) between the pit and the nearest residence on the north side of the project area. If residents looked to the south, they might see distant low stockpiles of material, although the stockpiles would be difficult to distinguish from other residences and the Shriver pit material stockpiles.

Residents living west of the proposed action would not be able to observe the project area.

Residents living east of the proposed action, when looking west, will only see a large soil stockpile of topsoil which screens the project area. This stockpile dominates the view of the landscape because it is in the foreground when viewed from such vantage points.

The Operator would mitigate visual impacts by strategically placing topsoil in berms along the edges of the operations to aid in visual screening, vegetating the berms, and concurrently reclaiming previously mined areas as mining begins in new areas. The addition of facilities and the resulting change in vegetation would attract viewer attention from nearby residences that are at elevation higher than the pit, but would not dominate the viewshed.

The project site is above the elevation of the town of Pinedale and located mostly below the level of the surrounding ground. It would be somewhat screened from view at most vantage points. Mineral materials mining is short-term and final reclamation would mitigate visual impacts in the long term, with the exception of the change in the landform, which would likely result in a depressed area that was formerly characterized by level or gently undulating terrain. Pit side slopes would be contoured to a slope no steeper than 3 to 1 in an effort to blend the pit area with the surrounding landscape and reduce the visual contrast that can be created by steep slopes. All debris and unused equipment would be removed or placed strategically so that it does not distract the casual observer.

## **4.7 Solid and Hazardous Waste**

### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no hazardous materials at the project area.

### **Alternative 2 – Proposed Action**

Oil products such as gasoline, diesel fuel, asphalt, and motor oil would be utilized during mining, crushing, and asphalt mixing operations. Hot mix asphalt is generally a combination of 95% aggregate (rock, gravel, sand, or stone) and 5% asphalt cement. Asphalt/bitumen is typically stored and transported at temperatures around 150°C (300°F). Sometimes diesel oil or kerosene could be mixed in before shipping to retain liquidity; upon delivery, these lighter materials would be separated out of the mixture if used. This mixture is often called bitumen feedstock. Some dump trucks route the hot engine exhaust through pipes in the dump body to keep the material warm. The backs of tippers carrying asphalt/bitumen, as well as some handling

equipment, are also commonly sprayed with a releasing agent before filling to aid release. Diesel oil is no longer used as a release agent due to environmental concerns.

SPCC plans would be required by EPA and DEQ regulations for facilities that store oil products and chemicals. EPA requires regulated facilities to develop and implement an SPCC plan to avoid spills and minimize impacts of spills on public health and the environment. The plans must include provisions for oil products and hazardous chemical spill prevention, spill response, and SPCC training. Any spills on site or roadways would be addressed as required by DEQ or other authorities. If required by DEQ or other enforcement agencies, contaminated materials would be treated in place or off-site and/or transported to a facility approved by DEQ for treatment, storage or disposal of that type of material. Spills would be minimized by the Operator's plan to store hazardous materials in appropriate containers and if required, within secondary containments.

#### **4.8 Wildlife and Migratory Birds**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to the wildlife.

##### **Alternative 2 – Proposed Action**

The current 2013 review indicates that despite the addition of residential homes and operation of the proposed project and adjacent aggregate mine a red-tail hawk nest is still present and has been active within the last three years. Because the proposed project has been in existence for 34 years and residential growth in the area has been occurring for several years, it is anticipated that wildlife will not be adversely affected by the proposed project. Wyoming Game and Fish Department (WGFD) were also consulted and did not have concerns and did not provide conditions of approval for wildlife. BLM concurs with WGFD and do not anticipate wildlife will be effected by the proposed project.

#### **4.9 Water Quality; Drinking/Groundwater**

##### **Alternative 1 – No Action Alternative**

Under the No Action Alternative, there would be no additional effects to drinking or groundwater.

##### **Alternative 2 – Proposed Action**

The major streams in the area are Willow Creek which drains into the New Fork River. This region is in the upper Colorado River Basin, for which special regulation has been enacted to control and mitigate river water salinity. The proposed action will utilize groundwater from the existing onsite groundwater wells (P46272.0W and P73340.0W) for dust control, crushing operations, and during asphalt mixing operations. The proponent is estimating that the proposed project will utilize 220,000 gallons of water per year for up to 10 years. This water usage was a best estimate assuming full proposed mining and asphalt mixing. The groundwater extracted is not expected to be returned to the watershed. Total water consumption is estimated .67 acre feet per year (220,000 gallons per year) or 6.70 acre feet of groundwater would be used during the life of the project. The U.S. Fish and Wildlife Service was

consulted to determine if this use could impact the bonytail, Colorado pikeminnow, humpback chub and razorback sucker or affect their critical habitat in the Colorado River system.

No surface disposal of water is proposed, so no direct impacts to surface water quality are anticipated from the proposed activity. However, construction and development activities, including grading, earth moving, stockpiling, excavation, and asphalt mixing, can affect surface water quality through increased sedimentation and runoff. Storm Water Pollution Prevention Plans (SWPPP) and Spill Prevention, Control and Countermeasure (SPCC) plans required by the EPA should prevent any spills from reaching surface water. Surface water impacts could occur from increased erosion and sedimentation from construction related runoff (i.e., non-point source pollutants). Impacts from sedimentation would not be significant if the operator complies with the DEQ water quality rules and regulations and with the SPCC Plan.

#### **4.10 Cumulative Effects**

The cumulative effects analysis area is the High Plains Ventures, LLC project site which consists of 40.11 acres, and the time frame is approximately 10 years. Mining of the aggregate minerals is considered short term. Short term effects would be mitigated once sand and gravel sources have been depleted and the mining stops.

Cumulative effects of total airborne dust, processing pollutant emissions, vehicular emissions, and noise would also occur, to some degree and intermittently, at this site. Operational dust abatement procedures would be designed into the mine plan and the concurrent phased reclamation should ensure that dust from the proposed mine would not significantly affect air quality in the local or regional area. No long term air quality effects would occur once the sand and gravel sources have been depleted and the mining stops.

Some neighboring residents have expressed concerns about odors that might be generated by the asphalt plant. While the asphalt plant is in operation the asphalt plant and trucks carrying asphalt may emit odors. The mobile asphalt plant is expected to operate up to 30 days per year. The limited schedule for the asphalt plant may result in odors intermittently noticeable to various receptors while in operation. The asphalt plant would be placed in the far northwestern corner of the pit to maximize distance to residences. The distance from residences, and variability of wind and weather conditions should ensure that no individual or group experiences long-term or continuous exposure, if any. Wind directions and speeds in the Pinedale area are variable, which would aid dispersion; thus, it is anticipated that these cumulative effects should be minimal and brief at or near the project site. Figure 3.1.1.a DEQ Wind Rose shown on page 19 indicates averages for the year. The proposed schedule would not create year-round odors that a permanent asphalt plant would emit.

Cumulatively, other current local air contaminant sources include agricultural activities, soil disturbance, livestock operations, oil and gas operations, operations from the adjacent gravel pit, dust from dirt roads, residential wood stove particulates, smoke and particulate matter from wildland fires, county road traffic, a nearby state highway, and wind-blown dust from disturbed or vacant land. Development of this sand and gravel operation site and asphalt mixing plant could add to these sources of potential contaminants but would be regulated under the DEQ AQD.

The BLM in cooperation and consultation with DEQ, EPA Region VIII, and other affected agencies, would continue to track changes in total NO<sub>x</sub> emissions from sources (new, abandoned, or modified) within the airshed of the BLM PFO. This tracking would continue until the Wyoming DEQ AQD review of its State Implementation Plan (SIP) for Visibility Protection, the Southwest Wyoming Technical Air forum, or other information source(s), provide recommendations with supporting technical analysis regarding regional visibility impacts.

The proposed action lies within the Upper Green River Ozone Non-attainment area, but involves emissions of ozone precursors which are well below the established de minimis thresholds required for a determination of conformity per the Wyoming air quality standards and regulations, effective after the grace period ends on July 20, 2013. Nevertheless, it is the BLMs goal under these circumstances to seek every reasonable opportunity to reduce emissions.

No cumulative effects are anticipated for cultural resources. Cultural Resources have been evaluated and inventoried in the projects area.

The Socio-Economics in the region have been influenced in large by oil and gas production in the region and have historically fluctuated as oil and gas activities have fluctuated. The proposed activity was established in 1979 with periodic extraction, processing, occasional mobile asphalt plant operations, and hauling of sand and gravel over the past 34 years. The proposed activity would be similar in scope and duration to the activity that has been occurring in the pit. It is possible that the asphalt plant may have an effect on property value during the 30 days that it may be in use. Should the local economy improve, the local market demand for sand, gravel and asphalt could increase, and the demand for more housing could also increase which would also drive the cost of housing higher. Demand for housing during influx of oil and gas production would be expected to have a larger socio-economic effect on the prices of homes in the immediate area.

The top soil at the proposed site has been stockpiled and will continue to be stockpiled and more minerals are extracted. Geologically, approximately 887,325 cubic yards of sand and gravel are expected to be removed during this project. This non-renewable resource would eventually be exhausted and no further mining could take place. This would substantially change the surface topography. The topsoil would be used for a later application during the reclamation phases of this project.

Much of the vegetation in the surrounding area has been mowed and the active mine area does not contain vegetation. Vegetation at the project area is minimal. Monitoring new reclamation and aggressive weed control programs are feasible and prudent measures available to minimize weeds and invasive plants. Thus, the proposed project's potential to contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area; or actions that may promote the introduction, growth, or expansion of the range of such species, would be minimized with the implementation of the control measures identified in Appendix IV Conditions of Approval.

High Plains Ventures, LLC would decrease their chances of an infestation of noxious and invasive species along with other undesirable species by utilizing a certified or registered seed (weed free) when reclaiming the disturbed area.

During mining, the operation will create a large open pit. Several methods would be employed to mitigate the visual impacts of the pit and associated equipment. Vegetated soil berms would be used to block the view of the pit or blend it into the surrounding environment. At the same time, most of the mining operation and asphalt plant operations would occur within the pit and out of sight of the general public. All debris and unused equipment would be removed or placed strategically so that it does not attract the attention of the casual observer. The visual change in terrain would remain permanent even when final reclamation is complete.

Solid and Hazardous wastes associated with asphalt plant and vehicle maintenance could be generated. The oil products such as gasoline, diesel fuel, kerosene, asphalt, and motor oil should be utilized during the mining, crushing, and asphalt mixing operations. SPCC plans have been required in the past for hazardous materials. Any waste generated should be appropriately containerized and disposed of in a permitted facility. If appropriately managed, no cumulative effects should occur by the use of solid or hazardous materials or generated solid or hazardous waste. The proposed project operations would comply with all applicable federal and state laws concerning hazardous materials and the operator's SPCC plan. Minimal impacts are anticipated with compliance of the hazardous materials regulations and SPCC regulations.

The proposed project has been in existence for 34 years and residential growth in the area has been occurring for several years. Various historic Raptor nests existed within one-half mile of the project but are no longer present. One redtail hawk nest is still present and has been occupied within the last three years. Much of the habitats within one mile of the project area have not been surveyed, so it is not known if there are or additional nests in the area. Bald Eagle winter roosting habitat and wintering Bald Eagles have also been seen in the area of the New Fork River. A delineated pronghorn migration corridor passes through the project area and surrounding subdivision. The current proposal is not expected to further effect the wildlife or migratory birds as it is located within and surrounded by residential homes and adjacent gravel mine.

Surface water could have historically been impacted by the project area, adjacent sand and gravel mine, and the construction of homes and roads in the area. The project will be required to comply with the current Wyoming stormwater regulations and permits. Groundwater will be utilized

Traffic from gravel and asphalt transportation, increasing residential populations, and general increased activity all contribute to traffic congestion in this area. Coordination with the Sublette County Planning and Zoning Commission and thoughtful development of the roads associated with this resource would address necessary controls and minimize impacts of increased traffic. Long term impacts would include increased traffic when the mine is reclaimed, homes have been built and are inhabited, if that is the ultimate fate of the property, as the landowner has suggested.

Operator mitigation measures and conditions of approval established by the BLM and DEQ would lessen or alleviate most of the potential effects to all resources. The Operator committed mitigation measures are included in Appendix III, and conditions of approval are included in Appendix IV.

## **4.10 Residual Effects**

High Plains Ventures, LLC is expecting to recontour the mined area so that a housing development similar to others nearby can be designed within the mined area. It is reasonably expected that the mined area would change from undulating or flat to slightly depressed topography. Currently the mine area is zoned for agriculture. In order to develop the closed mine site into a housing development residential subdivision zoning would need to be obtained. At minimum the mined area would be reclaimed in compliance with the DEQ LQD permit requirements.

## **5.0 TRIBES, INDIVIDUALS, ORGANIZATIONS, or AGENCIES CONSULTED**

The BLM consulted federal, state, and local agencies, and invited comments from the general public during the development of this environmental assessment.

### **5.1 Federal, State, and Local Agencies**

Wyoming Department of Environmental Quality, Land Quality Division  
Wyoming Game & Fish Department  
Sublette County Planning and Zoning Commission  
Sublette County Board of County Commissioners

### **5.2 Others**

Neighboring land owners and affected and interested public were invited to comment. See Appendix II for public comments received.

## **6.0 LIST OF PREPARERS**

Cindi Etcheverry, Environmental Protection Specialist  
Tim Zebulske, Natural Resource Specialist Supervisor  
Kirk Rentmeister, Geologist  
Dave Crowley, Archeologist  
Dale Woolwine, Wildlife Biologist  
Greg Noble, Assistant field Manager, Minerals and Lands  
Sheryl McCulloch, Planning & Environmental Coordinator

## **7.0 REFERENCES**

(RMP 2008) *BLM Resource Management Plan and Final Environmental Impact Statement for the Pinedale Field Office* (2008)  
BLM Manual Handbook (H-1790-1) preparing NEPA documents

(EA 2010) BLM, Case File WYW178622 – EA Number WY-100-EA10-528, High Plains Ventures Sand and Gravel Pit (2010)

Sublette County Website GIS, Website: <http://maps.greenwoodmap.com/sublette/mapserver/map>

State of Wyoming, Department of Environmental Quality  
Land Quality Division, Website: <http://deq.state.wy.us/lqd/>  
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(AQD 2011) Annual Summary of Meteorological and Air Quality Data at the Wyoming Department of Environmental Quality, Sublette County Wyoming (January 1 – December 31, 2011), Website: <http://www.wyvisnet.com/reports.aspx>  
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(CEMEX 2012) History/Facts copyright 2012 CEMEX S.A.B. de C.V. All rights reserved. Website: [http://www.cemexusa.com/Products\\_Services/AggregatesHistoryFacts.aspx](http://www.cemexusa.com/Products_Services/AggregatesHistoryFacts.aspx)

(07-11) American FactFinder  
[http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_11\\_5YR\\_DP03](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP03)

(Salary Calculator) Simply Hired  
<http://www.simplyhired.com/a/salary/search/q-sand+%26+gravel+mining/1-pinedale%2C+wyoing+82941>

## **APPENDIX I**

### **High Plains Ventures Proposal**

March 7, 2012

High Plains Ventures LLC.

PO Box 2005

35 B D Blvd

Pinedale, WY 82941

P(307)367-4254 f(307)367-4251

Bureau of Land Management

Pinedale field office

ATTN: Greg Noble

Mr. Noble,

As per our phone conversation this week in reference to amending High Plains Ventures mining plan, this letter is intended to notify the BLM that HPV at this time requests an amendment to its mining plan, to include an asphalt plant. Originally it was not our goal to have this at our location. We have after previous seasons realized with present operations it will take longer than originally anticipated to reach the goal of depleting this source. It is still our goal to subdivide the property into home sites after reclamation.

High Plains Ventures LLC. will be transferring ownership to myself. I Mike McCullough, have been the operator of this mining project from inception to present and will remain the operator to instill HPV's operator committed mitigation measures. It is also my goal to continue to diligently work together with surrounding home owners in order to keep good relations. The current measures that are in place will continue as is and any additional measures will be added.

This would include minimal change to current operations. However, the most notable change would be of a substantial flume of steam rising into the air.

Another substantial change would be the odor of asphalt being processed.

Truck traffic should not be affected by this change, simply because when paving is being done we would not be hauling gravel at the same time.

Hot mix plant would be on site an average of one hundred days per year.

We don't anticipate a substantial change in noise levels as hot mix plants are at about the same decibel as a crusher and the two plants would not run simultaneously. The material would be crushed first then stockpiled, before plant mix operations would begin.

The hot mix plant will run 4-5 days consecutively for most projects. However, if we obtained a large highway project this would change.

At this time there is one local source for asphalt and that source will reach depletion at some point leaving Pinedale without a source for upcoming projects. Bringing an asphalt plant to our location would

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March 7, 2012

High Plains Ventures LLC.

PO Box 2005

be a boost to the local economy by bringing jobs into the area. Eventually, this will also bring more home sites to the area.

With all things considered, the ability to have a hot mix plant at our location would speed the process of mining the gravel from our pit and would help reach the goal to reclaim the area and subdivide, and be completed with gravel operations sooner. This will bring property values up for the surrounding area.

We at High Plains Ventures will be diligent and continue working together with all regulatory agencies to remain in compliance at all times. We appreciate your consideration in our amendment. If there is anything we can do to assist in this process feel free to call me at any time.

Thank you,

Mike McCullough

~ 1 ~

High Plains Ventures, LLC.  
409 W. Adams, Suite D  
Riverton, WY. 82501

To: BLM, Pinedale Field Office  
1625 West Pine Street  
P.O. Box 768  
Pinedale, WY  
C/O Cindi Etcheverry, EPS/HazMat/Safety

RE: Information concerning the Asphalt Operations at High Plains Ventures, LLC. Sand and Gravel Mining Operation, Located at 35 BD Boulevard, Pinedale, WY.

1. What is the type and size of the mobile asphalt plant that you anticipate using?
  - A. We are anticipating using an LPG heated Cedarapids 8828 Drum Drier Plant with pollution controls and a current DEQ Air Quality permit.
2. How much asphalt do you propose producing? In a day? In a year?
  - A. This plant is capable of producing 200 tons per hour and 1,500 tons in a day.
3. How many truck trips would be required to accommodate this production?
  - A. 1,500 tons of asphalt would require 68 trips with side or belly dump trailers.
4. What is the load capacity of the belly dump trailers?
  - A. Belly and side dump trailers can haul 22 tons of asphalt legally on county and state roads.
5. Where do you plan on placing the asphalt plant?
  - A. We plan to set the plant in the northwest corner of the original Binning Pit where an asphalt plant was previously.
6. When do you plan on bringing in the asphalt plant each year and how many days per year will it be on site and operating?
  - A. Normally we would expect to bring the plant in and set it up between May 15<sup>th</sup> and October 15<sup>th</sup>, and operate the plant for 1 month each season. In a normal year we would suppose 2 projects of 10,000 tons each.(Approximately)
7. What additional equipment does the asphalt plant require in addition to sand and gravel extraction/hauling equipment?
  - A. Support equipment will include 2 front end loaders, water truck (for dust control on road), generator, possibly a backhoe and skidsteer.

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8. Are there going to be dedicated asphalt hauling trucks, and if not, is there washing associated with transferring use back to sand and gravel hauling? Will mineral oil be used to wash trucks? Please describe.
  - A. The trucks will be dedicated. No mineral oil will be used. We intend to use a citrus cleaner (if necessary), which is environmentally friendly.
9. Where will the water supply to wash the gravel come from?
  - A. We have a well on site to fill a large elevated water storage tank. The water can be transferred with a pump and line or with the water truck on site.
10. How will that water be managed?
  - A. The water will be recycled into a storage tank and a lined containment pit.
11. What kind of asphalt projects (i.e. parking lots, bike paths, etc.) are expected?
  - A. Seasonal and occasional Government contracts. I would expect to be doing some private driveways, parking lots, private roads, runways at airports, and some road construction.
12. What are your hours of operation going to be during asphalt operations?
  - A. We will be working normal operating hours of the sand and gravel operations. The exception would be personnel starting up the plant and heating up the mix so it is ready when the trucks show up to start hauling. These hours would be 7:00AM to 7:00PM.

SAND AND GRAVEL OPERATIONS:

13. How much sand/gravel is estimated to be left within the 39.9 acres?
    - A. We will leave enough pit run material to contour the slopes around the perimeter of the pit, and possibly contour the lots and build roads for the future planned subdivision. There is no subdivision designed now, but will be in the future as we approach the end of the mining operations. Some of this will be accomplished during reclamation also.
  14. How much sand/gravel is mined in a typical year?
    - A. We estimate 125,000 cubic yards would be an average.
  15. How long do you expect the sand/gravel reserve to last?
    - A. 5 to 10 years.
  16. How many years do you expect to operate the pit?
    - A. We expect to operate the pit up to 10 years.
  17. Are you able to obtain an alternate route so that BD Boulevard would not be used?
    - A. Not at this time.
-

~ 3 ~

18. How many employees are going to man the operation?
  - A. There would be 3-5 employees on site.
  
19. How many truck loads will be going in/out per day?
  - A. Approximately 20 loads per day.
  
20. What are your hours of operation going to be?
  - A. Normal business hours would be 7:00 AM. To 7:00 PM.

NOTE:

This plant is an LPG Heated Asphalt Plant, approved by DEQ Air Quality, with Pollution Control.

In the case where we might be using the Warm Mix Asphalt Plant: At some point specifications may be written by the governmental agencies whereby a Warm Mix Asphalt Plant would be specified or allowed to be used. So far, in most of the existing specifications, a Hot Mix Asphalt Plant has been specified for roads, and other paving. I am sure that in the near future, when this process has evolved to being specified and proven, we would look very strongly at converting over to this process.

High Plains Ventures, LLC. Is an "Environmentally Friendly" company, and is very aware of how delicate our environment is. We have a good working relationship with DEQ Land Quality Division and continuously strive to protect our surroundings.

We have been and will continue to be a good neighbor to the adjoining landowners.

Prepared by Randell D. Archer  
January 16, 2013

## **APPENDIX II**

### **Public Comments**

Name	Category	Comment	Response	Location in EA
Patrick and Ruth Mack	Transportation	Traffic on busy roadway.	Truck traffic on roads will be analyzed in the EA.	2.2, 3.1, 4.1, 4.9, Appendix III, IV
	Socio-Economic	Decreasing property values.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9
	Air Quality, Noise, & Odor	Noise pollution as well as air pollution. Dust and poisonous emissions from the petroleum products.	Comment noted. Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III, IV
	Water Quality	Concerns over groundwater contamination.	Groundwater will be analyzed in the EA.	3.7, 4.7, Appendix III, IV
	Wildlife	Upsetting the migration of antelope and deer in the area.	Wildlife will be analyzed in the EA.	3.8, 4.8
	Alternatives	Placing the plant where there would not be as large of impact on homes, schools, wildlife.	Consideration of a non-Federal connected action is limited in NEPA analysis, because the NEPA process is focused on agency decision making. (40 CFR 1500.1( c ), 40 CFR150.18, 40 CFR 1508.23)	2.2, 2.3, 4.9
Jack Hunter & Jeanne Brown	Wildlife	Proposal is in the middle of an already compromised Pronghorn migration route. Increased industrial odors and toxic fumes from the plant would further compromise this already impacted habitat for migrating Pronghorn. Proposal is within 2 miles of a large Sage Grouse lek and will have a negative impact on this declining species. Sage grouse regularly make use of the habitat directly surrounding the existing gravel pit.	Wildlife will be analyzed in the EA.	3.8, 4.8
	Wildlife	This issue acknowledged in the EA completed in 2010 for the expansion of the gravel operation and would surely be exacerbated by this highly disruptive activity.	Wildlife will be analyzed in the EA.	3.8, 4.8

Air Quality, Noise, & Odor	BLM should allow time for DEQ air quality permits to be in place before making a decision about the proposed operation.	The proposed project will be required to obtain updated mining and updated air emission permits associated with the mining operations. The hot mix asphalt plant will be required to comply with a mobile air permit. The Wyoming Department of Environmental Quality will be lead agency for permitting.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III, IV
Socio-Economic	The addition of an asphalt plant to the existing operation will increase noise and truck traffic, adding toxic fumes and strong odors to the already undesirable nature of the operation. Surrounding property values will be negatively impacted. Research suggests that the addition of an industrial operation of this type can reduce adjacent property values by as much as 56%. Asphalt and concrete plants are near the top of the list of those operations which most impact property values. Allowing this project forces me to subsidize the asphalt operation through reduced property value and loss of equity I have in my home, my rental property and vacant land which is all within 1 mile of the proposed operation.	Air quality is analyzed in the EA. Socio-economics will be analyzed in the EA. Truck traffic on roads will be analyzed in the EA.	3.1.7, 3.3, 4.1.7, 4.3, 4.9

Public Health	BLM may have found that the gravel pit did not adversely affect the residence of this subdivision in 2010, those exposed to the constant noise, dust and truck traffic might respectfully disagree. The addition of toxic fumes from the bitumen used in the manufacture of asphalt and the increased dust level caused by a larger operation will certainly affect the health and welfare of the neighboring families including children, adults with respiratory conditions such as asthma and COPD. The proposed asphalt plant will negatively impact my personal health and that of my family.	Comment noted. Air quality will be analyzed in the EA.	2.2, 3.1, 4.1, 4.9 Appendix III, IV
Air Quality, Noise, & Odor	Asphalt plants admit high quantities of VOCs which will further aggravate the ozone issues Sublette county is already experiencing. Ozone is a known respiratory irritant to the elderly, children and those that suffer from respiratory ailments.	Comment noted. Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III, IV
Socio-Economic	The jobs created would be few for Sublette County residents while many of those employed on the public projects this plant might support would be from surrounding states and communities outside Sublette county.	Comment noted. This issue is outside the scope of this project.	3.3, 4.3, 4.9
Socio-Economic	There is already an asphalt plant in operation that is supporting those few public projects that are underway.	Need for asphalt plant will be analyzed in EA.	3.3, 4.3, 4.9

Geoffrey & Jackie Sell	Socio-Economic	Deterioration of property values. The proposed location for the plant is directly up wind of approximately 30 homes in our subdivision and the subdivision located behind us. In June, July, and August people like to have their windows open and be outside enjoying the summer weather. If the wind is blowing out of the north or west, the smell may prevent this and in any case it will be unpleasant. For a house that was on the market, this would almost certainly be a death sentence if a prospective buyer were to visit. A study released by the Blue Ridge Environmental Defense League documented property value losses of up to 56% as a direct result of an asphalt plant.	Socio-economics will be analyzed in the EA.	3.1.7, 3.3, 4.1.7, 4.3, 4.9
	Air Quality, Noise, & Odor	The Environmental Protection Agency (EPA) states "Asphalt processing and asphalt roofing manufacturing facilities are major sources of hazardous air pollutants such as formaldehyde, hexane, phenol, polycyclic organic matter, and toluene. Exposure to these air toxins may cause cancer, central nervous system problems, liver damage, respiratory problems and skin irritation." A study shows that 45% of the residents living within a half mile of an asphalt plant report a deterioration of their health which began after the plant opened two years prior. Most frequent problems include high blood pressure, sinus problems, headaches, and shortness of breath.	Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III, IV
	Transportation	Increased truck traffic which could result in subdivision safety incident.	Comment noted. This issue is outside the scope of this project.	2.2, 3.1, 4.1, 4.9, Appendix III, IV

	Visual Resource	Piles of junk and a hole in the ground. Length of time the mine will be in operation.	Visual resources will be analyzed in the EA.	2.2, 3.6, 4.6, Appendix III
	Alternatives	Do not run the plant unless the wind is blowing from the south or southwest - away from close residents, and pave the subdivision road to reduce dust.	Comment noted. This issue is outside the scope of this project.	
	Alternatives	Relocate the plant at a location where there aren't a lot of houses downwind of the prevailing north and west winds.	Comment noted. Analyzed in EA.	2.3
Montria & Scott Taylor	Air Quality, Noise, & Odor	Not only will we be able to see it, we are very concerned about the smell it will produce from the smoke of the process and how it will directly affect our already poor air quality in the summer months. Homes and families occupy the direct local proposed area in terms of air quality, health concerns and ability to enjoy the outdoors. It will be putting more pollutants into our air that already has too many poor quality days.	Air quality will be analyzed in the EA.	2.2, 3.1, 3.1.7, 3.7, 4.1, 4.1.7, 4.7, 4.9 Appendix III
	Socio-Economic	With plant operating at least five possibly six days a week during the summer months it could encroach on our ability to enjoy the outdoors to the fullest extent.	Project operating hours addressed in the EA.	3.3, 4.3, 4.9 Appendix III
	Alternative	Since it is a mobile plant place it in a much less residential area and have the material trucked in.	Comment noted, This issue is outside the scope of this project.	2.3
Linda & Tony Micheletto	Transportation	My only concern is the increased truck traffic on Ehman Lane. This road has always been a fairly nice paved road in the county and the increased heavy load traffic would cause premature deterioration.	Truck traffic on roads will be analyzed in the EA.	2.2, Appendix III, IV
	Air Quality, Noise, & Odor	I have no problem with the plant in regards to air quality or noise.	Comment noted.	

	Alternatives	See the county be more proactive in road deterioration.	Comment noted. This issue is outside the scope of this project.	
Dean Boundy & Jacklin Hunt	Air Quality, Noise, & Odor	Our biggest concern is the fumes that will be liberated from the plant. The prevailing wind is from the north and west which will carry the fumes across our property most of the time. BLM is trying to stabilize the air quality in the area so why add an additional asphalt plant?	Air quality will be analyzed in the EA.	2.2, 3.1, 3.1.7, 3.7, 4.1, 4.1.7, 4.7, 4.9 Appendix III
	Transportation	Additional truck traffic will be generated on Ehman Lane. Traffic is undesirable in a school zone, residential neighborhood and antelope habitat.	Truck traffic on roads will be analyzed in the EA.	3.8, 4.8, 4.9, Appendix III, IV
	Socio-Economic	The proposed adjacent asphalt plant will downgrade our property and neighborhood.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9
Ted Reinwald	Air Quality, Noise, & Odor	I am a non-smoking victim of COPD and would appreciate not having additional particulate matter released into the surrounding atmosphere. The most common toxic emissions from asphalt concrete plants are from acetaldehyde, acetone, benzene, ethyl benzene, formaldehyde, toluene, and xylene. These pollutants are considered detrimental to human health (some are suspected carcinogens).	Comment noted. Health issue is outside the scope of this project. Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III
	Air Quality, Noise, & Odor	May emit significant levels of both particulate matter and gaseous volatile organic compounds (VOCS). Pollutants can be minimized by technology and proper emission control systems at the plant, periodic inspection and reporting. Where it fails, or human operators make errors, plumes of gases that are not fully cleaned are released, even from state of the art plants.	Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III
	Water Quality	Spills and leaks from associated equipment and the manufacturing and delivery process pose a	Solid and hazardous waste will be analyzed in the EA.	3.7, 4.7, Appendix III, IV

		significant potential to contaminate waters of the state.		
	Air Quality, Noise, & Odor	Odor from asphalt plants has periodically become an emotional issue for people living, working, or recreating in the vicinity of these plants. What should be the minimum distance of the plants from residential communities and certain specified public facilities?	Air quality will be analyzed in the EA. No information could be obtained for distance setbacks.	2.2, 3.1, 3.1.7, 3.7, 4.1, 4.1.7, 4.7, 4.9 Appendix III
Paul & Gabrielle Knapp	Air Quality, Noise, & Odor	This would severely affect my family's health. According to the federal occupational safety and health administration, exposure to asphalt fumes can cause headaches, skin rashes, fatigue, reduce appetite, throat and eye irritation, and coughing. Asphalt fumes are considered potential occupational carcinogens. These plants release millions of pounds of chemicals to the air during production each year, including many cancer-causing toxic air pollutants such as arsenic, benzene, formaldehyde, and cadmium. Other toxic chemicals are released into the air as the asphalt is loaded into trucks and hauled from the plant site, including volatile organic compounds, polycyclic aromatic hydrocarbons (PAHs), and very fine condensed particulates.	Comment noted. Health issue is outside the scope of this project. Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III
	Socio-Economic	No need for an additional gravel mine due to the downturn in oil and gas.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9
	Socio-Economic	450 yards down wind. Our ability to use the outside of our homes during summer and ability to open our windows and use nature's air conditioning during summer months would be impossible. Would smell hot mix 24-hours per day all summer long.	Impacts will be assessed in the EA.	3.1, 3.3, 4.1, 4.3, Appendix III

	Socio-Economic	National averages show those property values decline some 56% next to an asphalt plant.	Socio-economics are analyzed in the EA.	3.4, 4.3, Appendix III
	Transportation	Increased truck traffic not only from the expanded gravel mine but the added pick-up and delivery of the asphalt plant all summer long.	Truck traffic on roads will be analyzed in the EA.	2.2, 4.9, Appendix III, IV
	Alternatives	Moratoriums on asphalt plant construction and operation in communities where people live and go to school.	Comment noted. This issue is outside the scope of this project	
	Alternatives	Stricter testing and enforcement of air quality standards at asphalt plants.	Comment noted. This issue is outside the scope of this project.	
	Alternatives	Improve air standards that address all toxic contaminants including fugitive emissions.	Comment noted. This issue is outside the scope of this project.	
Angie & Brent Thomas	Socio-Economic	Negatively impact our lives and enjoyment of our property and that of our neighbors. The asphalt plant will be in operation when our family spends time in our yard and neighborhood.	Comment noted. This issue is outside the scope of this project.	2.2, 3.3, 4.3, Appendix III
	Air Quality, Noise, & Odor	Known carcinogens. Other contaminants that will be produced from the asphalt plant include hydrogen sulfide (death), benzene (cancer causing), chromium (cancer causing), formaldehyde (cancer causing), Polycyclic aromatic hydrocarbons (cancer causing), cadmium (lung damage, cancer and death), and arsenic (cancer causing). Other side effects from these contaminants include dizziness, headaches, and neurological effects, irritations to the skin, eyes, nose and respiratory system.	Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III
	Alternatives	There are other locations in Sublette County for the operation of an asphalt plant that are not upwind of neighborhoods and a school.	Comment noted. This issue is outside the scope of this project.	

	Socio-Economic	Landowners use of its land and the use of federal minerals as a source of revenue, against the effects of that use on all the neighboring homeowners rights to use and enjoy their land, the single land owner loses every time. Asphalt plant will increase its income or investment in its land and will drastically decrease the investment we have made in our home.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9 Appendix III
	Wildlife	Will have a major impact on migrating antelope and deer considering the already mentioned toxins that will be released into the air. Odors, toxins, noise and traffic will further disturb the wildlife in their migrating corridor. The effects will also be tremendous on sage grouse, bald eagles, owls and all other types of birds.	Wildlife will be analyzed in the EA.	3.8, 4.8
Pete & Nancy Feck	Socio-Economic	Proposed plant is in the middle of a residential area. Will negatively impact my quality of life and my ability to enjoy my property without harassment. Negatively impacts our ability or that of my neighbors to enjoy our property or which negatively impacts the investments we have made in our home and our land.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9 Appendix III
	Alternative	Environmental quality studies need to be completed prior to approving this project. BLM should allow for all applicable environmental permits to be in place before making a decision about the proposed operation.	The proposed project will be required to obtain updated mining and updated air emission permits associated with the mining operations. The hot mix asphalt plant will be required to comply with a mobile air permit. The Wyoming Department of Environmental Quality will be lead agency for permitting.	1.4, 2.2, 3.1, 4.1, Appendix III

Air Quality, Noise, & Odor	Applicant has not requested approval from the DEQ for the permitting of the site, the operation, or the equipment to be used on site. There has been no public comment allowed to DEQ on the impacts of the site on the residential neighborhood surrounding the site because those applications have not been made.	The proposed project will be required to obtain updated mining and updated air emission permits associated with the mining operations. The hot mix asphalt plant will be required to comply with a mobile air permit. The Wyoming Department of Environmental Quality will be lead agency for permitting.	1.4, 2.2, 3.1, 4.1, Appendix III
Socio-Economic	Surrounding property values will be negatively impacted. Available research suggests that the addition of an industrial operation of this type can reduce adjacent property values by as much as 56%. Asphalt and concrete plants are near the top of the list of those operations which most impact property values. Allowing this project forces me to subsidize the asphalt operation through reduced property value and loss of equity I have in my home, which is directly adjacent of the proposed operation.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9
Air Quality, Noise, & Odor	Will negatively impact my personal health and that of my family. Neighbors' health and welfare will also be negatively impacted. Asphalt plants admit high quantities of VOCs which will further aggravate the ozone issues Sublette County is already experiencing.	Comment noted. Health issue is outside the scope of this project. Air quality will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III
Socio-Economic	Jobs created would be few for Sublette county residents while many of those employed on the public projects this plant might support would be from surrounding states and communities outside Sublette county and the state of Wyoming.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9

	Socio-Economic	There is no need for this additional capacity in Sublette county particularly in today's economic conditions.	Socio-economics will be analyzed in the EA.	3.3, 4.3, 4.9
Derek & Sonia Schupp	Transportation	Trucks entering and leaving the gravel pit do not yield to the traffic on the subdivision road and several of the trucks going into and out of the gravel pit at excessive speeds which is both a safety concern and also generates a lot of dust. The speed with which the trucks enter and leave the gravel pit is a hazard to the children walking home from the bus stop and the unyielding truck drivers pose a danger to the teenage drivers.	Truck traffic on roads will be analyzed in the EA.	2.2, 3.3, 4.3, 4.9, Appendix III
	Air Quality, Noise, & Odor	The increased traffic results in a lot of dust begin generated which blows over and towards the majority of the homes in the BD subdivision. Water is applied one or two times per day but not on a regular basis and not enough to keep the conditions satisfactory for the home owners in the subdivision.	Truck traffic on roads will be analyzed in the EA.	2.2, 3.1, 3.7, 4.1, 4.7, 4.9 Appendix III
	Alternative	Before asphalt plant is allowed operator should be required to address the subdivision concerns and change the negative impacts to the subdivision into something positive with a formal written plan. BLM needs to monitor the activities and enforce the agreement.	Monitoring Plan and COA's have been proposed and will be included in the EA.	2.2, Appendix III
	Air Quality, Noise, & Odor	Potential impact of air, dust, and noise pollution from operations.	15 comments	
	Transportation	Potential impact to the subdivision road and community safety.	6 comments	
	Socio-Economic	Potential of decrease in property values because of the asphalt plant.	14 comments	
	Wildlife	Potential for odors, noise, and traffic to impact wildlife.	4 comments	
	Visual Resource	Potential for impact to view shed by presence of excess debris.	1 comment	

## **APPENDIX III**

### **Operator Committed Mitigation Measures**

## **OPERATOR COMMITTED MITIGATION MEASURES**

1. All activities will remain in accordance with Standard Practices, Best Management Practices, and Guidelines for Surface Disturbing Activities for the Pinedale Field Office.
2. High Plains Ventures, LLC will provide a DEQ AQD approved site specific Air Emissions Permit for the sand and gravel operations and would include the Asphalt Plant mobile emissions permit, in conformance with the DEQ Air Quality Control regulations.
3. High Plains Ventures, LLC will comply with Wyoming Air Quality Rules and Regulations at all times.
4. High Plains Ventures, LLC has developed and will comply with the dust control plan. The dust control plan addresses fugitive dust caused by haul trucks on access road (BD Boulevard) to the pit. Dust suppression of sprayed water will be applied on an as need basis during the crushing, processing, and hauling of material.
5. High Plains Ventures, LLC will provide a DEQ WQD approved site specific Mineral Mining Permit including stormwater pollution prevention plan (SWPPP) in conformance with DEQ Water Quality Control regulations.
6. The top soil piles will be maintained in an elongated berm fashion on the outside edges of the pit to reduce the impact to the neighbor view shed and noise from the operation. The top soil piles will be surrounded by erosion controls to reduce the loss of sediment from runoff and wind erosion. The piles will be vegetated seeded with a quick growing seed such as winter wheat or rye.
7. High Plains Ventures, LLC will extract, crush, and process material between the hours of 8:00 am to 5:00 pm Monday through Friday, hauling taking place from 8:00 am to 6:00 pm Monday through Friday, with an occasional weekend hauling of material of four to five truck loads.
8. All trucks leaving this site with mineral material must pass over a state certified scale and obtain a weigh slip these weigh slips will be provided to BLM with payment for material removed from the site.
9. Signage will remain posted to notify the public of hazards due to increased truck traffic along Sublette County Road 23-144 (Ehman Lane).
10. High Plains Ventures, LLC will remain responsible for maintaining the access road in a safe manner. The road to the pit is a crowned and ditched gravel road with culverts appropriately placed in accordance with the BLM Manual Section 9113.
11. High Plains Ventures, LLC will insure that increased truck traffic in connection with the proposed aggregate mine and asphalt transportation operations do not interfere with the safety of the public. Vehicles will operate in accordance with all state and local laws at all

times. Speed limits of 20 mph will be obeyed where posted. Incidents involving the public or damage to private property, including livestock, will be handled in accordance with local, state, and federal laws.

12. High Plains Ventures will maintain BD Boulevard, which will include grading, plowing, and placing dust suppressant chemicals such as magnesium chloride to the road on an as needed basis to maintain safe driving conditions for their operation and the use by others.
13. Any cultural resources (historic or prehistoric site or object) discovered during operations would be immediately reported to the Authorized Officer. Operations in the area of such discovery would be suspended until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery would be made by BLM to determine appropriate actions to prevent the loss of significant cultural values. The Operator would be responsible for the cost of evaluations and for necessary mitigation. Mitigation might include avoidance or excavation of the site.
14. High Plains Ventures, LLC will remain responsible for controlling non-native and invasive weed species at all times in accordance with the Sublette County Weed and Pest program.
15. High Plains Ventures, LLC or any contracting company working for or with High Plains Ventures will have on site, material safety data sheets (MSDS) for all chemical, compounds, or substances used on site. These MSD sheets will be available for BLM to review upon request. In addition, all chemicals will be handled in an appropriate and safe manner to minimize the potential for leaks or spills to the environment.
16. Accidental releases, spills, and fires involving hazardous materials will be handled according to the operators' SPCC plan and the Operator will abide by all applicable federal, state, and local laws or regulations. All incidents of any type of any chemical spill will be reported immediately to the Authorized Officer and followed in 15 days in writing to the PFO.
17. High Plains Ventures, LLC will remain responsible for cleanup of any fluid spills. All spill related material will be appropriately hauled and disposed of in an approved facility.
18. All garbage or refuse will be contained in an enclosed receptacle as to prevent it from being scattered by the wind or wildlife. All solid waste will be appropriately disposed of at a permitted facility for solid waste.
19. Portable restroom facilities will be provided on site at all times employees are active at the High Plains Ventures, LLC.
20. High Plains Ventures, LLC will not receive more concrete on site until the existing stockpile has been processed and removed and provided that the DEQ LQD approval includes this activity.
21. Material stockpiles will be strategically placed to reduce visual impact to closest adjacent homeowners.

## **APPENDIX IV**

### **CONDITIONS OF APPROVAL**

## CONDITIONS OF APPROVAL

1. This is a Contract for Sale of Mineral materials (3600-9) issued by the U.S. Government for the sale of mineral materials from within the High Plains Ventures, LLC sand and gravel mine, from the Bureau of Land Management, Pinedale Field Office. No other operators will be allowed to operate within the permitted area.
2. The contract will be issued for a 200,000 cubic yard or weight equivalent. If the amount initially granted has been exhausted, a new permit must be obtained 30 days before the complete excavation of the previous permit's amount. Removal in excess of this amount will constitute a breach of contract, cancellation of contract, and trespass charges.
3. All trucks leaving this site with mineral material must pass over a state certified scale and obtain a weigh slip these weigh slips will be provided to BLM with payment for material removed from the site.
4. The operator will report all in-bank volumes of mineral material that have been removed during each month and will provide weigh slips from a state certified scale. This will be provided to the PFO in writing on a monthly basis by the 15<sup>th</sup> day of the month following mineral material removal (43 CFR 3602.21(a) (2)(iii)).
5. If the contract is to lapse before the complete removal of the stated amount, a one-time extension may be granted (not to exceed one year). The operator must apply for this extension 30 days before the contract's expiration date (43 CFR 3602.27).
6. The operator is required to obtain a valid, signed BLM Sale for Mineral Materials for the stated in bank quantity of material that is to be removed for the term of the contract from the PFO before any extraction taking place.
7. The operator will comply with all the terms of the contract, permit, and these conditions of approval at all times. If not, this constitutes a breach of contract and the contract will be terminated at any time.
8. A yearly report of all activities will be submitted by December 31<sup>st</sup> of each year. The operator will, at the time of the submittal of the yearly report, report the next year's mining plans to the best of their knowledge and expectations. At the time of submittal any variations from the original approved mining and reclamation plan can be submitted for review and consideration. Approval of any and all changes will be sent in writing from the PFO to Mr. Randy Archer of High Plains Ventures, LLC.
9. All pertinent permits and documents are to remain onsite at the High Plains Venture Pit at all times.
10. Heavy truck traffic signs will remain posted at the appropriate distances east and west along BD Boulevard and north and south along Ehman Lane.

11. All equipment and vehicles will be confined to the open pit area.
12. The approximate depth of topsoil in the area is six to eight inches. Any and all topsoil will be removed from the approved mining area as stated in that year's mining plan. The topsoil will be stripped and stockpiled in an elongated manner along the east wall area and additional areas as deemed appropriate. The top soil will only be disturbed twice, once to be removed and secondly to be redistributed during reclamation. If topsoil is exposed to the elements for more than one week, it must be stabilized at its base by use of erosion control devices to control any possible erosion of runoff or wind erosion. The topsoil pile also must be seeded with a seed mix approved by the DEQ for wind and water stabilization purposes. All topsoil piles will be maintained in this manner for the life of the project until reclamation takes place.
13. When overburden is encountered, it will be stockpiled between the topsoil pile and the high wall area, and kept separated from the topsoil. The excess overburden can be used for reclamation and the re-sloping and contouring of the high wall to a final slope.
14. The operator is responsible for site stabilization once aggregate minerals have been exhausted and mining stops. Site stabilization will include preventing soil erosion and runoff that might adversely affect surface water quality and noxious or invasive weed controls, or other controls that will prevent adverse impacts to adjacent landowners. Additionally, the operator will comply with all DEQ conditions. BLM will inspect the operations at least annually, or as needed, to determine the progress toward site stabilization. The final inspection for release of High Plains Ventures, LLC's responsibility to the pit will occur three years after initial site stabilization has been established. At that time, High Plains Ventures, LLCs' bond will be released.
15. Whenever the Authorized Officer identifies a weed control problem, the operator will be responsible for weed control on disturbed areas within the limits of the pit. The operator is responsible for consultation with local county weed and pest personnel for the most appropriate weed control methods.
16. Whenever the Authorized Officer identifies soil erosion and runoff conditions that might adversely impact adjacent property owner surface or groundwater quality, the operator is responsible for consultation with DEQ, WQD.
17. The operator shall comply with all applicable federal, state, and local laws and regulations concerning the use of pesticides (i.e., insecticides, herbicides, fungicides, rodenticides, and other similar substances) and other hazardous materials in all activities/operations under this permit.
18. If the operator or any person working on their behalf discovers any historical, archeological (historic or prehistoric site or object), or paleontological resources, they shall immediately stop all excavation and immediately notify the Authorized Office of the PFO. If the operator does not comply, they will be subject to prosecution for damaging, altering, excavating or removing any archaeological, historical, vertebrate fossils or paleontological objects from the

pit. Within five (5) working days, the Authorized Officer will evaluate the discovery and inform the operator of actions that will be necessary to prevent any further loss of significant cultural or scientific values of the materials found. The operator will be responsible for the cost of any mitigation required by the Authorized Officer evaluation. The Authorized Officer will provide technical and procedural guidelines for conducting mitigation. Upon written verification from the Authorized Officer, when the required mitigation is completed, the operator will be allowed to resume operations.

19. High Plains Venture, LLC or any contractor working for High Plains will have MSDS available for all hazardous chemicals, compounds, or substances that are used during the course of extraction onsite and available for BLM review.
20. Spillage of any hydrocarbons or any other hazardous materials must be reported immediately to the BLM Authorized Officer and DEQ. All appropriate measures must be followed to clean the spillage up, remove, and dispose of it properly from the pit to an approved DEQ disposal site.
21. The operator has developed an operator committed approved dust control plan. The dust control plan addresses fugitive dust caused by haul trucks from the pit area and along BD Boulevard, as well as by operations at the proposed aggregate mine. The techniques used involve hourly watering and as needed of the operation while separating, crushing and hauling, with a spray of water. The application of chemical dust suppressant such as magnesium chloride solution to BD Boulevard will reduce the dust to acceptable levels.
22. A sign with the name of the operator, lease serial number, and surveyed description of the pit will be placed at the entrance to the site in plain sight.
23. Restroom facilities must be onsite at all times of operation to accommodate employees.
24. All undesirable events (fires, accidents, spills, or hazardous substance discharges of any kind) will be reported immediately verbally to the Pinedale BLM Authorized Office and followed within 15 days in writing.
25. Garbage will be contained in an enclosed trash receptacle to prevent it from being scattered by the wind or by wildlife.
26. Sewage will be disposed of in accordance with the DEQ Solid and Hazardous Waste regulations. No sewage boreholes will be allowed.
27. All sand and gravel mining and processing operations will take place from 8:00 a.m. to 5:00 p.m. Monday through Friday and hauling will take place from 8:00 a.m. to 6:00 p.m. Monday through Friday, with occasional operations of four to five trucks on the weekends within the hours of 8:00 a.m. to 6:00 p.m.
28. During asphalt processing operations, High Plains Ventures, LLC will operate from 7:00 am to 7:00 pm with occasional operations of four to five trucks on the weekends.

Failure to adhere to the general terms, conditions and stipulations of the contract and mining plan, and to the above conditions of approval will be cause for the termination of this contract, the revocation of the bond, and possible trespass charges.

## **APPENDIX V**

### **Specialist Reviews & Supporting Documentation**