

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SPOKANE DISTRICT, WASHINGTON STATE**

**ENVIRONMENTAL ASSESSMENT TITLE PAGE**

<b>ENVIRONMENTAL ASSESSMENT NUMBER</b>  OR-135-05-EA-013	<b>SERIAL NUMBER</b>  WAOR 62012-01	<b>DATE OF REPORT</b>  August 7, 2007
<b>BLM RESOURCE AREA</b>  Border		<b>COUNTY</b>  Benton
<b>TYPE OF ACTION</b> Development of, and Issuance of Competitive Mineral Material Sales from, a Benton City Community Pit (Federal Parcel)		
<b>APPLICANT'S NAME</b>  BLM – Spokane District Office		<b>ADDRESS (Include zip code)</b>  BLM – Spokane District Office 1103 North Fancher Spokane, WA 99212

**DATE(S) OF FIELD EXAMINATION** – Numerous examinations over a five year period (continuing)

**LANDS INVOLVED**

<b>Township</b>	<b>Range</b>	<b>Meridian</b>	<b>Section</b>	<b>Subdivision</b>	<b>Acres</b>
T. 09 N.	R. 27 E.	Willamette	20	SE¼SW¼	~72.5

**PURPOSE OF REPORT:**

To determine the environmental effects of developing a mine and issuing competitive mineral material sales for removal of up to 16,000,000 tons (approximately 500,000 tons/yr) of sand and gravel from this Federal parcel over an estimated 20 to 30 year period.

## **I. Introduction**

### **A. Background:**

The Tri-Cities area of Richland, Pasco, and Kennewick has been growing rapidly for many years. To help meet the mineral materials demand associated with this growth, the Bureau of Land Management Spokane District - Border Resource Area proposes to develop a sand and gravel community pit near Benton City, WA. A Federally owned parcel adjacent to Benton City has been evaluated and found to contain substantial mineral material (sand and gravel) resources. Supporting information includes, previous trespass mining on the parcel, drilling on and near the parcel, surface exploration, and a current market appraisal. On August 26, 2005, Benton City zoned the lands adjacent to this federal parcel for light industrial use.

On June 3, 2005, Kevin Devitt, the Border Resource Area Manager submitted a notice to the Oregon/Washington State Office, designating the parcel as the Benton City Community Pit. On October 13, 2005, A&B Asphalt, Inc., a Washington aggregate company, operating a sand and gravel pit on private land adjacent to the proposed Benton City Community Pit site, submitted a formal request to BLM for a Competitive Mineral Materials Sale at the site. The proposed project area would encompass about 72.5 acres of fee simple (surface & subsurface) Federal ownership.

A&B Asphalt, Inc. has been extracting sand and gravel from the adjacent 80 acre private property to the south since the mid 1980s. Early in 2005, BLM resolved a trespass where A&B Asphalt had entered onto 2.8 acres of the BLM administered parcel described herein. With the successful resolution of this trespass issue, A&B Asphalt is eligible for, and has requested BLM, to initiate a Competitive Mineral Material Sale on the subject parcel.

This environmental assessment (EA) describes the proposed action and no action alternative, analyzes the environmental and social impacts of those actions, evaluates any mitigating measures which might be needed, describes the mining and reclamation procedures, and examines the ultimate land use alternatives for this parcel.

### **B. Type of Action:**

This action includes assessment, development, and reclamation planning of a large mineral materials (sand and gravel) pit near Benton City, WA.

### **C. Purpose and Need for Proposed Action:**

The purpose of the proposed action is to comply with federal laws and regulations, and the Spokane District Resource Management Plan Record of Decision (RMP/ROD - 1987). This action is needed to insure a reliable, local supply of reasonably priced mineral materials to support continued community growth and related infrastructure. It is also a response to a request from a local company for BLM to make minerals available at the proposed site.

Section 302 of the Federal Land Policy and Management Act of 1976 directs the Secretary of the interior to manage public lands under the principles of multiple uses. Minerals are specifically identified as one of these multiple uses in the Act.

The Act of July 31, 1947 as amended (Mineral Material Act) provides for the disposal of mineral materials from public lands managed by BLM (30 USC 601 et seq). The Secretary of the Interior has discretion to permit the competitive sale of mineral materials to private companies.

The Code of Federal Regulations (434 CFR 3601.6) states that it is BLM's policy "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."

The Spokane RMP/ROD (1987) states that "salable minerals, including common varieties of sand, gravel, and stone will continue to be made available to local governments and the general public." It also states that "new material sites may be developed as needed, when they are consistent with the protection of other resource values."

The population of the Tri-Cities area of Washington, approximately 10 miles east of the site of the proposed action, has grown by over 34,000 over the past 6 years (US Census 2006). It is the fastest growing area in Washington, and among the top growth areas in the Pacific Northwest. As a result, there is a large regional demand for materials, such as gravel, to support the development of infrastructure to support this growth.

A& B Asphalt, an adjacent sand and gravel mining company, has made an official request for access to the material situated on the Federal Benton City Community Pit site. Other mineral material companies have shown similar interest and will be included in subsequent competitive sales.

D. Location of Proposed Action:

This project is located about 1 mile southeast of Benton City, Benton County, WA, adjacent to major transportation routes. The legal description of this tract is Township 9 North, Range 27 West, Section 20, SE ¼ SW ¼, Willamette Meridian (Attachments 3, 4, and 5). The project area is wholly within the Border Resource Area of the Spokane BLM District.

E. Compliance with Applicable Land Use Plan:

The proposed action conforms to the Spokane Resource Management Plan Record of Decision (1987)

F. Relationship to Statutes, Regulations, or Other Plans:

The proposed action is in conformance with federal law and regulations as described in the Purpose and Needs section above.

## II. Proposed Action and Alternatives

Two alternatives are analyzed in this document: 1) Offering mineral materials from the Benton City Community Pit for competitive bid sale and; 2) No Action.

A. Description of Proposed Action

BLM will offer the mineral materials with the designated Benton City Community Pit for disposal through competitive sale. After awarding a contract to the successful bidder, the contracted party must develop a detail mining and reclamation plan for BLM approval prior to initiation of mining operations. When approving the mining and reclamation plan, BLM may require mitigation measures, or stipulate them as conditions of approval. For purposes of

analysis, it is assumed that the following generalized scenario will occur and the described actions will be part of the mining and reclamation plan.

A mineral materials (sand and gravel) pit would be sequentially developed over most of the 72.5 acre Federal parcel, excluding 50 foot property buffer zones around the entire perimeter of the parcel. This would be accomplished through competitive sales contracts issued to private mining companies. These companies would subsequently mine the parcel at a rate of about 250,000 to 500,000 tons per year for approximately 30 to 50 years until the resource was exhausted and the site is fully reclaimed. The ultimate pit bottom elevations are projected to be 400 feet and 500 feet above mean sea level (AMSL) for the larger West and the narrower East portions of the parcel respectively. These pit floor elevations may vary depending on resource and groundwater conditions encountered during mining.

This property would be developed using open pit mining methods with concurrent reclamation of the mined out areas. The surrounding 50 foot buffer and upper slopes of the highwall would be reclaimed first and progress downward as the pit develops. Mining will be governed by a pre-development mining plan to ensure that BLM mining requirements (Examples presented in Attachment 6) would be followed. An adjacent gravel pit (A&B Asphalt) has developed up to the south and east boundaries of the Federal parcel. This previous development should allow complete mining, up to the south and east boundaries of the Federal parcel. This would result in maximum resource recovery from this area of the Federal parcel. The outcome of this scenario appears to be consistent with the Benton City planning department's proposal of a light industrial site surrounding this location. The north and west sides of the Federal parcel pit would be developed leaving a 50 foot property boundary buffer and utilizing a 2 horizontal to 1 vertical (2:1) final pit highwall slope for safety and to enhance post mining revegetation. It is anticipated that complete mining of the parcel would result in a small lake in the bottom of the pit. This pit lake would remain after mining and reclamation as a water source to replace the percolation pond which will dry up after pit dewatering ceases.

Sand and gravel would be loosened from the pit using dozers to push down the highwall slopes into the developing pit bottom where large rubber tire loaders will fill haul trucks or load the material directly onto an in-pit conveyor system. No blasting would be required initially for mining of the loose fluvial (stream) gravels in the upper portion of the deposit. As the pit deepens, exposed basalt bedrock would be blasted, and then crushed to add an additional valuable material product from the pit. Loaded material would be transported to an "in-pit" crushing / screening facility. This facility would be located below grade after the pit is established, to reduce local noise levels and aesthetic impacts to the surrounding area. Water sprays would be used during all phases of material handling to reduce fugitive dust. The material would be crushed, sorted, washed and stockpiled for load-out and commercial sale. Stockpiled product would be loaded into highway dump trucks, weighed on-site and hauled off the property by-way-of existing paved access roads and highways.

Temporary haul roads would be constructed and removed within the pit as necessary. Support equipment in the pit would consist of 4x4 pickup trucks, a truck rinsing facility, water trucks for dust suppression, dewatering pumps and pipelines, maintenance vehicles, and power supply lines. All mining, processing, and high traffic areas associated with this operation would have water sprays to reduce potential generation of fugitive dust. Power has already been established to the site and would be used to operate processing equipment and support administrative facilities. A single 250' deep water well would be required initially, and would probably be located in the southwest portion of the parcel. This well would supply potable and process

make-up water for the mine and processing plant. Based on previous mining at the adjacent A&B Asphalt pit, the BLM pit development is expected to encounter groundwater at about 200 feet below the ground surface. Below that, excess water will be pumped from the pit into the adjacent dry wash impoundment area to the southwest (Attachment 7). Mine water discharge from the A&B Asphalt pit has previously been directed into this percolation area. A portion of the excess pit water will be used as ore processing make-up water to control dust and wash the gravel. Used water will be run through a series of settling ponds to remove the majority of particulates. The remaining water would be allowed to seep back into the ground through the percolation pond bottom to replenish the water table from which it was removed. The percolation pond would consist of impoundment of the adjacent dry wash to the southwest of the project site. The pit will be designed with a centripetal drainage layout where the majority of the surface runoff water at the site flows towards the center of the pit for collection and redirection into the adjacent percolation pond.

“Surfer” computerized three-dimensional software models were constructed of both the original land surface and the proposed pit limits (Attachments 8 and 9). These models calculate a potential available resource of over 16 million tons. This estimate is generally supported by outcropping sand and gravel exposures on the site, A&B Asphalt’s directly adjacent highwall lithology, local water well lithologic data available on line from the Washington Department of Ecology, and Washington State Department of Transportation drill hole data.

The following mitigation measures would be required:

- Haul roads leaving the site would be continuously watered or paved and connected directly with paved local access roads and the Benton City freeway interchange to minimize fugitive dust from leaving the site.
- Mining activity would occur during the daytime hours and most operations (crushing, screening, etc.) would be preformed within the pit walls to minimize noise impacts to the local community.
- If pit water is encountered during mining operations, pumping will be utilized to dewater the local pit area. Water pumped from the pit will be directed into the adjacent drainage and will be allowed to slowly infiltrate back into the local aquifer.
- Dust generating activities within the pit will be continuously controlled by water trucks and dust control spray systems.
- The entire highwall of the site will be fenced to protect the public from entering into a dangerous pit slope or equipment operation area. Stable, final reclamation slopes of at least 2 horizontal to 1 vertical will be planned and incorporated into the mining operation sequence to prevent over-steepened final pit walls during mining
- If an archaeological resource (historic or prehistoric site or object) is discovered by the operator or any person working on the operator’s behalf, on federal lands, the operator shall immediately stop all operations in the area, immediately notify the Authorized Officer (Field Manager, Border Resource Area) verbally, and follow such verbal notification with a written confirmation (certified mail recommended). In accordance with 43 CFR §10.4 (c)(d) and (g), if the discovery includes human remains, funerary

items, sacred objects, or objects of cultural patrimony, operations shall remain suspended and the discovery protected for thirty (30) days or until a written notice to proceed is issued by the AO. An evaluation of the resource or remains will be made by the AO and appropriate mitigation actions will be identified in consultation with the SHPO, consulting tribes, and holder. Holder shall be responsible for evaluation and mitigation costs. All archaeological materials shall remain the property of the United States.

B. No Action Alternative

No additional mineral materials in excess of those previously trespassed by A&B Asphalt would be removed from this parcel.

**III. Affected Environment**

A. General Setting

Surface material at the Benton City Community Pit site is generally Pleistocene glacial Lake Missoula outbreak flood debris and Yakima River terrace sand and gravel deposits and surficial wind-blown loess deposits. These materials vary from fine grained to large boulders in size and rest upon regional basalt flows. This deposit is the result of sedimentary sorting in the Yakima River Channel and subsequent bar deposition relatively slack-water areas behind Goose Hill, in the abandoned portion of Yakima River Canyon.

The parcel area is open space with no development. It has an arid climate, no native trees, and it is predominantly covered by low sagebrush and grasses (see photo in Attachment 8). Slopes on the parcel are generally flat or gently graded to the west or southwest. The sandy nature and porosity of the wind blown topsoil minimizes erosion associated with rain events, although some gullies are present.

Surrounding area land-use includes sand and gravel mining to the south, vineyards and orchards to the east, farming to the south, and residential development to the west. The highest monetary value for this property is mineral resource development. The adjacent mine (A&B Asphalt) produces about 528,193 tons of sand and gravel per year with associated asphalt and concrete production on-site. This requires an estimated 35 truck/pup traffic cycles per day, 320 days per year. Reserves at the A&B Asphalt property are rapidly being depleted with an estimated 5 year remaining mine life. The company has expressed interest in bidding for access to minerals on the adjacent BLM parcel. The mine has completed some reclamation on a portion of the BLM parcel where they performed unauthorized mining, in the intermittent stream channel where they installed an unauthorized drainage ditch, and on some of the highwall slopes of their pit which encroached onto BLM.

B. Air Quality:

Air quality on the parcel is generally good due to open space, nearly continuous southwesterly winds removing local contaminants, rural setting, and lack of concentrated population around the site. Local sources of air contaminants are the adjacent sand and gravel mining operation to the southwest, adjacent farming to the east and south, adjacent railroad line to the south, dirt roads on-site and to the west, and residential heating to the west. Fugitive dust issues are present in this area and should be addressed in mine/reclamation planning. Benton Clean Air Authority states on their website that: "Compared to other urban areas in Washington State, the Tri-Cities has some of the cleanest air over the majority of the year. Our average pollution levels are well below the national average. However, on occasion, the Tri-Cities does (do) have problems with a

pollutant called "particulate matter". Particulate matter is a federally regulated pollutant; in high concentrations, it poses a health risk to both sensitive populations and to healthy, active people as well" (Benton Clean Air Authority 2007).

C. Water Quality:

No permanent surface waterways protected by the Clean Water act are present on or directly adjacent to this proposed mine site.

The subject parcel is at an average elevation of about 550 feet above mean sea level (AMSL) and adjacent to an intermittent stream channel grading to the northwest. The nearest permanent surface water feature in the area of the subject Federal parcel is the Yakima River, situated about ½ miles to the northwest and about 60 to 80 feet down gradient from the site. Groundwater is present at an estimated elevation of 350 to 400 feet AMSL on the subject Federal parcel.

Currently only seasonal water occurs on the parcel from winter rains and snowmelt. Some water is present in the gully on the southern portion of the parcel, as a result of pit dewatering from the adjacent A&B Asphalt mining operation. Overall water quality at the site is thought to be good due its groundwater source and the ability for pit water discharge water to locally support abundant vegetation and wildlife in the discharge area. Washington State Department of Ecology does not rate the small intermittent streams adjacent to the mine area.

Section 303(d) of the Federal Clean Water Act requires Washington State to periodically prepare a list of all surface waters in the state for which beneficial uses – such as for drinking, recreation, aquatic habitat, and industrial use – are impaired by pollutants. These are water quality limited estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. A description of the Washington State Water Quality Assessment can be viewed on the web at <http://www.ecy.wa.gov/programs/wq/303d/introduction.html>. The Yakima River to the northwest of this proposed operation site is rated as Category 5 waters due to increased temperatures, PH problems, the presence of chemical contaminants such as Dichloro-Diphenyl-Trichloroethane (DDT), Poly Chlorinated By phenols (PCBs), Dioxins, endosulfan, and others (Johnson, 2006). This contamination appears to be the result of concentrated agriculture in the Yakima River Valley. No discharge will occur from the proposed mine into the Yakima River.

D. Cultural Resources:

A Class III cultural inventory was completed for this site and no cultural resources were found.

E. Recreation Use:

Recreation on this site is currently limited to motorcycle and ATV riding, trapshooting, and occasional hiking on the network of sandy access roads that dissect the parcel.

F. Soils:

Soils on this Federal parcel are poor and exhibit minimal, if any, organic A horizon. There is a substantial thickness of fine grained wind-blown loess to a depth of 0 to 50 feet in some places on the proposed site.

G. Vegetation:

Vegetation on the site is minimal and limited to sagebrush, small shrubs, grasses, and a variety of noxious weeds on the upper portion of the parcel. No native trees occur on the parcel although A&B Asphalt has planted and irrigates some trees along their access road right-of-way. Willows

are present in the gully where pit dewatering has supported their growth. Some partial reclamation has been completed on the A&B Asphalt pit to reduce fugitive dust emission. A BLM site evaluation found no special status plant species or communities of concern.

H. Visual Resources:

Visual resource impacts at this site are limited. The area consists of a basalt bluff (Goose Hill) to the northeast, orchards and vineyards to the east, farmlands to the south, and sparse residential development to the west. The site is not visible from the town of Benton City, and only the more rural areas to the south and southeast, which include farms and orchards, will be able to view parts of the operation. Interstate 82, which is located to the north of the parcel, may have minor distant views of the pit surface area. This view will be diminished as the pit is developed.

I. Wildlife:

This parcel is composed of shrub-steppe habitat consisting of open ground with low sagebrush vegetation. Wildlife is very limited on the parcel due to lack of water, semi arid conditions, and proximity to the existing A&B Asphalt sand and gravel mine. Wildlife which may visit the area includes an occasional mule deer, coyote, black-tailed jack rabbit, long billed curlew, Townsend's ground squirrel, burrowing owl, magpie, red tailed hawk, meadowlark, a variety of migratory water fowl in the adjacent manmade wetland. A BLM site evaluation found no special status species habitat.

M. Wetlands:

Pit dewatering from the A&B Asphalt mine has created a temporary wetland in the adjacent wash to the south. This area has previously served as a settling area for pit dewatering from the A&B Asphalt pit. This area is not normally a wetland due to the local arid climate but wildlife temporarily uses this human-made resource as a successful habitat.

N. Transportation:

The active A&B Asphalt operation, situated adjacent to and south of the proposed project, currently hauls sand and gravel and concrete to the local markets. The A&B operation is similar in size (528,193 tons per year) to the proposed project (500,000) and dispatches about 25 company trucks and 10 private contractor trucks per day for a total of 35 trucks per day hauling from the site. These trucks access the site through a one half mile paved right-of-way across BLM property on Field Road. To the intersection at Kiona which is also an on-ramp for I-82.

O. Socio-economic:

The U.S. Census Bureau data shows Benton County median household income for 2004 to be \$52,922 and an unemployment rate of 5.7% in 2005 (**Fedstats, 2005**). Personal income in Benton County in 2004 averaged \$30,572. Mining related jobs such as equipment operation, heavy truck driving, and paving operation average \$46,000, \$37,000, and \$34,000 per year respectively (**Monster, 2007**). The current A&B Asphalt operation employs 120 people in these higher paying positions, at labor union scale. These jobs average about \$50,000/year per employee.

P. Critical Elements of the Human Environment Not Present or Not Affected:

BLM evaluated the critical elements listed below and found that they were either not present, or would not be affected by the alternatives:

- Areas of Critical Environmental Concern

- Environmental Justice
- Prime or Unique Farm Lands
- Invasive, Non-Native Species
- Migratory Birds
- Wastes, Hazardous or Solid
- Wilderness
- Wild and Scenic Rivers

#### IV. **Environmental Impacts**

##### A. Impacts from the Proposed Action:

###### Air Quality:

Direct impacts to local air quality as a result of this project would be short term in nature. Impacts would include on and off-site dust generation, batch plant gases, and motor vehicle emissions from on-site mining and processing operations. These impacts will decrease throughout the mining process as the operation decreases its operational footprint size and operations are limited to within the pit. Partial reclamation during mining will also help to reduce migration of particulates. Air quality impacts should cease upon conclusion of mining and final reclamation.

Any fugitive dust issues will 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. Dust levels will initially be moderate due a cumulative effect of the proposed mining operation being situated adjacent to the active A&B Asphalt operation. In about 5 years A&B Asphalt should run out of material and the fugitive dust factor contributed by that operation should cease. Dust emission from the new operation located on the BLM parcel would meet air quality standards as directed in the mine plan of operations.

###### Water Quality:

There should be no measurable effects on the Yakima River from this proposed operation due to its non-connectivity with the site.

Surface water quality at the site may show some initial impacts due to the disturbance of fine grained sediments associated with mining of sand and gravel. These “fines” will be controlled through the use of settling ponds within the pit proper to filter and re-use process water. A percolation pond would be developed to reintroduce clean pit dewatering discharge water into the local groundwater. The pit will establish a centripetal drainage where the majority of runoff water at the site will flow towards the center of the pit. This runoff would be captured and directed into the adjacent percolation pond located to the southwest of the pit. Overall, surface and groundwater quality at this site should not be significantly affected with proper abatement controls incorporated into the mining plan. A percolation pond would be developed to reintroduce clean pit dewatering discharge water into the local groundwater. The pit will establish a centripetal drainage where the majority of runoff water at the site will flow towards the center of the pit. This runoff would be captured and directed into the adjacent percolation pond located to the southwest of the pit.

###### Cultural:

Since no cultural resources were found on the site, no impacts are anticipated. The requirement to cease operations and contact BLM in the event that cultural resources are found would minimize the potential for impacts to undiscovered resources.

Recreation:

Because of the limited recreational use of the area and the availability of lands of similar character nearby, little disruption to recreational activities is expected.

Soils:

Most soils at the site will be removed and stockpiled during development and mining. They will be redistributed during sequential reclamation of the pit walls and access roads.

Vegetation:

Most of the original surface vegetation would be removed with the topsoil which is to be stockpiled for later application during the reclamation phase of this project. As the mine develops, concurrent reclamation of the pit high walls would eventually re-establish more vegetation than was originally present due to the increased surface area associated with the slopes. Re-introduction of vegetation would be engineered to provide native species preference, suitable slope control, and maximum wildlife habitat.

Visual Resources:

View shed for this area will be affected with the development of a 72 acre sand and gravel operation just southeast of Benton City. View character will not change greatly from the current views due to the existence of the adjacent 80 acre A&B Asphalt sand and gravel pit. Development of the proposed BLM operation will appear simply as an extension of the existing pit that has operated at that location since the 1980s. Long term visual resources should be improved from the initial stages of the project when the pit is established to below current topography surface elevations. Concurrent reclamation of the upper portion of the pit walls will enhance views for the surrounding properties.

Wildlife:

Short term effects on wildlife will be exclusion from the pit area of the BLM parcel during the initial mining operation. Long term effects would be permanent loss of some shrub-steppe habitat (about 60 acres) due to this project. Sufficient alternative shrub-steppe habitat is available at adjacent local sites such as the 7,700 acre BLM - Horse Heaven Hills recreation site 1 mile to the south of this parcel. For that reason, long term impacts should be minimal. Once the pit is established and concurrently being reclaimed, additional wildlife habitat will be restored at the parcel throughout the life of the mine. Pit lake water and mine discharge into the percolation pond would not contain any contaminated materials. Water would be clear or soil clouded and would have no negative impact on wildlife or humans. Pit water in the adjacent drainage from the mine discharge would actually provide additional range and forage which would enhance the viability and variety of wildlife in the local area. Some wildlife habitat will probably improve beyond current conditions due to engineered slope contouring, reclamation using selected beneficial native species, and the presence of a permanent pit lake water source.

Wetlands:

Once the BLM parcel has been mined down to the local water table, discharge from the pit into the percolation pond would be used to replace previous discharge from the A&B Asphalt operation which should be ending operations due to lack of resource. Continued operations at the BLM site would lengthen the period for which the percolation pond area would be useful

habitat. Upon final pit reclamation, a pit lake will remain in order to replace the water source that will dry up once mine dewatering has ceased.

Transportation:

Traffic in and around the pit area will increase from the current level as the proposed facility develops. Ultimately, the removal of about 500,000 tons/yr from this parcel would replace production at the A&B Asphalt site which is currently producing 531,193 tons/yr (2006). Assuming a 320 days per year operating schedule, full production at the new project site would result in about 38 (calculated) dump truck and pup trailer vehicle trips, or fewer, larger capacity transport belly-dump truck round-trips, per day. That would equate to a truck leaving or arriving at the property approximately every 19 minutes. This anticipated traffic when combined with the current A&B Asphalt vehicles for the initial operation years would result in increased traffic flow near the mine area. A centralized radio truck dispatcher or installation of a traffic light at the intersection of Badger/Weber Canyon Road and Field Road (Mine Access Road) may be required and would be included an approved mining plan.

As the A&B mine runs out of resources within the next 5 years, local truck traffic will be associated more and more with this proposed operation and less with the A&B Asphalt site. Long term, traffic would be roughly equivalent to that of the current A&B Asphalt mine which has a similar production rate. Favorable location of the parcel on a well maintained, lightly used paved road which is directly adjacent to a major freeway interchange (I-82 Kiona) would minimize the effects of temporary traffic increases. Trucks are able to enter and leave the property almost directly onto an interstate freeway system without passing through high-traffic municipal or residential areas.

Socio-economic:

This project would create a significant number (estimated 100+) of high wage employment opportunities at the mine and trucking facility. The jobs would be available to local residents of Benton County and the surrounding area. In addition, economic ripple effects to service these new jobs (restaurants, stores, schools, etc.) will spread out into the local community increasing the number of service and support job opportunities. This proposed mine would ensure a stable supply of reasonably priced mineral materials to support future community development. Municipal tax base will also be enhanced to help support community infrastructure. Mine production would generate about \$140,000 to \$150,000 per year in royalties to the Federal treasury.

B. Impacts from No Action

If no action is taken on this proposal, conditions at the site will remain relatively the same as they are now with some development. The area would remain rural with some increase in residential development to the west of the parcel. Farming and orchards would continue to dominate the landscape to the east. Benton City has annexed some State of Washington land and private land near the parcel and proposes to develop the area into a light industrial park in the future.

Mining at the adjacent A&B Asphalt property to the southeast would continue up to the boundaries of this Federal parcel or until all available resources at that site are utilized. High paying mine related jobs in the Benton City area would then be eliminated and the economic ripple effect benefits to the local community through support services for mining would be reduced.

Pit dewatering for the A&B operation would then cease and the man-made habitat area in the adjoining gully would dry up. No replacement habitat would be available for the displaced wildlife.

Limited recreation would continue at the site. It is anticipated that there would be increased impacts related to refuse dumping and increased dust generation from increased use of dirt roads on the parcel.

C. Cumulative Impacts

Cumulative short term impacts related to this project will be dust, processing off-gas and vehicular emissions. According to the Benton County Clean Air Authority, “Compared to other urban areas in Washington State, the Tri-Cities has some of the cleanest air over the majority of the year. “Our average pollution levels are well below the national average.” Due to relatively consistent winds and dispersion; it is anticipated that these impacts should be minimal at the parcel and insignificant beyond ½ mile from the project area. With dust abatement procedures designed into the mine plan and concurrent, phased reclamation, the additional emission sources from the proposed mine should not significantly affect short term cumulative air quality in the local or regional area. Long term air quality will be minimally impacted after reclamation is complete.

Other current local air contaminant sources include agricultural soil disturbance, chemical herbicide spraying, fugitive dust and off-gases from the adjacent A&B Asphalt mine and associated AJ Crushing operation, dirt roads, residential wood stove particulates, adjacent railroad service, adjacent freeway traffic, and wind-blown dust from large tracts of vacant land.

D. Mitigation Measures

Mitigation measures would be incorporated into the mining and reclamation plan as described in the Proposed Action.

V. Consultation and Coordination

A. Individuals and Organizations Consulted:

- Robert Spink of Spink Engineering in Richland, WA, a planning consultant for Benton City, WA was consulted regarding the land use planning and zoning of the private and municipal lands surrounding this parcel.
- Robin Priddy of the Benton Clean Air Authority was consulted regarding initial assessment of potential on and off-site impacts to local air quality from the proposed mine.
- On March 8, 2006, notification letters concerning the Benton City Community Pit proposed operation were sent to the State of Washington Department of Archaeology and Historic Preservation (DAHP), and the Yakima Indian Nation.
- In a letter dated March 14, 2006, the State of Washington Department of Archaeology and Historic Preservation (DASP) concurred with the findings of the AHS cultural report, that “No Historic Properties are Effected” for the proposed Benton City Community Pit.

B. Databases Consulted:

The following databases were used to review the subject area for known cultural resources and threatened and endangered (T&E) plant and animal species at or near the project area.

- State of Washington-Department of Fish and Wildlife Priority habitat and Species Database.
- State of Washington-Department of Natural Resources-Washington Natural Heritage Plant Database.
- State of Washington-Office of Archaeology and Historical Preservation Site Database.
- Bureau of Land Management Resources Inventory Database and other records.

**VI. List of Preparers**

The following personnel were involved in the field evaluation of this parcel:

BLM Representatives

Rich Bailey	- Spokane District - Archeologist
Lori Baker	- Spokane District – Recreation Specialist
Barb Benner	- Border Resource - Area Botanist
Kelly Courtright	- Spokane District - Mining Engineer
Al Gardner	- Border Resource - Area Forester
Joe Kelly	- Spokane District - Fisheries Biologist
Rick McComas	- Border Resource Area - Range Specialist
Scott Pavey	- Spokane District - Environmental Coordinator
Thomas Sweeney	- Border Resource Area - Geologist
Joyce Whitney	- Border Resource Area - Biologist

Other Individuals Consulted

Philip Paterno - U.S. Dept. of the Interior, National Business Center –  
Certified General Appraiser

**VII. References**

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**VIII. Attachments:**

**Attachment 1:** General Location map of the proposed Benton City Community Pit, Benton City, WA.

**Attachment 2:** Site Map - USGS 7.5 Minute Series (1:24,000)

**Attachment 3:** Aerial photograph Imagery of the Benton City Pit Site

**Attachment 4:** Master Title Plat of the Benton City Community Pit area showing ownership

**Attachment 5:** Three-dimensional Computerized Model (“Surfer” software) of the Benton City Community Pit Federal Parcel - Original Surface

**Attachment 6:** Three-dimensional Computerized Model (“Surfer” software) of the fully developed Benton City Community Pit

**Attachment 7:** Photograph of proposed pit parcel (looking to the northwest)