

ENVIRONMENTAL ASSESSMENT

PROPONENT: Gary Krueger

SITE NAME: Krueger Site

LOCATION: W2 E2 Section 15, T29N, R22W

COUNTY: Flathead

TYPE AND PURPOSE OF ACTION:

The applicant proposes the addition of 46 acres to an existing 80-acre gravel pit in the W1/2E1/2 of Section 15 and south of Church Drive (see Attachment 1 – Permit Map). This site is approximately 6.5 miles from Kalispell. Activities proposed for this amended area are limited to sand and gravel extraction, potential crushing to create various aggregate products, stockpiling and transportation of over 141,000 cubic yards for the initial 5 acres of mining and over 1,000,000 cubic yards of sand and gravel over a period of 35 years if he mines the remaining 40 acres of that parcel. Excavation to recover sand and gravel would extend approximately 25 feet below ground surface. Surface soils and overburden average 18 inches thick across the site. Ground water is not less than 10 feet below the proposed pit floor. The excavation would not encounter ground water. Access would occur from an existing farm road on West Spring Creek Drive approximately 300 feet south of the Church Drive intersection and south through farm fields. Current topography is rolling. The mine excavation would be graded to slopes no greater than 3:1 and with a curved finish to mirror the existing topography. The area would be progressively reclaimed with replacement of the salvaged topsoil and overburden and planting to pasture grass. Final reclamation would be completed by 2045.

This environmental assessment (EA) is required under the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose and analyze the impacts of an action, in this case operating a sand and gravel pit over which the state must make a decision, so that an informed decision can be made. MEPA sets no environmental standards even though it requires analysis of both the natural and human environment. This document may disclose many impacts that have no legislatively required mitigation measures or over which there is no regulatory authority. The state legislature has provided no authority in MEPA to allow DEQ or any other state agency to require conditions or impose mitigations on a proposed permitting action that are not included in the permitting authority and operating standards in the governing state law, such as the Opencut Mining Act, the Clean Air Act of Montana, or any other applicable state environmental regulatory law. Beyond that, a company may agree to voluntarily modify its proposed activities or accept permit conditions.

The state law that regulates sand and gravel mining operations in Montana is the Opencut Mining Act. This law and its approved rules place operational guidance and limitations on a project during its life, and provide for the reclamation of land subjected to opencut materials mining. This law requires that a surety bond, cash deposit or other financial instrument be submitted to the state to cover the complete costs of reclaiming the site to its approved, post-mining land use.

The permit decision is based on whether or not the proponent has met the requirements of the Opencut Mining Act, pursuant rules, and other laws pertaining to its proposed actions.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>Soil, which varies from 3 to 12 inches of well-drained, fine sandy loam, and additional 10" to 12" of overburden would be salvaged and stockpiled away from the mine and roads. Following mining, grading and ripping, the salvaged soils and overburden would be replaced, disked and seeded to pasture.</p> <p>The site is located at the terminus of the Lost Creek alluvial fan. Surface topography has been shaped by glaciation and wind erosion of the fine sands. Much of the area is reminiscent of kettle and kame land forms. Deeper layers are bedded sands and gravels to depths of over 200 feet. Historically the site was farmed for forage and small grain crops. Yields are moderate due to the sandy nature of the soil.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or ground water resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>This site is east of the Lost Creek aquifer where investigations have been conducted for the source of the high nitrates in the Lost Creek aquifer. The proposed Krueger mining operation would not affect the site aquifer, because no petroleum products would be stored on site, onsite measures would be taken to manage petroleum products and spills (see third paragraph below), no toxic or hazardous materials are used in the mining and processing of sand and gravel, and the operation would not penetrate the ground water table. There would be no water discharged from the operations. Surface water ponds are located west and east of the site. Implementing Best Management Practices, berming, silt fences, grading to drain internally and reseeding would minimize particulate load in any surface water runoff leaving the site.</p> <p>Existing depressions west and east of the proposed facility are filled with water during the year. From the well logs these appear to be perched sites and are not directly connected to the deeper aquifer. High ground water elevations appear to be 40 to 60 feet below the surface elevation of the site at approximately elevation 3005 feet MSL. Pit depths would be at least 10 feet above ground water elevations at a maximum depth of 3015 feet MSL. There are five wells in Section 15 and six in Section 10 directly north of the proposed facility. State aquifers and well depths vary indicating the presence of perched aquifers.</p> <p>Special precautions would be taken to minimize possible contamination of the ground and surface water. No petroleum products would be stored on site. Portable equipment with fuel tanks such as loaders, a crusher, and trucks would be located in various places within the facility. Any accidental spills or leaks from equipment would be excavated and contaminated materials would be properly disposed of. No waste or trash would be disposed of at the site. Excavations would be graded to drain inwards toward the interior of the permit. With these precautions, the quality and quantity of the ground and surface water should not be adversely impacted.</p> <p>A water well located in the NE¹/₄NE¹/₄ of Section 15 will supply 30 gallons per minute for dust control. This was a well drilled in August 1989 and was a marginal well for the farm, but it will supply ample water for dust control. Krueger has constructed a concrete 27,000 gallon cistern to store water during off-work times. No impacts are anticipated as a result of pumping water for dust control at this rate.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>Air quality may be degraded at times but shouldn't be any greater than currently exists with the other permitted area because the operations are not cumulative- it's either/or, so while there may be particulate matter, it should not be greater than currently exists. Dozers, loaders, and trucking equipment typically could cause dusty conditions in disturbed soil sites, especially during hot, dry periods. Dust</p>

would be controlled around the site by water truck. Water is needed to control three common fugitive dust sources in gravel pits: 1) the pit floor, 2) the haul road, and 3) the crusher. The original permitted area to the north involves the use of a crusher which may move to the amended area later – there would not be two crushers operating – just relocating one from north to south. Dust suppression on the crusher is accomplished by spraying water into the crushing chamber and onto the conveyor belt that transports the crushed material onto stockpiles. The crusher spray bars would use, on average, about 500 gal/day. Since crushers cannot be operated in very cold weather and the sprayers are not necessary every operating day, water for sprayers would be required about 6 months a year and normal water usage for the crusher is estimated as follows: 500 gal/day X 5 days/week X 26 weeks = 65,000 gallons per year. The 65,000 gallons per year used by the crusher would be lost by evaporation and none of it would be returned to ground water. To control dust in the pit and on the haul road the applicant proposes to use an average of 2,000 gallons of water a day (gal/day) with a maximum usage of 4,000 gal/day for about 9 months a year. Thus, typical yearly usage would be: 2,000 gal/day X 5 days/week X 39 weeks = 390,000 gal per year. The proposed maximum water use for all dust control for 260 working days a year consumes about 455,000 gallons per year or about one-tenth of the amount of water to be produced from the 30 gpm well (9 months at 24 hours per day = 11.6 million gallons per year). The majority of this water would be lost to evaporation and would not return to ground water. Using magnesium chloride or other chemical dust suppressants on high traffic areas would considerably reduce the amount of water required for fugitive dust control. Crushers are regulated for emissions and the equipment used must be tested and approved by DEQ (Air Resources Management Bureau). The site is not within a Class I airshed. The proponent would be required to comply with state air quality regulations.

Krueger's conditional use permit for the original permitted area (CUP) from Flathead County includes several requirements relating to dust control. These include requirements for vegetating soil and overburden berms and stockpiles, paving of certain segments of affected public roads, limits on the extent of mine-related disturbance at any one time, and scheduling of reclamation (see conditions 10, 14, 15, 16, 17, 22, and 23 on Krueger's original CUP listed in section 16 of the EA below). See Attachment #1 below for a discussion about the PM10 non-attainment status of the Flathead Valley.

The existing operation would increase the levels of some pollutants in the area, particularly particulate matter and carbon monoxide, but as stated above, this action is not cumulative to the first. The proponent would be required to comply with state air quality regulations, which are as or more strict than federal (Environmental Protection Agency) requirements. The proponent would be required to obtain all required air quality permits. The air quality permitting process includes an analysis of Best Available Control Technology.

Because the existing and proposed sites are in or within 10 km of a PM10 (particulate matter no greater than 10 micrometers in aerodynamic diameter) nonattainment area, the proponent would be required to: 1) use water spray bars on crushers, screens, and material transfer points, 2) limit visible emissions from the crushing and screening plant, other equipment, works areas, and roads within the permit area to less than 10 percent opacity (a measurement of visibility through a dust plume) over 6 consecutive minutes, 3) treat unpaved roads and work areas with water or a dust suppressant as necessary to maintain compliance with the 10 percent opacity limitation, 4) limit crusher and screen production during any rolling 24-hour period, and 5) limit diesel generator hours of operation during any rolling 24-hour time period. Exhaust from machines other than diesel generators, including haul trucks, is not regulated.

In addition to the requirements of the DEQ air quality permit, the proponent has committed to a dust control plan detailed in Section II(6) of the plan of operation in the mining permit application. Condition 10 of the original Flathead County Conditional Use Permit requires that the proponent perform dust abatement consistently and conscientiously to limit any impacts to the surrounding properties and general air quality. Flathead County, not the proponent, is responsible for dust control on public roads in the area; however, fugitive dust from county roads near the proposed mine site would appear to be an insignificant issue, because of the following conditions of the County's original CUP (FCU 06-02):

15. One hundred feet of West Springcreek Road at its intersection with Church Drive shall be paved to County standards.

16. The applicant shall gravel and maintain West Springcreek Road to County standards from the end of the pavement (see condition 15) to the entrance of the haul road.

17. One hundred feet of Stillwater Road at its intersection with Church Drive shall be paved to County standards.

Gaseous emissions from mobile equipment such as front-end loaders and haul trucks used on- or off-site are not regulated by any agency.

Cumulative Impacts

The proposed amendment area is projected to supply pit-run materials, but in conjunction with and replacing that use of the original operation that is being depleted of that specific resource and it's possible the crusher could be moved to this site too. This new area should not add to the level of dust produced within the entire permitted (proposed) area.

Two other prospective mine sites are nearby, Beasley-Silverstone and Tutvedt 2. The first of these is an existing permitted site approximately ½ mile west of the Tutvedt 2 site. An amendment has been submitted for the Beasley-Silverstone site; this amendment would, among other things, increase production to a total of 700,000 cubic yards over a 15-year period. This site would also include a crusher, but the permittee has not obtained an air quality permit for this facility. Also, the Conditional Use Permit (CUP) on the Beasley-Silverstone site was revoked in June 2006 by the Flathead County Board of Adjustment; the mine cannot operate unless the operator submits application for and receives a new CUP.

The Tutvedt 2 site is a permitted operation located about 1.0 mile west of Krueger. The site is permitted for dry gravel mining and crushing on 40 acres, from which approximately 1.5 million yards of materials would be mined over 10 years. The permit for this site includes a crushing operation, and the operator has obtained an air quality permit for such a facility.

It is likely that air quality permits for Beasley-Silverstone and Tutvedt 2 would be similar in their requirements and restrictions to that of the Krueger site. Also, the plans of operation in the Beasley-Silverstone mine permit amendment and the Tutvedt 2 mine application both contain dust control commitments. The county issued a CUP to Tutvedt in June 2005. Several CUP conditions imposed on Tutvedt with respect to fugitive dust control are identical in content or concept to those in the Krueger CUP. Thus, each of the three sites would be subject to similar requirements that would limit air quality impacts in relation to state and county requirements.

The Air Resources Management Bureau (ARMB), which is the DEQ bureau responsible for issuing air quality permits and conducting air quality compliance work, does not monitor dust emissions on individual sand and gravel mine sites,

	<p>especially of this size. Thus, quantitative particulate (dust) emission data are not collected on sites such as these. Typical permits of ARMB issued for crushers working on sand and gravel sites in this area require that dust emissions from crushers and associated equipment be limited to no more than 250 tons per year and to meet certain air opacity requirements. Based on generally accepted particulate emission factors on mine sites such as these, dust from other sources (known as fugitive dust) such as trucks or other equipment moving across/around the pit or on access roads, loading of trucks, stockpiling of soil or overburden, etc. is considered to be less than 15 tons per year by ARMB. Thus, on average, these three mines collectively could emit close to 795 tons of particulates per year $[(250 \times 3) + (15 \times 3)]$. How this would affect air quality in the general area around these operations is difficult to predict. It is possible to conceive of atmospheric, weather, and operational conditions wherein the emissions from these operations could be additive in terms of air quality deterioration: all operating at full capacity at the same time when there is an air inversion in the valley and low humidity. The likelihood of all of these circumstances occurring at the same time is unknown.</p> <p>DEQ has been monitoring air quality at certain locations in the Flathead Valley for quite some time. Community air pollution control plans have been developed to help Columbia Falls, Kalispell, and Whitefish meet state and federal air quality standards, because these towns have been designated by the federal government as out of compliance with particulate standards (i.e., nonattainment). Please see Attachment 2 for details concerning DEQ's initiatives and efforts in this regard.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>There are no known rare or sensitive plants or cover types present in the site area. Vegetation consists of wheat stubble and some pasture grass and covers 90% of the ground. It would be removed as soil is stripped, and the site would be re-planted with species compatible with the proposed reclaimed use of pasture. Krueger's plan of operation includes a statement that weeds will be controlled by mowing and spraying. Condition 14 of the Krueger's original CUP requires an Invasive Plant Management Form be signed by the County Weed and Parks Department. The new CUP does not require the same action, but the Plan of Operation for the new amendment requires the operator to comply with local weed district requirements.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>Although the area is used primarily for agriculture, it is occasionally used by whitetail deer, waterfowl, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are considered minimal due to the site's agricultural character. The proposed mine would not significantly degrade wildlife populations.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>The Natural Heritage Program and site evaluations have not revealed any endangered or threatened plant or animal species that would be directly affected. Bald eagles are known to range all along the Flathead River Valley, but no nesting sites are known on or within a range of two miles, the limit for disturbance of active nesting sites. No adverse effects to eagles as a result of this proposed action have been identified.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>Although there are cultural values in the general area, this site has been previously disturbed by modern man during farming activities, thus destroying the integrity of resources that may have existed. A surface reconnaissance did not discover any cultural, historical or archeological resources. The operator would give appropriate protection to any values or artifacts discovered in the affected area. If significant resources are found, the operation would be routed around the site of discovery for a reasonable time until salvage could be conducted. The State Historic Preservation Office would be promptly notified.</p>
<p>8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or</p>	<p>The site is partially visible from homes in the local area and to traffic along Church Drive. There could be a deterioration of aesthetics while the operation is underway, but this would be relatively minimal as the existing agricultural operations employ silage pits and manure piles. Reclamation would return the</p>

<p>light?</p>	<p>area to a visually acceptable landscape.</p> <p>Hours of operation for the site are proposed to be 7:00 am to 7:00 pm, Monday through Saturday, which are the hours imposed by CUP condition 4 from the county (see Condition 4 section 16 of the EA below). In addition, county CUP condition 4 also prohibits hauling to or from the site after 12 pm on Saturday. In addition, please see mosquito control, Condition 10 the CUP below.</p> <p>Noise levels generated by operating equipment at the pit would generally be within the range of 60 to 90 decibels measured on-site, decreasing with distance. As a comparison, sound levels for ordinary activities such as close conversation at A noise level of 60 decibels and music from a radio at 70 decibels are considered to be moderate. Levels above 90 decibels lasting for 8 hours or more are severe, and prolonged exposure can lead to hearing loss. There is also noise from loaders and truck traffic hauling to various projects. These impacts are intermittent and of relatively short duration.</p> <p>Noise decreases with distance. A crusher noise level of 85 decibels measured at 50 feet reduces to 79 decibels at 100 feet, 72 decibels at 200 feet and 65 decibels at 400 feet. Thus, the noise level would be reduced to moderate levels at the permit boundary and would continue to decline beyond that; however, it would still be audible. The nearest residence is 1,800 feet east of the initial mining phase. Noise levels should be less than 51 decibels.</p> <p>As pit activities progress north and south, several residences would be affected. These same residences are in an active farm operation and currently experience similar noise levels.</p> <p>Noise is not cumulative. A truck operating at 65 decibels and loader at 75 decibels do not add up to the equivalent of a 140-decibel jet plane at takeoff.</p>
<p>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>No limited resources in the area would be used.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?</p>	<p>A study sponsored by DEQ's Remediation Division did not reveal any abnormal Nitrate levels in the deep aquifer. Further studies designed to determine groundwater flow and connectivity between aquifers has been completed. This research indicated there is a potential for downward migration of groundwater and contaminates, but the potential does not necessarily indicate that vertical mixing of groundwater is occurring because the presence of aquitards may limit vertical migration such that little if any connectivity exists.</p>
<p>IMPACTS ON THE HUMAN POPULATION</p>	
<p>RESOURCE</p>	<p>POTENTIAL IMPACTS AND MITIGATION MEASURES</p>
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>On-site, heavy equipment including, trucks and loaders would create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents. Dust from disturbed ground would be controlled on site by watering and chemical dust control as needed. Dust from the crusher located at the north site and potentially the new amended site would be controlled as required by the air quality permit. See section 3 above in the EA for discussion about dust control requirements with respect to public roads and the new interior road that were imposed in the county's CUP.</p> <p>Traffic</p>

Over the past several years, the Montana Department of Transportation (MDT) has conducted traffic counts and systems impacts studies in the vicinity of the proposed open-cut operation to determine existing traffic flows and possible impacts from planned developments. These continuing efforts provide a factual basis for road or traffic control improvements. The county on March 19, 2007, adopted their Growth Planning Policy and it did address road and traffic. Also under review is a master plan amendment on 3,200 acres in the area of Highway 93 around West Spring Creek Road to Fox Farm Road. Average daily traffic (ADT) is calculated so that numbers can be compared to data developed by the Montana Department of Transportation, Flathead County Planning Board, or traffic consultants.

Trucks must follow the same rules of the road as other traffic. Speed limits, signage, and other traffic control devices are designed to protect humans. For example, the springtime truck speed limit is reduced to 35 mph on Farm To Market Road due to road breakup. The MDT traffic studies, in conjunction with the local government planning efforts, would be used to determine if speed limits should be reduced, warning signs or traffic signals should be installed, or other actions should be taken to control or reroute traffic.

The original Conditional Use Permit for the Krueger site places three traffic conditions on the initial operation:

- 15. One hundred feet of West Springcreek Road at its intersection with Church Drive shall be paved to County standards.
- 16. The applicant shall gravel and maintain West Springcreek Road to County standards from the end of the pavement (see condition 15) to the entrance of the haul road.
- 17. One hundred feet of Stillwater Road at its intersection with Church Drive shall be paved to County standards.

In addition FCU 08-19 limits the combined operations to one access point as described in FCU 06-02.

The Krueger amendment application indicates that approximately 141,000 cubic yards of materials would be mined over 20 years or about 7,000 cubic yards per year. Traffic that might be generated due to this operation can be calculated as follows. The average daily traffic (ADT) is computed by dividing the total volume of product proposed to be mined (141,000 cubic yards) by the estimated volume per truckload (20 cubic yards). This number of loaded-truck trips is multiplied by 2 to account for empty trucks returning to the site. Then, dividing the total truck trips by the 20-year life of operation and by 286 working days per year (5.5 days per week) results in 2.4ADT ($141,000 \text{ yds}^3 / 20 \text{ yds}^3/\text{truck} \times 2 \text{ trips} / 20 \text{ years} / 286 \text{ days}$). This would be a negligible increase in traffic.

Church Drive traffic counts are not available, because it is not a state highway, but assuming trucks from the Krueger operation went out to Highway 93, there would be less than 0.02 percent increase in traffic on Highway 93. If they were to go to Farm to Market Road, the increase on this road would be 0.1 percent.

Another hauling scenario might be that the owner/operator would work a full eight-hour day. He would load a truck and deliver the gravel to the buyer's location, taking about 1 hour per round trip (2 ADT). Working a full day, this would result in 8 trips or 16 ADT, or 61 work days a year. This traffic increase would also be negligible or minor. It would result in a 0.08 percent increase on Highway 93 or 0.5 percent on Farm to Market Road during the 61 days of hauling each year.

It is obvious that the crusher or wash plant could not operate daily at this low level

	<p>of activity for 20 years. It is far more likely that the crusher or wash plant would be operated until some amount of material was stockpiled, and then would be hauled off-site as sales were realized. A small crusher could set up and crush a year's supply of gravel at this site in 2 weeks.</p> <p>Specific traffic counts for Stillwater Road are unavailable, because it is not a state highway. However, the majority of traffic from the Stillwater Road mines goes south onto West Reserve. Traffic on West Reserve is projected by MDT to increase to over 11,000 ADT (52.1 percent) due to the new high school and a subdivision along West Reserve. If half of that traffic were to go north on Highway 93, the addition of the Krueger traffic to West Reserve would be 0.01 percent or less.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>The acreage listed in the Type and Purpose of Action would be taken out of agricultural production and put into industrial/commercial use. Concurrent with and upon completion of mining, the land would be returned to pasture.</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>No new jobs would be created as a result of this operation.</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>Additional taxes may be generated for the county and state in the form of income to the applicant and employees and fuel and highway taxes paid by hauling products and equipment.</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>The operation would require periodic site evaluations by DEQ staff until such time as the site is successfully reclaimed to the required post-mining use. However, these evaluations are usually performed in conjunction with other area operations.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>City/County zoning clearance has been obtained. The Flathead County Board of Adjustments has issued a Conditional Use Permit for this site. At its February 3, 2009 meeting, the Board granted Krueger's request to allow an extractive industry within the West Valley Zoning District under the following conditions:</p> <p style="text-align: center;">Conditional Use Permit Gary & Jessica Krueger Staff Report #CFU 08-19 Final Approved Conditions</p> <ol style="list-style-type: none"> I. Development and operation of the facility shall be performed in compliance with the information presented and approved except as otherwise modified by these conditions. The Flathead County Board of Adjustments reserves the right to terminate the permit if these conditions are not complied with. 2. Any change or modification to the use not specified in the application may not be effected unless specifically approved in writing by the Flathead County Board of Adjustment. 3. If the permittee fails to implement the use of the property as allowed by this permit within one year from the date of issuance or if all conditions are not satisfied, this permit shall become void. 4. Hours of operation shall be 7:00 AM to 7:00 PM, Monday through Friday. Saturday operations shall be limited to 8:00 AM to 5:00 PM, with no hauling after 12:00 noon Saturday, and no operations on Sunday. Operations are considered to start when equipment is turned on and shall be turned off at the end of day. Equipment may be transferred between the site and maintenance facilities Monday through Saturday only, until 9:00 PM. Fueling and equipment repair and maintenance shall not be considered 'operations'. 5. All parking areas for employee vehicles and company vehicles shall be provided onsite, or at the site of the existing permitted pit on the same tract of land. 6. Dust abatement shall be performed on the site and interior access roads to limit

any impacts to surrounding properties and general air quality.

7. The applicant will employ all available means to minimize noise generated by operations. This includes, but is not limited to the constructions of planted berms.

8. Soils stockpiled onsite shall be bermed to a minimum of eight feet. Berms shall be maintained to reduce noise and visual impact of operations to limit impacts on neighboring properties. The berms may be cultivated in conjunction with farming activities being conducted on the adjacent areas of the subject tract, and surrounding applicant-owned property.

9. Any light used for the operation may be equipment-mounted or free-standing, and all light shall be directed so as to be contained within the site.

10. Pockets and stagnant pools of water resulting from surface drainage shall be treated with EPA-approved larvicides to eliminate breeding places for mosquitoes and other insects. Method and chemical uses shall be approved by the Montana Department of Agriculture; or the ponds shall be periodically drained to prevent the creation of such breeding places. Any larvicides used shall be environmentally safe and pose no threat to water quality.

II. Active mining, stockpiling and equipment staging shall be limited to twenty (20) acres at any time, with 'rolling reclamation' implemented. No new disturbance, beyond the 20 acres of active mining shall occur until the preceding active mining area is reclaimed.

12. Areas of the subject tract not under active mining or support use shall be maintained in farming activity.

13. One access is granted for all mine related operations, including material transport, via the established access road approved for FCU 06-02 from West Springcreek Drive to the gravel pit site.

14. The applicant shall obtain a letter from the West Valley Rural Fire Department stating all access, parking, fire suppression, and emergency evacuation plans are acceptable for the purpose of protecting public health and safety.

15. The applicant shall obtain and furnish proof of increased usage for the previously approved approach permit from the Flathead County Road and Bridge Department for commercial access onto West Springcreek Drive.

16. A Plan of Operations shall be signed and approved by the owner or operator, the Montana Department of Environmental Quality with a copy submitted to Flathead County Planning and Zoning within five working days of receipt.

17. The applicant shall not store unleaded gas, diesel fuel, or any hazardous materials onsite.

18. This operation is limited to extraction of gravel.

19. Asphalt and concrete batch plant operations are prohibited.

20. Both the landowner and operator of the mining operation shall comply with the Montana Opencut Mining Act, as administered by the Montana Department of Environmental Quality. The conditions of this permit shall be in addition to the requirements of the State. Violations of the state-issued permit are construed as a violation of this permit.

21. Conditional Use Permit FCU 08-19 shall be valid for 20 years from the date of issuance and runs with the property. Should the property be sold during this time, and if the new owner wishes to continue the use of the property, said use shall remain in compliance with all terms of this conditional use permit and be commenced within one year of transfer of ownership.

22. Conditional Use Permit FCU-08-07 will undergo administrative reviews by the Planning and Zoning Department at five year intervals from the date of issuance to ensure compliance with on-going conditions.

23. Use of mined materials may be used for farm related activities on applicant's property.

17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	No wilderness or recreational areas are nearby or accessed through this tract.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	The project would not add to the population or require additional housing.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	The area has generally been cropland and pasture. Locals could notice a change in the area as gravel is being extracted and hauled away. They could notice some dust, equipment working, and truck traffic coming and going. There would be a short-term substantial change in aesthetics immediately at and near the site that would continue for the life of the mine. Upon reclamation, the site would be reclaimed to grazing and returned to rural use.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	The residents of West Valley value the area's rural lifestyle. Residences and residential development continue to be added to the area. The addition of the proposed Krueger opencut operation, along with the prospective Beasley and newly permitted Tutvedt operations in the same general area are not considered positive additions to this area by some residents. However, visual, aesthetic, noise, air quality, and traffic impacts would be lessened by conditions in the plan of operation and by the conditions imposed by the county in the Conditional Use Permit.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	None.

22. Alternatives Considered:

A. Denial: The pit would not be permitted and impacts from mining would not occur. The owner of the gravel resource would be denied full utilization of his property at this time. However, another application could be submitted to revise the existing plan, or an application could be submitted for another site.

B. Approval of the application with mitigating conditions: The application would be approved with the following conditions in effect: water protection, soil salvage, and full reclamation as found in the Plan of Operation, and conditions imposed by Flathead County.

23. Public Involvement, Agencies, Groups or Individuals contacted: State Historic Preservation Office; Montana Heritage Program; Flathead County Weed Control District; Flathead County Planning for zoning. This DRAFT EA will be published on the DEQ website and comments will be received for a period of two weeks.

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Flathead County for Zoning and Weed Control Compliance, Mine Safety and Health Administration for safety permit, DEQ Air Quality Permit for crushers from ARMB.

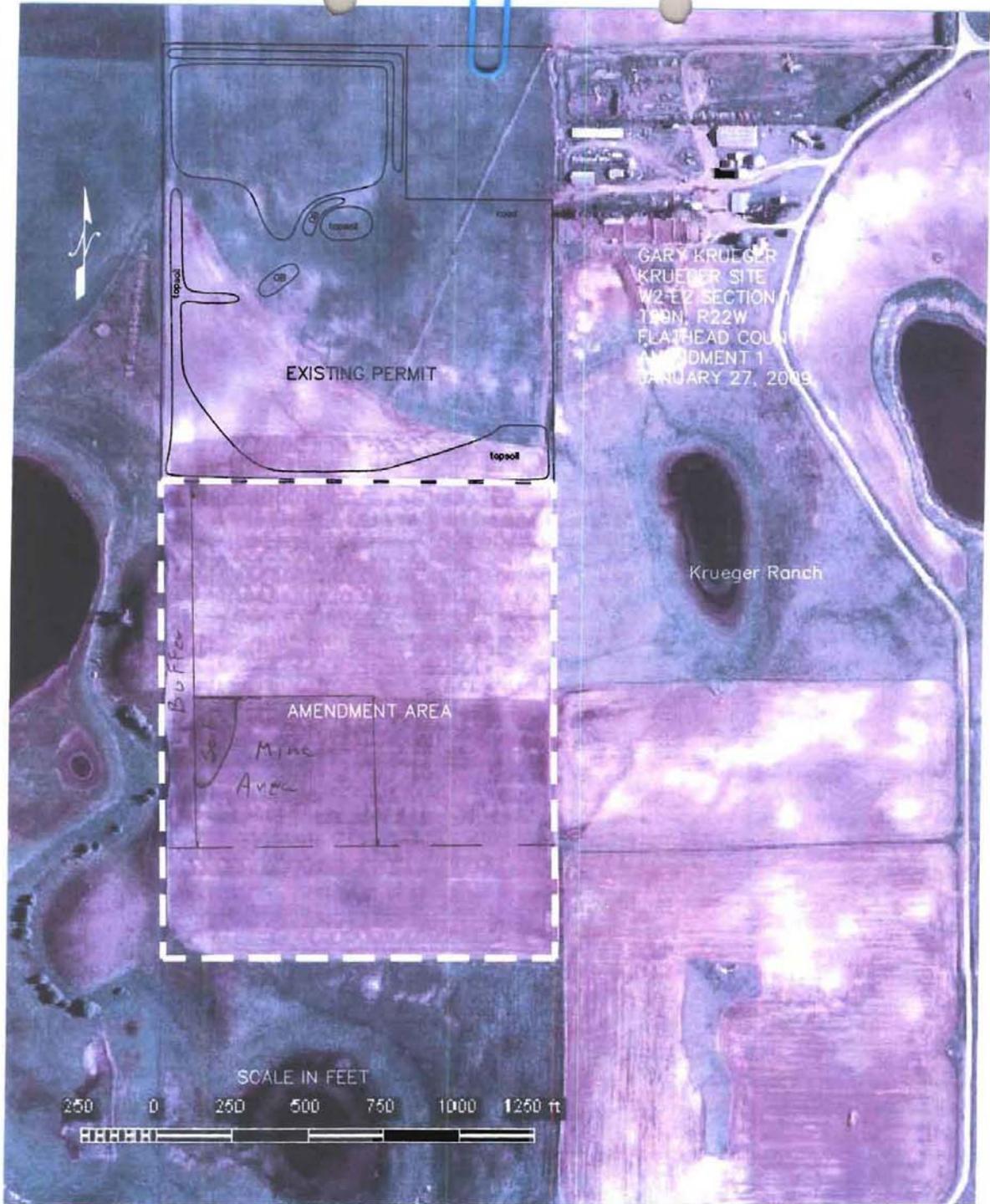
25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant on the general environment because of the scope and location of the project, the lack of significant or threatened wildlife or habitat, and because of the mitigation measures placed in the Plan of Operation and the County's Conditional Use Permit.

26. Regulatory impact on private property: The analysis conducted in response to the Private Property Assessment Act (PPAA) indicates no impact is expected on the use of private property. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

27. References

Montana Bureau of Mines and Geology. 2005. Groundwater Information Center Report for 11 Well Records in Section 16, Township 29N Range 22W, an online data base at <http://mbmgwic.mtech.edu>. Retrieved August 2005.

ATTACHMENT 1 - PERMIT MAP



Amerel #1

ATTACHMENT 2

AIR QUALITY IN FLATHEAD COUNTY

(Excerpted and Edited from a Submittal by Bob Habeck, Air Resources Management Bureau, DEQ; June 2006)

Background: The federal Clean Air Act (Act) applies to the entire nation. However, state and local air pollution control agencies do much of the work to fulfill the requirements of the Act. States and counties develop community air pollution control programs to address automobile emissions, outdoor burning, road dust, or similar sources of air pollution.

States and counties develop and maintain State Implementation Plans (SIPs) that explain how they will protect against air pollution under the Act. A SIP is a collection of programs, policies and rules used to attain and maintain the primary and secondary National Ambient Air Quality Standards (Standards). EPA must approve each SIP, and if a SIP fails in some way to protect the Standards, EPA may reject an Agency's SIP and assume administration of any specific portion of the Act in that state and/or develop its own implementation plan for the state.

DEQ implements state and federal air quality standards in Flathead County, in part, through the development of community air pollution control plans. Flathead has three communities that have violated state and federal air quality standards. These communities are Columbia Falls, Kalispell, and Whitefish. Air pollution control plans have been developed for each of these areas.

Comprehensive, valley-wide air pollution studies have not been performed. Evaluation of current air pollution is performed through an assessment of ambient air quality monitoring, located within each community. Because monitoring data indicate compliance with state and federal air quality standards, further studies to evaluate air pollution are generally not warranted. However, in anticipation of a revised particulate air quality standard, DEQ will conduct an air quality study in the Whitefish area in the winter of 2006-2007 to determine the sources and contributions of fine particulate matter.

Air quality issues in Flathead County primarily involve particulate matter originating within the communities of Columbia Falls, Kalispell, and Whitefish. The air quality status of each community is outlined below.

Columbia Falls: Particulate monitoring has been conducted in Columbia Falls since 1971. Air quality standards were exceeded in 1987 and the area was federally designated nonattainment in 1990. Re-entrained road dust from paved roads was determined to be the major contributor. DEQ and the Flathead County Health Department developed an air quality control plan and submitted it to EPA in 1991. The control plan focused on fugitive dust emissions from roads, parking lots, construction, and demolition, as well as the Plum Creek facility. EPA approved the control plan in 1994.

Dust generated by a bark processing facility in the industrial park on the northeast side of Columbia Falls generated considerable concern in 1998-2000. Monitoring for dust never identified any exceedances of air quality standards. To date, no further air quality control measures are being taken in Columbia Falls. Current air quality monitoring data indicate the area is in compliance with state and federal air quality standards. However, officially, the federally designated nonattainment status of Columbia Falls has not changed.

Kalispell: Particulate monitoring has been conducted in Kalispell since 1971. From 1977 to 1982, Kalispell was one of the communities involved with the Flathead River Basin Environmental Impact Statement. Monitoring was conducted at several locations in the basin and it was determined that most of the high concentration sites were associated with anthropogenic sources in the city centers.

Air quality studies performed in 1986 and 1987 determined that re-entrained road dust was the predominant source of air pollution followed by residential wood combustion. Kalispell was federally designated nonattainment in 1990. DEQ and the Flathead County Health Department developed an air quality control plan and submitted it to EPA in 1990. The control plan consisted of controls on fugitive dust emissions from roads, parking lots, construction, and demolition. EPA approved the control plan in 1996.

To date, no further air quality control measures are being taken in Kalispell. Current air quality monitoring data indicate the area is in compliance with state and federal air quality standards. However, officially, the federally designated nonattainment status of Kalispell has not changed.

Whitefish: Whitefish was federally designated nonattainment in 1993. An air quality study determined that re-entrained road dust as the largest source of particulate. DEQ and the Flathead County Health Department developed a control plan and submitted it to EPA in

2000. EPA has not approved this control plan.

To date, no further air quality control measures are being taken in Whitefish. Current air quality monitoring data indicate the area is mostly in compliance with state and federal air quality standards. However, air quality in Whitefish continually threatens the standards. Following an exceedance in 2006, the Whitefish Public Works Department was re-engaged by the Flathead County Health Department to step-up efforts to apply mandatory road dust control measures within the Whitefish area.

The Whitefish area is targeted for a Chemical Mass Balance (CMB) study during the winter of 2006-2007. The CMB study will determine the origins of fine particulates commonly referred to as "PM-2.5" (refers to particles no greater than 2.5 micrometers in aerodynamic diameter). EPA is currently revising the standards for PM-2.5 that may result in Whitefish being designated nonattainment with respect to these standards. Sources of PM-2.5 emissions are mostly the result of combustion, such as from vehicle exhaust, prescribed outdoor burning, residential woodstoves, industrial operations, etc. Results from this study will be used by DEQ and the Flathead County Health Department to determine what, if any, additional control measure are necessary to meet state and federal air quality standards.