Decision Record/ Finding of No Significant Impact

Proposed Wayklo Pozzolan Mine Project
Steven & Torrie Klomp
EA NV-040-02-039

Decision: I have reviewed this Environmental Assessment and it is my decision to authorize the Wayklo Pozzolan Mine Project as described in the proposed action. Appropriate mitigation and monitoring has been included as part of the proposed action. No additional mitigating measures are proposed.

Rationale: Implementation of the Proposed Action will allow Steven and Torrie Klomp to produce pozzolan which would help meet the demand for cement additives in southern Nevada and elsewhere in the southwestern United States.

FONSI: I have determined that no significant impacts will occur to the quality of the human environment as a result of this decision; therefore, an Environmental Impact Statement is not required.

Rationale: The Finding of No Significant Impact is based on the following:

1. The project will have no adverse effects on unique characteristics such as cultural resources, wilderness areas, wetlands, and riparian areas.

2. The environmental effects of the project are neither controversial nor do they involve unique or unknown risks.

3. The project will not affect Special Status Species (Federally listed, proposed or candidate Threatened of Endangered Species, and State sensitive species), or designated Critical Habitat for these species.

4. The project does not threaten to violate a Federal, State, or local law or requirements imposed for the protection of the environment.

5. The project will not affect the quality of human health or environment of minority or low-income populations.

6. The project will have no adverse effects with regard to noxious weed establishment or encroachment.

7. The project will have no adverse effects with regard to Visual Resource Management.

_____ _____

Jeffrey A. Weeks Date
Assistant Ely Field Manager

Non-Renewable Resources

FINAL
ENVIRONMENTAL ASSESSMENT
FOR

MINING PLAN OF OPERATIONS
N75500

STEVEN W. & TORRIE O. KLOMP

WAYKLO POZZOLAN MINE PROJECT

EA NV-040-02-039

ELY FIELD OFFICE
BUREAU OF LAND MANAGEMENT

PREPARED BY
WILLIAM R. WILSON
AUGUST 2002

I. BACKGROUND INFORMATION

Need for the Proposal

The proposed action would help meet the demand for cement additives in southern Nevada and elsewhere in the Southwestern United States. It would provide for an economic opportunity and a legitimate multiple use of public land.

Relationship to Planning

The proposed action is in conformance with the Caliente Management Framework Plan approved in 1982. Objective 1.0, under minerals, states "…encourage the search for production of the locatable minerals in the planning. Consider mining to be the primary use of lands (especially around known mining districts) that are shown to contain valuable minerals in commercial quantities. Specifically, mining areas listed in URA Step 3.42A Paramarginal and submarginal resources and undiscovered resource areas classified and Hypothetical and Speculative (also shown on the Overlay). Work with operators to assure that environmental damage is commensurate with potential value...The following are mines and Mining Districts in the planning unit that are considered to belong to the Paramarginal category...SE 5-9 Panaca Pozzolan Deposits..." The proposed action would be in this category.

The proposed action is consistent with the Lincoln County Public Land and Natural Resource Management Plan, updated November 19, 1997, which states ".... it is the policy of Lincoln County to encourage mineral exploration and development consistent with custom and culture and to eliminate unreasonable barriers to such exploration and development...."

Issues

Potential visual impacts to the Cathedral Gorge State Park were identified as an issue during the Ely District's internal scoping procedures, review of the scoping results of a previous exploration Notice, and consultation with the Nevada Division of State Parks.

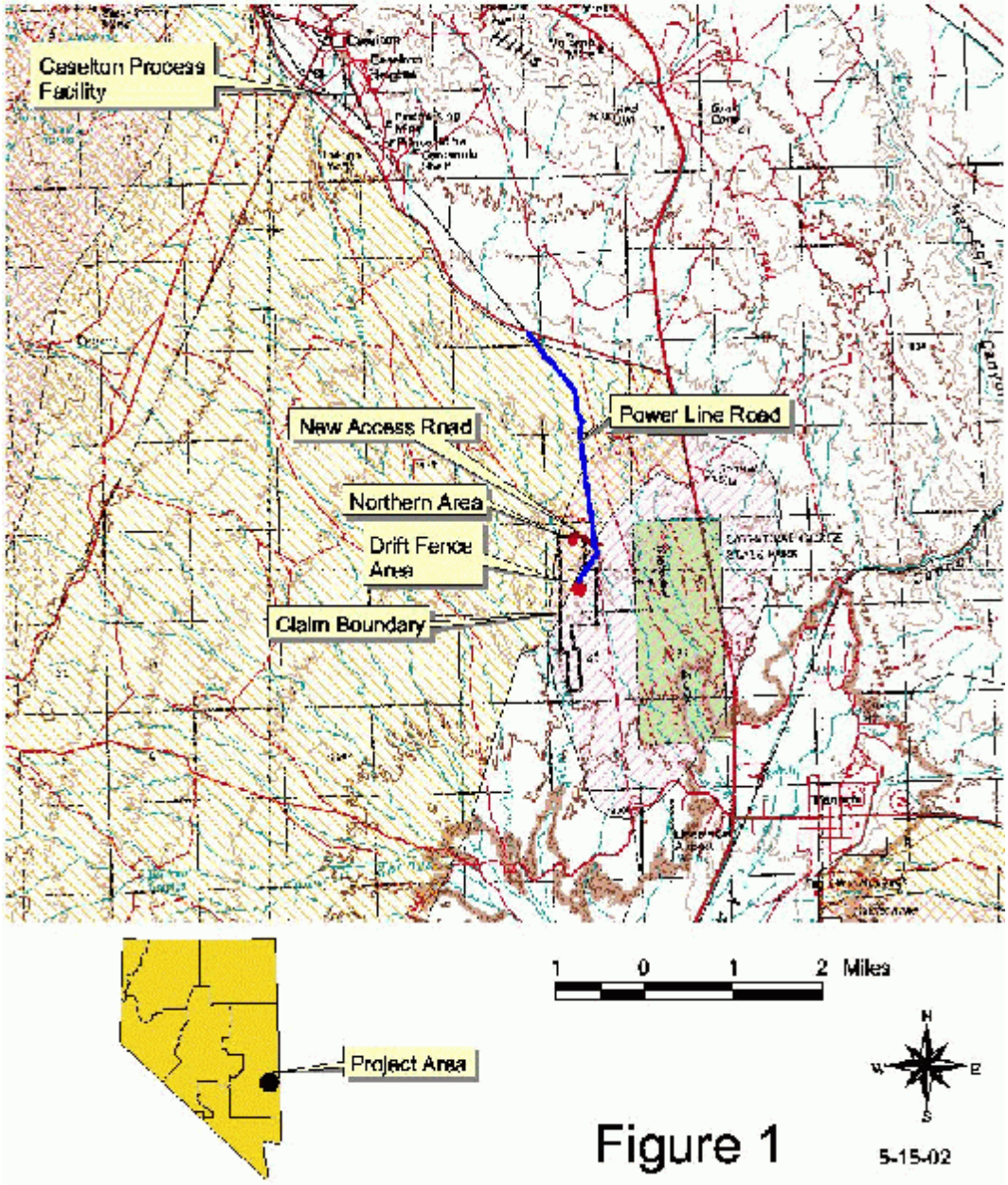
II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action

<u>Mining</u>

Steven W. & Torrie O. Klomp have submitted a Plan of Operations (POO), attached as Appendix 1, to mine pozzolanic material from their Wayklo claim block located northwest of Panaca, Lincoln County, Nevada. The project area is located in T. 1 S, R. 67 E. Section 25 and is shown on Figure 1.

Klomp Pozzolan
Plan of Operations



This mining plan follows an exploration and sampling program, conducted under a notice, for this same deposit. Concurrent reclamation would contain disturbance to less than 5 acres at any specific time.

The proponents plan to mine pozzolanic material in a series of shallow open pit units or "cells" of approximately one-acre in size, each of which would contain as much as 24,000 tons of this material. With a production rate estimated to be as much as 100 tons per day, it would take approximately 240 working days of production, approximately one year, to mine each one-acre cell. Two areas have been targeted for initial production: the "northern" area and the "drift fence" area.

A Class III cultural inventory has been completed for the northern area and most of the drift fence area (CRR 04-2002-1449). Additional inventories would be conducted prior to expanding mining operations beyond these first two surveyed areas and improving or widening the drift fence access road.

All required state and local permits would be obtained in accordance with applicable laws. All operations would be conducted in accordance with the Recommended Operating Procedures for Exploration/Mining Activities in the Ely District, March 1992. Routine compliance exams by BLM personnel would ensure that no unnecessary or undue degradation takes place on public lands as a result of this Plan of Operation.

Proposed Disturbance		
Number	Description of Disturbance	Acres of Disturbance
4	Mining cells, 1 acre each	4.0 acres
1	Temporary "access corridors"	0.4
2	Constructed roads: 900' x 12' under notice	0.2 acres
1	Widen existing 2-track: 1500' x 4' new	0.1 acres
Total		4.7 acres

Mining operations would be conducted using a small bulldozer (D-6 or D-7) to rip and push-up the pozzolanic material that would then be loaded into one or more trucks with a wheel loader. A completely mined out cell would result in a pit approximately 9 to 15 feet deep and one acre in size. A temporary "access corridor" would be established between the access road and the active cell to allow parking and staging during mining. These would eventually be mined out and reclaimed along with the last cell in a mine area.

As many as 5 truck loads per day would transported about 3 miles along an existing power line road and 4 miles of paved road to the existing Caselton mill area. The process facility would be

located within renovated mill facilities on privately held patented mining claims. Pozzolanic material would be comminuted, sacked, and loaded for shipment.

Mine Reclamation

Mine reclamation activities would be integrated with the overall mining schedule as illustrated in Figure 2. Available growth medium would be stockpiled, using the small bulldozer, at the edge of each cell. If it is anticipated that the stockpile would remain for more than one growing season, the operator would immediately seed the stockpile with an application of the same seed mixture, as listed below for the permanent reclamation seeding, in order to preserve the agronomic characteristics of the soil. Non-growth medium overburden (waste rock) would be similarly stockpiled at another place on the perimeter of the cell. Once mining is completed for the cell, the operator would re-contour and smooth the cell to a 2:1 slope, push the overburden back in, replace the previously stockpiled growth medium over the cell, and re-seed the area using a broadcast seeder. Operations would be sequenced to mine the areas farthest from the access road first, so that reclaimed portions are not subsequently re-disturbed.

Visual design techniques would be employed to reduce the amount of visual impact. Recontouring would follow the form of existing topography. Edges of disturbance would be scalloped and feathered to blend into the undisturbed ground.

Mined out cells and abandoned new access roads would be re-seeded during the first available period between October 1 and March 15. Two site-specific seed mixtures have been recommended to the operator by the BLM and would be used for the two most common soil types:

Sandy Soil Mix:

Rice grass	3.10 lbs of PLS Seed per Acre
Three-awn	1.75 lbs of PLS Seed per Acre
Shadscale	13.40 lbs of PLS Seed per Acre

Loamy Soil Mix:

Rice grass	3.10 lbs of PLS Seed per Acre
Three-awn	1.75 lbs of PLS Seed per Acre
Fourwing	16.80 lbs of PLS Seed per Acre

Reestablishment of vegetation would be monitored each year by the BLM so that seed mixtures and planting methods could be adjusted to optimize vegetative success in seeding the succeeding cell. For areas with adequate existing soil cover and vegetation, the goal is to have an average distribution of two perennial plants per 4 square feet.

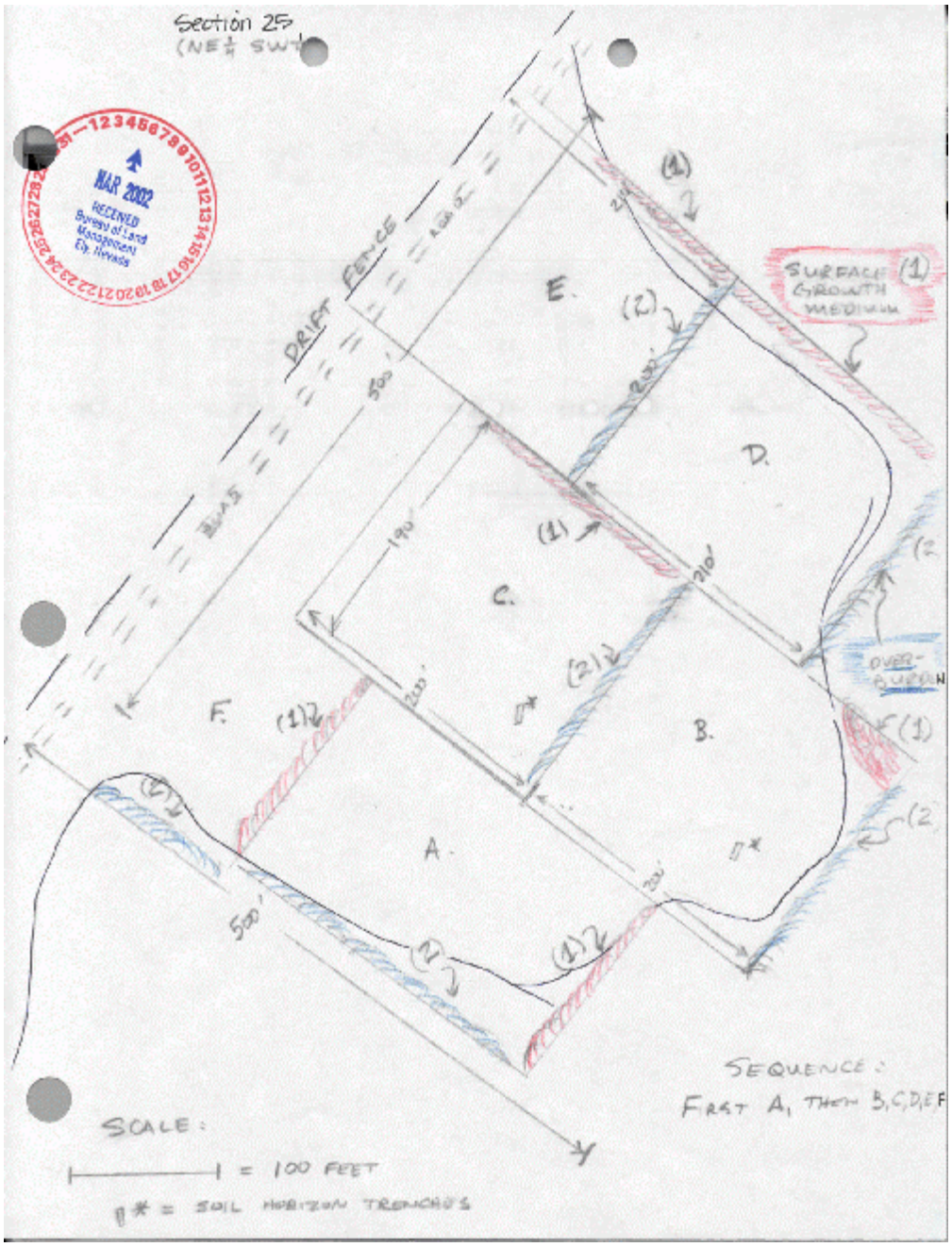


Figure 2. Map of Drift Fence area showing layout of mining cells, mining and reclamation sequence, overburden (waste) stockpiles, and topsoil stockpiles

Ely District BLM Weed Control Guidelines (BLM 1999) would be implemented. Standard mitigation measures emphasize the control of noxious weeds through preventative measures. Trucks and equipment used in this project would be thoroughly washed and cleaned prior to entering the project area to prevent importation of weed seeds from prior places of work. The wash down would concentrate on the undercarriage, with special emphasis on axles, frame, cross members, motor mounts, and on the underside of steps, running boards, and front bumper/brush guard assemblies. Additionally, vehicle cabs would be swept out with refuse disposed of in waste receptacles. Seeds and other materials used to reclaim these sites would be certified weed free. Reclaimed areas and access roads would be continually monitored over the life of the project and for two years following final reclamation. The BLM would recommend treatment, reseeding, or other appropriate measures to the operator in the event of seeding failure or the establishment of noxious weeds.

Access Roads

Access roads already exist to the two areas proposed for near-term mining. The main access road for the project area is the power line road maintained by the Lincoln County Power District #1 that runs northward from the Lincoln County Airport to Caselton. Pozzolan would be hauled up this road from the project area to the paved Caselton Highway, up the highway to Caselton, and along County and Private roads to a process facility in Caselton. Lincoln County Power District #1 have granted the proponents permission to use the pole line road as their haulage road to the Caselton process site. Thus, the proponent would assume all normal maintenance and dust suppression needs for the portion of the power line road that they would use. Dust suppression measures would include graveling problem areas as they develop, watering, and covering the haul trucks to prevent the pozzolanic material from blowing out. The proponent would comply with County and State regulations concerning signage for vehicular traffic.

Traffic from the drift fence area to the power line road would travel over an existing 2-track road that parallels an old northeast-running drift fence. Because this 2-track was established over virtual outcrops of the pozzolan and other friable bedrock, it is subject to decomposition and powdering by heavy vehicular use. Much of it would need to be widened, using a grader, from 8 feet to 12 feet. Areas in which the surface may become degraded would be graveled. The proponents would coordinate with the BLM in the event that additional dust control measures become necessary. The fence line road may eventually be improved further to the southwest to allow heavy truck access to the southern portion of the Wayklo claims.

BLM Recreation specialists would coordinate the activities to avoid any use conflicts between the pozzolan operation and other users, such as OHV racers. Both the BLM and the proponent would monitor for increased OHV use due to improving the access roads. The proponent, in consultation with the BLM and Cathedral Gorge State Park, would implement control measures such as fencing, berming, signing, or other, should unauthorized access into the Park, via the pole line road, become a problem.

Road Reclamation

Upon completion of operations in the drift fence area, the fence line road would be reclaimed to its original width by re-covering the widened portion of the road with the growth medium of the berm, ripping (to discourage additional use), and seeding. Seed mixtures would be the same as for reclamation of the mined areas. Reclamation would not be required for the original width of this existing road or any of the other existing roads.

Secondary access to the northern mine area is by a 900-foot long road that was constructed under the previous exploration notice. A reclamation plan and bond are already in place for this road.

No Action Alternative

Under a no action alternative, the BLM would deny the Plan of Operations.

Alternatives Considered but Eliminated from Detailed Analysis

No other alternatives are necessary to address unresolved conflicts concerning alternative uses of existing resources.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

The resources present in the project area have been described in the Caliente Management Framework Plan approved in 1982, which is available for review at the BLM Ely Field Office. Site-specific resources that could be affected by this proposal are discussed below.

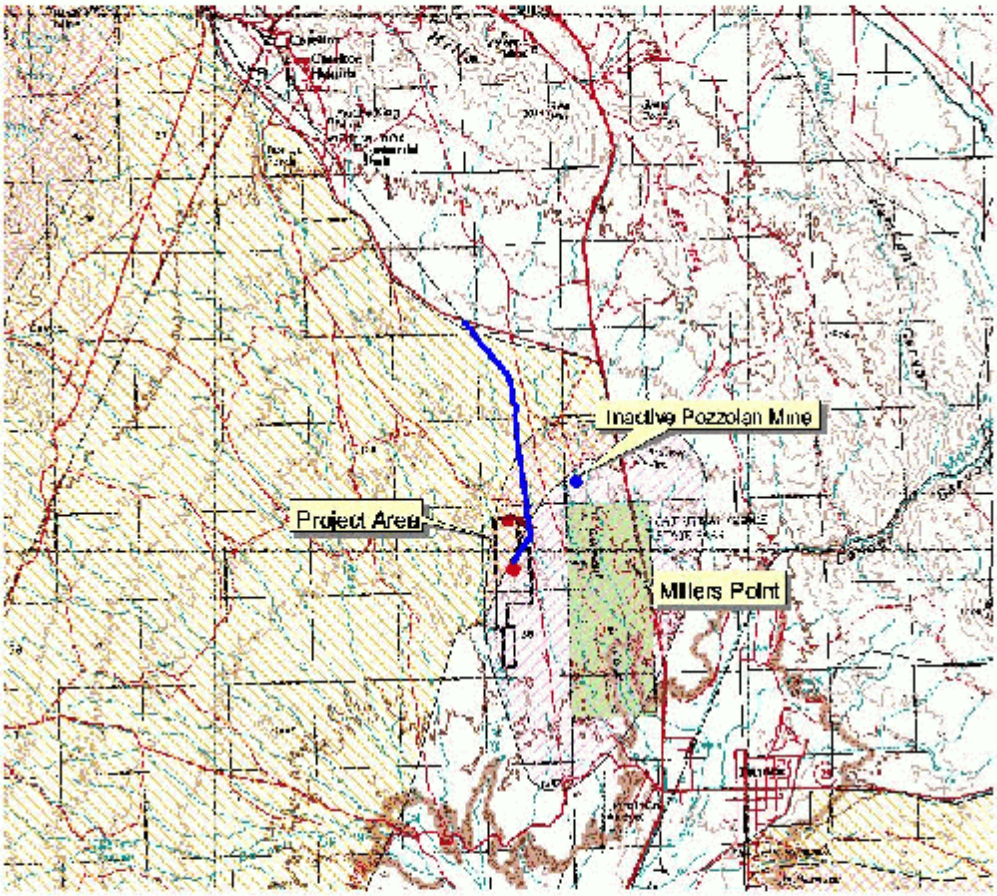
Geology

The project area is located in Meadow Valley at an elevation of approximately 5100 feet, between Little Red Wash on the west, and Cathedral Gorge on the east. It is situated on a low terrace that is underlain by flat-lying, Tertiary lakebed, sedimentary rocks. White volcanic tuff beds which occur in the upper portion of the exposed sequence, are locally altered to pozzolan, the material that would be mined. Erosion, over geologic time, has stripped off most of the overlying beds and exposed these altered beds in an area approximately 8,000 feet long by a few hundred feet wide, as shown in Figure 3. Mining would concentrate on the most completely exposed, barren, white, pozzolan altered outcrops. They contain little or no overburden waste or topsoil cover. Vegetation is extremely sparse.

Visual Resources Management (VRM)

The proposed action is located within a VRM Class II, as shown on Figure 3.

Klomp Pozzolan POO
Resource Features



2 0 2 4 Miles

VRM Class II

Highland Peak HMA

Figure 3

5-15-02

Soils and Vegetation

The proposed action is within two vegetation types: the big sagebrush and the mixed shrub. Scattered pinyon and juniper occur in the northern mine site area.

The road into and out of the project area generally is a silty loam soil. The northern mining area has been identified as a sandy soil, while the drift fence site is a loamy soil. Soil cover is absent over the outcrops of the pozzolanic material on the northern site and much of the drift fence site. Vegetation is sparse over these outcrops.

Range

The proposed project area is in the extreme east-central portion of the Highland Peak Grazing Allotment, which is grazed by sheep from about January into March.

Wild Horses

The proposed project area would be located along the extreme eastern boundary of the Highland Peak Horse Management Area (HMA). The proposed northern pit area is within the HMA, while the southern pit location is outside of the HMA, as shown on Figure 3. Approximately 40 wild horses use this general area yearlong. There are no concerns.

Cultural, Paleontological, and Historical Resource Values

A class III cultural resource inventory was conducted by a BLM archeologist on September 13, 2001 for the preceding Notice that covered the northern area, northern access routes, and most of the drift fence pit area. A small amount of historic scatter was recorded at the drift fence pit area. No cultural concerns were identified.

Invasive, Non-native Species (Including Noxious Weeds)

The project area was visited on October 4, 2001, and February 15, 2002. No noxious weeds were observed in either of the proposed mining areas or along the access roads to the sites. However, previous noxious weed surveys in the Panaca and Caselton areas identified Tamarisk, Dalmatian Toadflax, and Spotted Knapweed.

Cheatgrass occurs in the project area at a cover density estimated to be less than 10 percent. Disturbed and un-reclaimed areas elsewhere in the Panaca region may be dominated by cheatgrass, for example, the old burn near the Panaca Airport, about 2 miles south of the project area.

IV. ENVIRONMENTAL CONSEQUENCES

Proposed Action

The proposed action is not anticipated to foster any impacts upon special status species (Federally listed, proposed or candidate Threatened or Endangered Species, and State sensitive species); flood plains, wetlands, and riparian areas; wilderness values, areas of critical environmental concern, and wild and scenic areas; prime or unique farmlands; environmental justice; cultural, paleontological, and historical resource values; water quality (drinking/ground); wild horses and burros; Native American religious concerns; wastes, hazardous and solid; or migratory birds.

Visual Resource Management

The proposed action is located within a VRM Class II. The objective of Class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. The project area has been classified as a VRM Class II due to its proximity to Cathedral Gorge State Park. Two Visual Contrast Rating worksheets were completed to ensure that this project met the class objectives for VRM Class II. (see Appendix II, Visual Contrast Rating Form). Two key observation points were established to complete this rating: Millers Point and the Cathedral Gorge State Park picnic area. Due to the fact that the proposed action could not be seen from these points or any other established trails or roads within the State Park, it was determined that the Class II VRM objectives were satisfied.

The mitigation measures outlined in the proposed action section of this EA, which include re-contouring and reseeding, utilizing visual design techniques, would lessen the visual impacts of the proposed action from US 93 north of the State Park and elsewhere in the region.

Air Quality

Impacts to air quality would inevitably occur during mining. They would be transitory and temporary, limited in duration, and would end at the completion of the proposed action. Changes in the local air quality would be caused by exhaust emissions from mechanized equipment and fugitive dust emissions. Exhaust emissions would be quantitatively small in comparison to fugitive dust emissions and would not affect regional air quality.

Fugitive dust would originate through vehicle travel, land clearing, ripping the pozzolanic material, truck loading operations, hauling, and wind erosion from cleared areas. Once reclamation has been completed, fugitive dust emissions would return to background levels. A combination of as many as five measures incorporated in the proposed action would minimize fugitive dust:

1. Concurrent reclamation would prevent more than 5 acres (including mine site access roads) from being exposed at any specific time.
2. Because of the small scale of the operation, no more than five truckloads would be mined and hauled per day.
3. Dusty portions of access roads would be graveled or addressed through additional measures.
4. Roads would be watered, as necessary.
5. Haulage trucks would be covered to prevent the pozzolanic material from blowing out.

Invasive, Non-native Species (Including Noxious Weeds)

A noxious weed assessment for the project area determined that the potential for a noxious weed problem is low (Attachment 1). A list of noxious weeds known to occur in Nevada is listed in Attachment 2. Successful establishment of perennial vegetation during post-mining reclamation efforts, plus implementation of the mitigation measures contained in the proposed action, would inhibit potential establishment of noxious weeds on this site. The re-establishment of some cheatgrass is expected. However, it is anticipated that there would be no net increase of cheatgrass over the project area.

Soils and Vegetation

It is anticipated that the reclaimed areas would support vegetative communities similar in species composition and structural diversity to the pre-mining vegetation. For areas with existing soil cover and vegetation, the goal is to have an average distribution of two perennial plants per 4 square feet. BLM personnel would monitor the plant dispersal and adjust the seed mix, if appropriate, to meet this goal. Areas with presently little or no available soil cover and correspondingly little vegetation are not expected to meet this goal, since there would be no available growth medium to re-cover these areas. Both the northern area and approximately two cells of the drift fence area occur on these exposed barren outcrops of pozzolanic material. Post-reclamation revegetation is expected to be sparse in these areas.

Some soil loss would occur due to wind and water erosion of the access roads and mining cells prior to reclamation. Adequate mitigation measures are discussed in the proposed action. Due to the lack of rain in this area, water erosion is unlikely. Procedures in the proposed action would prevent the loss of agronomic characteristics of the stockpiled growth medium.

Range

The proposed operation would occur in the extreme east-central portion of the allotment near the allotment boundary. The BLM would notify the permittee of the operation prior to his seasonal use of the area. He would herd his sheep to circumvent any pozzolan mining operations.

No Action Alternative

Under the no action alternative, the impacts described above would not occur.

Cumulative Impacts, Visual Resources to Cathedral Gorge State Park

According to the BLM handbook Guidelines for Accessing and Documenting Cumulative Impacts (1994), the amount of analysis that is necessary can be greatly reduced by limiting cumulative analysis only to those issues and resource values identified during scoping that are of major importance. The issue and resource value of major importance or public concern which will be analyzed for cumulative impacts is impacts to **visual resources.**

Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts could result from individually minor, but collectively significant actions, taking place over a period of time (Council on Environmental Quality, Regulations for Implementation of NEPA, 1508.7).

Past Actions

Cathedral Gorge State Park was established in 1935 to draw attention to and preserve the unusually well formed erosional features of the Tertiary Lake bed sediments of the Panaca Formation. The Miller Point overlook offers scenic views directly into the gorge and on southward into the Panaca Valley.

An inactive pozzolan mine, located immediately north of the Park, has been intermittently worked since the mid-1950s when an effort was made to supply pozzolan to the Glenn Canyon Dam project (Lory Free, personal communication).

The power line road and transmission lines were initially constructed in the early 1900's in order to supply power between the Caselton mines and Panaca. They are maintained under a right of way granted to Lincoln County Power District No.1 by the BLM in 1988. This road has been used for occasional off highway vehicle races and other recreational activities.

Present Actions

The Lory Free pozzolan mine immediately north of the Park has been recently re-sampled under a mining notice, and is now awaiting a possible Plan of Operations, environmental review, and appropriate bonding for renewed mining. Reclamation under the notice has not yet been initiated.

Reasonably Foreseeable Future Actions

The Nevada Division of State Park has submitted a Recreation and Public Purpose (R&PP) application to expand the Cathedral Gorge State Park an additional 3/4 miles to the north. Within this addition, the proposed mine areas would not be visible from U.S. Highway 93, but could be seen from the extreme northwest corner of the addition along the access road to the Lory Free pozzolan mine.

OHV activity around the Park could increase due to the improved access along the pole line road. Riders could more easily find or develop unauthorized routes into the Park. Future OHV races may travel over portions of the power line road.

Should there be an increase in demand and price for this type of pozzolanic material, the proposed project could be expanded. Other parties may be attracted to the area to initiate additional pozzolan mining operations. The Lory Free mine, immediately north of the Park, could go back into production.

Impacts - Proposed Action

Past and present actions (pozzolan mining and OHV use) have contributed to visual resource impacts to Cathedral Gorge State Park. Reasonably foreseeable future actions would also contribute to such impacts.

The northern portions of the pole line haul road would be more easily seen from the potential future Park addition than from within the existing Park boundaries. Mitigation measures for dust control and revegetation, addressed in the proposed action, would be applicable to the proposed Park addition.

If the proponents expand their operations to the southern portion of Wayklo claim block due to an increase in demand and price of the mined material, additional visual assessments would be needed.

Concerns of the Nevada State Parks over the status of the Lory Free pozzolan mine are currently being addressed by the BLM Ely District staff.

Upon completion of operations, portions of the power line road and drift fence road would be left in an improved condition for use by the general public. OHV travel may increase due to the proposed improvements of the power line road and drift fence access road. The proposed action also includes mitigation measures to control OHV access, which would help mitigate visual impacts to the proposed Park addition.

Impacts - No Action Alternative

The no action alternative would not contribute to cumulative impacts to visual resources.

V. PROPOSED MITIGATION MEASURES

Appropriate mitigation has been included in the Proposed Action. No additional mitigation is proposed based upon results of the impact analysis.

VI. SUGGESTED MONITORING

Appropriate monitoring has been included in the Proposed Action. No additional monitoring is proposed based upon results of the impact analysis.

VII. CONSULTATION AND COORDINATION

Intensity of Public Interest and Record of Contacts

On March 5, 2002, copies of the Plan of Operation were sent to:

Steve Weaver	Nevada Division of State Parks
Terry Slatauski	Nevada Division of Wildlife

A meeting was held with the Division of State Parks on March 11, 2002. Lincoln County Power District # 1 was contacted concerning use of their power line right of way. Consultations with the Native Americans were held during the Ely District's regularly scheduled Tribal Coordination meetings on November 28, 2001, for the previous Notice, and February 13, 2002, for this Plan. No concerns were identified at either meeting.

This EA was scoped with the Ely Field Office Management Team. It was decided that internal review was adequate, and that external review was not needed. A site inspection was conducted on February 15, 2002 with the proponent, BLM specialists, and State Park personnel.

The EA was posted on the Ely BLM internet site on May 31, 2002. Verbal comments were received from the Division of State Parks on June 28 and followed by written comments on July 3, 2002.

Internal District Review

William Wilson	Team Lead/Geology
Melissa Whittemore	Environmental Coordinator
Jake Rajala	NEPA Coordinator, Social/Economic Resources
Karen Prentice	Invasive, non-native species
Nathan Thomas	Cultural Resources
Paul Podborny	Wildlife, Migratory birds, Special status plants and animals
Kristin May	Soils/Vegetation, Air quality
Domenic Bolognani	Range
Alan Shepherd	Wild Horses
Curtis Tucker	Native American Religious Concerns, Tribal Coordination
Gretchen Burris	Wilderness, Visual Resources, Recreation, ACEC
Jeffrey Brower	Water quality, Flood plains
Dan Netcher	Wastes, Hazardous & solid

VIII. LIST OF REFERENCES

- Caliente Management Framework Plan, approved 1982
- Lincoln County Public Land and Natural Resource Management Plan, updated November, 1997
- Geology and mineral deposits of Lincoln County, Nevada, 1970, Nevada Bureau of Mines and Geology, Bulletin 73
- Recommended Operating Procedures for Exploration/Mining Activities in the Ely District, March, 1992
- Ely District BLM weed control guidelines (BLM 1999)
- Instruction Memorandum No. NV-040-2000-01, Noxious Weed Risk Assessment

Attachment 1. RISK ASSESSMENT FOR NOXIOUS WEEDS

On 4-29-02, a Noxious Weed Risk Assessment was completed for Klomp's Wayklo Mining Operation located near Panaca, Lincoln County, Nevada, T.1 S, R.67 E, Sections 25 and 36. Mining will occur in increments - "cells" - of one acre in size. Mined out cells will be concurrently reclaimed while mining progresses to the next cell. Less than 5 acres of un-reclaimed disturbance, including mining cells and access roads, will exist at any one time. Noxious weeds have been identified on the GIS weed maps in the region within 6 miles of the project area: Dalmatian toadflax, tamarisk, and spotted knapweed. None were observed in a soil/vegetation reconnaissance conducted on the property on October 4, 2001, and February 15, 2002.

Factor 1 assesses the likelihood of noxious weed species spreading to the project area.

For this project, the factor rates as **low (4)** at the present time. This means that no noxious weeds were identified within the project area. Dalmatian toadflax has been identified along the Caselton paved road, which will be the main northern route to access the project area.

Factor 2 assesses the consequences of noxious weed establishment in the project area.

For this project, the factor rates as **low (2)**. This means that as many as 5 acres may subject to invasion of noxious weeds at any one time: 2 acres in production, plus 2 acres in reclamation, plus about an acre of access roads. The arid climate and lack of soil cover makes it difficult for any vegetation to establish itself.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

For this project, the Risk Rating is **low (8)**. Because the areas to be mined are mostly outcrops of the tuff beds, there is very little available topsoil or other growth medium. Whatever was able to be stockpiled will be spread back over as much of the mined-out area as possible once it has been re-contoured. Sufficient growth medium is available to cover most of the access roads. All disturbance will be re-seeded. Vehicles and equipment will be washed prior to entering the site. The operator will be shown how to recognize Dalmatian toadflax, tamarisk, and spotted knapweed. The concurrent reclamation will provide an opportunity to monitor for and address noxious weed problems before project is completed.

Reviewed by: _____ _____

Noxious Weed Coordinator Date

Attachment 2 - Nevada Noxious Weed List

NEVADA NOXIOUS WEED LIST		
Common Name	***Latin Name***	**Other Name(s)**
Austrian fieldcress	*Rorippa austriaca*	Swaisonpea
Austrian peaweed	*Sphaerophysa salsula*	
Black henbane	*Hyoscyamus niger*	
Camelthorn	*Alhagi pseudalhagi*	*A. camelorum*
Canada thistle	*Cirsium arvense*	
Carolina Horsenettle	*Solanum carolinense*	
Common crupina	*Crupina vulgaris*	
Common St. Johnswort	*Hypercium perforatum*	Goatweed; Klamath weed
Dalmation toadflax	*Linaria genistifolia ssp. dalmatica*	
Diffuse knapweed	*Centaurea diffusa*	
Dyer's woad	*Isatis tinctoria*	
Hoary cress	*Cardaria draba*	whitetop
Houndstongue	*Cynoglossum officinale*	
Iberian starthistle	*Centaurea iberica*	
Johnsongrass	*Sorghum halepense*	Perennial sorghum
Leafy spurge	*Euphorbia esula*	
Mediterranean sage	*Salvia aethiopis*	
Medusahead	*Taeniatherum caput-medusae*	Medusahead rye
Musk thistle	*Carduus nutans*	
Perennial pepperweed	*Lepidium latifolium*	Tall whitetop
Perennial sowthistle	*Sonchus arvensis*	

NEVADA NOXIOUS WEED LIST		
Common Name	***Latin Name***	**Other Name(s)**
Poison Hemlock	*Conium maculatum*	
Puncturevine	*Tribulus terrestris*	
Purple loosestrife	*Lythrum salicaria*	Purple lythrum
Purple starthistle	*Centaurea calcitrapa*	
Rush skeletonweed	*Chondrilla juncea*	
Russian knapweed	*Centaurea repens*	
Saltcedar	*Tamarix ramosissima*	Tamarisk
Scotch thistle	*Onapordum acanthium*	
Silverleaf nightshade	*Solanum elaeagnifolium*	White horsenettle
Spotted knapweed	*Centaurea maculosa*	
Squarrose knapweed	*Centaurea virgata ssp. squarrosa*	
Sulfer cinquefoil	*Potentilla recta*	
Yellow starthistle	*Centaurea solstitialis*	
Yellow toadflax	*Linaria vulgaris*	butter and eggs
Waterhemlock	*Cicuta ssp.*	
Western waterhemlock	*Cicuta douglasii*	
Wild licorice	*Glycyrrhiza lepidota*	American licorice