INTERIOR BOARD OF LAND APPEALS

Western Shoshone Defense Project

160 IBLA 32 (August 21, 2003)

WESTERN SHOSHONE DEFENSE PROJECT

IBLA 99-301 Decided August 21, 2003

Appeal from a decision of the Battle Mountain, Nevada, Field Office, Bureau of Land Management, approving an amendment to a mining plan of operations. N64-93-001P (98-1A).

Motion to dismiss denied; request for hearing denied; decision affirmed.

1. Federal Land Policy and Management Act of 1976: Plan of Operations--Mining Claims: Plan of Operation

   Approval of an amendment to a plan of operations will be upheld where the record, including the EA for the amendment and the scientific reports incorporated therein, demonstrates that BLM carefully considered the amendment's potential impacts, including those affecting groundwater quality and quantity, and conditioned approval of the amendment on the performance of mitigation measures designed to prevent any unnecessary or undue environmental degradation, and the appellant has failed to show error in that determination

2. Environmental Quality: Environmental Statements--Federal Land Policy and Management Act of 1976: Plan of Operations--National Environmental Policy Act of 1969: Environmental Statements

   A BLM decision approving an amendment to a plan of operations will be affirmed where the appellant fails to show that BLM neglected to consider a reasonable alternative to the amendment. An alternative considered and rejected in the EIS to which the project-specific EA is tiered does not need to be reconsidered in the project-

specific EA, absent evidence that the rationale for the EIS' rejection of the alternative no longer applies.

3. Mining Claims: Plan of Operations

Although BLM always retains the authority to examine the validity of unpatented mining claims located on public land, it generally does not do so when analyzing whether approval of a plan of operations will unnecessarily or unduly degrade the affected lands. An appellant who challenges BLM's approval of the amendment of mining plan of operations by questioning the validity of the claims has the burden of presenting evidence that, at a minimum, establishes a reasonable basis for a conclusion that the claims are invalid.

APPEARANCES: Christopher Sewell, Crescent Valley, Nevada, for appellant; John W. Steiger, Esq., Office of the Field Solicitor, U.S. Department of the Interior, Salt Lake City, Utah, for the Bureau of Land Management; Robert Tuchman, Esq., Thomas F. Cope, Esq., Denver, Colorado, and Geoffrey P. Gold, Esq., Vancouver, B.C, for intervenor Cortez Gold Mines.

OPINION BY DEPUTY CHIEF ADMINISTRATIVE JUDGE HARRIS

Western Shoshone Defense Project (WSDP) has appealed the March 12, 1999, decision of the Battle Mountain, Nevada, Field Office, Bureau of Land Management (BLM), approving an amendment to the Pipeline Project plan of operations (Plan Amendment) filed by Cortez Gold Mine (Cortez) (N64-93-001P (98-1A)). BLM's approval of the Plan Amendment, known as the Pipeline Infiltration Project (Infiltration Project), relied on the Cortez Pipeline Gold Deposit Final Environmental Impact Statement (FEIS) prepared for the original Pipeline Project plan, as well as on the March 12, 1999, finding of no significant impact and decision record (FONSI/DR) and the February 1999 environmental assessment (EA) prepared specifically for the Infiltration Project (NV063-EA98-062). By order dated June 11, 1999, the Board granted Cortez' motion to intervene in these proceedings.

BLM approved the original plan of operations for the Pipeline Project on March 4, 1996, following completion of the FEIS, which analyzed, among other

issues, the environmental effects of the mine's dewatering system. [1/] The dewatering system, which includes dewatering wells and infiltration facilities consisting of conveyance corridors (access roads and pipelines and ditches for water) and infiltration sites (infiltration basins and infiltration ponds), provides water of adequate quality for the mining, milling, and non-potable water service needs of the mine. See EA at 2-5 through 2-6. The dewatering process involves pumping ground water from wells located adjacent to and within the open pit for use in mine operations, conveying unused water from the pumping wells to the infiltration facilities, and returning the water to the ground water basin from which it was extracted. (EA at 2-6.) The FEIS analyzed the pumping of up to 30,000 gallons per minute (gpm) for dewatering and the return of up to 28,000 gpm to groundwater through infiltration, with 2,000 gpm consumed as part of the mining operation through retained moisture in the heap leach and tailings, dust control, and pond and infiltration operations evaporation. (EA at 1-1.) Although the approved plan authorized initial infiltration activities on 120 acres within a 1-mile wide arcuate area 3 miles from the center of the open pit, the FEIS acknowledged that the infiltration facilities would be modified based on the results of actual infiltration operations to achieve the best infiltration results. Id.

Shortly after the mining operations and infiltration began, problems developed with the approved infiltration program because of its lack of flexibility which prevented the pit dewatering from keeping pace with the mining operations and necessitated the periodic cessation of mining when water entered the pit bottom. (EA at 1-1; FONSI/DR at 1.) The apparent need for an additional infiltration basin area arose because

> (a) due to the location of non-Cortez Gold Mine * * * controlled mining claims, the actual area for infiltration within the 1-mile wide arcuate area for infiltration is very limited; (b) 120 acres has proved to be insufficient to properly manage the infiltration operations to allow some sites to be under active infiltration, others to be periodically idle and awaiting future infiltration, and still others to have been reclaimed and awaiting bond release by the BLM so that approved acreage disturbance could be utilized at other locations[;] and (c) the underlying geologic formations within the areas available for infiltration were poor media (too fine-grained) for efficient infiltration.

[1/] Great Basin Mine Watch (GBMW), an umbrella organization whose members include Western Shoshone Resources, Inc. (WSRI), Citizen Alert Native American Program, and the Toiyabe Chapter of the Sierra Club, appealed BLM's decision approving the plan of operations (IBLA 96-307). See n.2, infra.

(EA at 1-1; see FONSI/DR at 1.)

On June 17, 1997, BLM approved an amendment to the Pipeline plan of operations designed to address the problems that had developed with pit dewatering. It allowed Cortez to construct and operate infiltration facilities on an additional 236 surface acres on public and private land within the infiltration area delineated in the FEIS. (EA at 1-1.) [2/] Pursuant to this plan amendment, Cortez began operations on two infiltration sites on private land (the Filippini and Frome sites). However, Cortez soon discovered that the geologic formations underlying those lands were poor media for efficient infiltration. Id. It therefore reclaimed part of the Filippini site and proceeded to build the Rocky Pass and Windmill infiltration sites within the 1-mile wide arcuate area. Id. Although these limited actions increased infiltration efficiencies, water still periodically entered the bottom of the open pit and seeps formed down surface gradient from the infiltration basins, one of which reached 17 acres in size and triggered the imposition of specific management requirements from the Nevada Division of Environmental Protection (NDEP). Id.

This first plan amendment did not completely ameliorate the infiltration problems. Difficulties continued, partially because the additional sites had to be situated within the approved areas identified in the FEIS, which precluded Cortez from erecting new sites in areas with favorable geology outside the designated areas. Also, the 356-acre area of authorized surface disturbance failed to provide sufficient flexibility for adequate infiltration given the need for pond maintenance, rotation, and reclamation. The inability of Cortez to successfully negotiate arrangements to use mining claims with favorable media for infiltration not controlled by Cortez and located within the zone of potential infiltration activity exacerbated the need for additional siting adaptability. See Cortez Answer to Statement of Reasons and Request for Hearing (Cortez Answer) at 6-7.

Cortez developed the Infiltration Project to "eliminate land conflict issues as well as inadequate geologic site conditions elsewhere within the zone of potential infiltration activity, and [to] more effectively manage infiltration." (Cortez Answer at 7.) The Infiltration Project, initially proffered to BLM in September 1998 as a second

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[2/] GBMW and WSRI filed separate appeals from BLM's decision approving this plan amendment which were docketed as IBLA 97-506 and IBLA 97-510, respectively. The Board consolidated those appeals with the pending appeal of plan approval (IBLA 96-307) and affirmed both BLM's decision approving the mining plan of operations and its decision approving the amendment to that plan. Great Basin Mine Watch, 146 IBLA 248 (1998). Relevant portions of the Board's decision will be discussed infra.

amendment to the Pipeline plan of operations (N64-93-001P (98-1A)) and revised on February 19, 1999, expands the Pipeline Project area delineated in the FEIS to the south and east to accommodate additional infiltration facilities. It also creates an additional 600 acres (956 acres total) of surface disturbance for infiltration facilities within the expanded Project area. (EA at 1-1, 1-2, 2-15.) According to the EA, the new infiltration facilities would be operated in accordance with the infiltration management plan and would minimize or eliminate the creation of seeps downgradient from the infiltration basins. Id. at 1-2, 2-15.

The Infiltration Project proposes the initial construction of three infiltration sites and conveyance corridors within the area subject to the Project, with additional facilities constructed as needed, subject to NDEP approval and appropriate consultations to avoid interference with Native American traditional values. (EA at 1-2, 2-16.) Because cattle are attracted to water in the infiltration basins, Cortez would install up to ten watering troughs in the Infiltration Project area. The Project would also include the creation of a maximum of 200 acres of infiltration pond surface area within the infiltration basin. Id. at 2-15. The EA notes that the Project does not change the approved dewatering rates for the entire Pipeline Project analyzed in the FEIS; that the projected 180 to 400 gpm evaporative loss from the infiltration ponds, when combined with the up to 40 gpm evaporative loss from the seeps would not exceed the 2,000 gpm consumptive water use limit established in the FEIS; and that the plan also incorporates the reclamation and monitoring requirements set forth in the FEIS. Id. at 1-2, 2-16.

BLM circulated a draft EA evaluating the potential impacts of the Infiltration Project for public comment in October and November 1998. WSDP and NDEP, among others, submitted comments which BLM responded to in the February 1999 final EA.

In its FONSI, BLM determined that, based on the analysis and mitigation measures detailed in the EA and the attached DR, the Infiltration Project's impacts would not be significant. It stated that the modifications described in the Project, the measures outlined in the FEIS and integrated into the plan of operations, and the conditions of approval set forth in the DR would, "as best as can be determined, prevent unnecessary and undue degradation of public land." (FONSI/DR at 2.)

BLM relied on the EA and the FONSI to approve the Infiltration Project. BLM found that the Project's design and Cortez' water management plan, coupled with the mitigation measures outlined in the EA and FONSI, demonstrated that all practicable means of avoiding or minimizing environmental harm and unnecessary and undue degradation to public lands had been adopted. (FONSI/DR at 4.) Selection of the no

action alternative, BLM stated, would not be consistent with its legal mandates and policy to promote mineral development, nor would it facilitate the crucial infiltration component of the Pipeline Project. Id. BLM also determined that, while the Project would create short term incremental impacts to soils, vegetation, and wildlife resources, the cumulative impacts for most resources would be negligible. Id. at 4-5.

In addition to the mitigation and monitoring measures detailed in the FEIS and its accompanying record of decision, BLM imposed project-specific measures, including the following:

> Water Resources: Prior to the development of infiltration sites beyond the three specifically identified in the Proposed Action, additional testing and modeling to be determined by consultation with the BLM, shall be undertaken by [Cortez] to eliminate the potential for unknown impacts to the ground water flow of each site.
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> Monitoring of the ground water elevations adjacent to the constructed sites will be conducted to minimize the potential for the development of seeps. When ground water elevation rises to within ten feet of the ground surface adjacent to the site [Cortez] must discontinue discharge into the site so that the ground water level can return to more than ten feet below ground surface; this accomplished, infiltration activities at the site can resume.
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> Noxious Weeds: [Cortez] must ensure that a weed monitoring and management plan is implemented. This program must continue for the life of the project. Should weeds be a problem following the completion of reclamation, a portion of the reclamation bond, as determined by the BLM, shall be retained to fund programs to eliminate noxious weed infestations within the Pipeline Project area. The bond will be released at the discretion of the BLM when the weed problem is eliminated and the site(s) is returned to vegetative conditions matching the surrounding area.
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> Wildlife: Any land clearing must be conducted outside avian breeding season, otherwise a qualified biologist must survey the area of impact prior to disturbance. If nests or nesting evidence are observed a protective buffer (size depending on species) shall be delineated and the buffer zone avoided until nests and/or nesting behavior are no longer evident.

> Land Use and Access: Infiltration sites and conveyance corridors shall be located so that they do not block access through the Pipeline Project area, nor limit the use or maintenance of existing rights of way.
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> Cultural Resources/Native American Traditional Values: Prior to the construction of additional infiltration sites (other than the three specifically approved by this decision) the BLM will contact Native Americans to gather information concerning traditional values relative to the potential sites. If there are location conflicts [Cortez] will relocate the sites to acceptable areas, or BLM will initiate consultation to resolve conflicts.
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> Monitoring: Post-reclamation monitoring of infiltration basins will begin on reclaimed areas following completion of reclamation activities. Monitoring will continue until reclamation has been accepted by BLM and [NDEP]. For bonding purposes, a three year monitoring period is required for post-completion of reclamation.

(FONSI/DR at 5-6.)

BLM implemented the FONSI/DR in its March 12, 1999, decision approving the Plan Amendment for the Infiltration Project. BLM noted that, while the amendment proposed up to 600 additional acres for infiltration basins, "Cortez [had] submitted a reclamation plan revision and bond cost estimate for the immediate construction of three additional infiltration sites totaling 72 acres of new disturbance. These three sites are identified as Windmill 4 and 5, and Rocky Pass 2 Infiltration Sites." (Decision at 2.) BLM subjected the approval to the following conditions:

> 1. Prior to initiation of any further construction above the 72 acres, Cortez shall identify the location of additional sites, complete required testing, address [N]ative American concerns, provide additional bonding and receive BLM and NDEP approval. In addition, Cortez must have the blanket/consolidated bond in place and accepted by the BLM before the approval of any additional facilities.
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> 2. This approval is subject to the conditions stated in the [FONSI/DR] for [EA] NV063-EA98-062.

Id. BLM noted that the conditions conformed to Cortez' NDEP water pollution control permit (NEV 95111) and were designed to prevent unnecessary and undue degradation of public lands. Id. BLM added that Cortez was required to implement

the mitigation measures outlined in the FONSI/DR and the FEIS and comply with all Federal, state, and local regulations; that any modification of the plan had to be coordinated with and approved by BLM; and that approval of the plan did not serve as a determination of the ownership or validity of any of the affected mining claims. Id.

On appeal, WSDP attacks BLM's decision on three fronts. First, WSDP maintains that, by allowing groundwater and other environmental degradation, the decision violates BLM's duty under section 302(b) of the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. § 1732(b) (2000), to prevent unnecessary and undue degradation of public lands. Second, WSDP argues that BLM violated the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332(2)(E) (2000), by failing to consider reasonable alternatives to the Infiltration Project. Finally, WSDP asserts that BLM erred in not determining the validity of the underlying claims before approving the Infiltration Project. We will address each of WSDP's challenges seriatim. [3/]

[1] Section 302(b) of FLPMA, 43 U.S.C. § 1732(b) (2000), requires that "[i]n managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." The applicable regulations in effect at the time BLM issued its decision defined "[u]nnecessary or undue degradation" as

> surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary, and proficient operations of similar character and taking into consideration the effects of operations on other resources and land uses, including those resources and uses outside the area of operations. * * * Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation.

[3/] BLM has moved for dismissal of WSDP's appeal, alleging that WSDP's representative, Christopher Sewall, is neither a practicing attorney nor an officer or full time employee of WSDP and thus is not authorized to practice before the Board under 43 CFR 1.3(b), and that WSDP has not shown that it is adversely affected by the decision and therefore lacks standing to appeal under 43 CFR 4.410(a). WSDP counters with evidence that Sewall is, in fact, its full time employee and that its constituents use land that allegedly will be adversely affected by the Project. We find that WSDP has satisfied the requirements of both 43 CFR 1.3(b) and 43 CFR 4.410(a) and deny BLM's motion to dismiss.

43 CFR 3809.0-5(k) (1998). [4/]

Approval of a mining plan of operations will be affirmed where the record discloses that BLM carefully considered the plan, analyzed potential environmental impacts, and conditioned approval of the plan on the adoption of mitigation measures designed to ensure successful reclamation. National Wildlife Federation, 126 IBLA 48, 65 (1993). To make these determinations, 43 CFR 3809.2-1(a) (1998) directed BLM to prepare an EA for the plan of operations or "a significant modification which encompasses land not previously covered by an approved plan, * * * to identify the impacts of the proposed operations on the lands and to determine whether an environmental impact statement is required," and 43 CFR 3809.2-1(b) (1998) required that BLM use the EA "to determine the adequacy of mitigating measures and reclamation procedures included in the plan to insure the prevention of unnecessary or undue degradation of the land." See Kendall's Concerned Area Residents, 129 IBLA 130, 137 (1994). [5/] In this case, BLM prepared

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[4/] The current and more expansive definition of "[u]nnecessary and undue degradation" is found at 43 CFR 3809.0-5 (2002).

[5/] The Board discussed the relationship between BLM's duty to determine whether significant impacts are likely to occur and its responsibility to prevent unnecessary or undue degradation in Kendall's Concerned Area Residents, 129 IBLA at 138 (quoting Nez Perce Tribal Executive Committee, 120 IBLA 34, 36 (1991), vacated on other grounds on reconsideration by order dated Mar. 18, 1992), as follows:

"'BLM employs the National Environmental Policy Act (NEPA) process to evaluate both whether a proposed mine plan of operations entails significant effects on the environment and whether mitigation measures are required to prevent unnecessary or undue degradation of the public lands. 43 CFR 3809.2-1. Of course, the consequences of the two determinations differ. The fact that a proposed mine plan of operations would not cause unnecessary or undue degradation of public lands does not preclude the possibility that it would cause significant environmental effects that would require preparation of an environmental impact statement. See Southwest Resource Council, 96 IBLA 105, 120-21, 94 I.D. 56, 64-65 (1987); 45 FR 78902, 78905 (Nov. 26, 1980). If there are significant environmental effects that cannot be mitigated, an EIS must be prepared even if there is no unnecessary or undue degradation of the public lands. 42 U.S.C. § 4332(2)(C) (1988). If there is unnecessary or undue degradation, it must be mitigated. See 43 CFR 3809.2-1(b). If unnecessary or undue degradation cannot be prevented by mitigating measures, BLM is required to deny approval of the plan. 43 CFR 3809.0-3(b); Department of the Navy, 108 IBLA 334, 336 (1989). See 43 U.S.C. § 1732(b) (1988); 43 CFR

(continued...)

an EA (NV063-EA98-062) in February 1999 to analyze the impacts of the Infiltration Project and issued a FONSI/DR in March 1999, which imposed numerous mitigation measures designed to avoid environmental harm and prevent unnecessary or undue degradation.

In its statement of reasons (SOR), WSDP argues that BLM's decision approving the Infiltration Project allows Cortez to continue to degrade the public lands in violation of FLPMA, 43 U.S.C. § 1732(b) (2000). Given the continuing problems with the infiltration system, including the deficiencies in the underlying geological formations and the creation of seeps and springs, WSDP questions the assumptions and modeling supporting that system. It asserts that the science relied upon by Cortez must be re-evaluated before additional infiltration activities are approved. WSDP discounts the rationale provided for the failure of the infiltration system. It expresses incredulity that Cortez was unaware of the existence of other mining claims in the Project area and concern that Cortez' modeling was insufficient to accurately predict the acreage needed for the system and the chosen location's geologic suitability for infiltration. WSDP objects to the failure of the EA to provide information about the area available for infiltration and maps of affected mining claims, asserting that such information is vital because many Native Americans will not reveal site specific cultural resource information unless they know that a site will definitely be impacted. (SOR at 1-4.)

WSDP maintains that BLM's decision neglects significant issues concerning groundwater and inappropriately segments the analysis of the infiltration impacts from other significant impacts associated with the dewatering system. Specifically, WSDP contends that the loss of water in the infiltration ponds through evaporation is unacceptable given the existence of other techniques which would eliminate such water loss; that the dewatering system may have caused the drainage of the old Cortez pit lake; that reinfiltrated waters may be traveling to surface springs instead of returning to the groundwater aquifers; and that the acreage subject to seepage and saturation may have been grossly underestimated.

WSDP contends that the existing data is insufficient to support a finding that the Project will prevent unnecessary and undue degradation because that information fails to address the environmental impacts of seepage and saturation, does not discuss the water quality of the seepage, omits any analysis of the impacts of seepage and saturation on birds and wildlife, and ignores seepage's contribution to the spread of noxious weeds, such as salt cedar. WSDP further worries that, although the

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[5/] (...continued)
3809.0-5(k).' [Footnote omitted.]"

quality of the groundwater pumped and delivered to the infiltration system is generally good, the aquifer may nevertheless be degraded due to the flushing and migration of various toxic elements. It contends that those elements may also bioaccumulate within the ponds and pose a threat to birds and other wildlife, and that roadkill and possible exposure to cyanide in the heap leach pads will increase wildlife mortality. (SOR at 4-5.)

In its answer, Cortez argues that BLM's approval of the Infiltration Project will not cause unnecessary or undue degradation, pointing out that BLM carefully considered the Project and its potential impacts, basing its evaluation on the EA and relevant portions of the FEIS. Cortez adds that technical reports integrated into the EA, including the Groundwater Flow Modeling Report for the South Pipeline Project (1998), the Characterization of Baseline Conditions for the South Pipeline Project (1998), the Hydrogeochemical Evaluation of Proposed Infiltration Sites, Pipeline Project, Lander County, Nevada (1998) (Hydrogeochemical Report), and the Pipeline Injection Viability Report (1998) (Injection Viability Report), completely reevaluated the modeling assumptions for groundwater flow in Crescent Valley, including the infiltration system, utilized in the FEIS, thus refuting WSDP's claim that the EA is based on stale science. (Cortez Answer at 15-16; Declaration of Andy Davis, Ph.D., Director of Geochemistry and Vice President of Geomega, an environmental consulting firm, attached to Cortez Answer as Ex. 2 (Davis Decl.) at 2 ¶ 4); see EA at 2-6, 3-9 to 3-22, 4-1 to 4-2, 4-8, 5-6 to 5-10, 5-12 to 5-14, 5-19, 5-23 to 5-31, 5-33, and 7-2.

Cortez explains that it was well aware of the locations of mining claims within the "zone of potential infiltration activity" identified in the FEIS that are not controlled by Cortez. (Affidavit of Jim Collard, Superintendent of Environmental Services for Cortez, attached to Cortez Answer as Ex. 1 at 2 ¶ 5.) "However, an acceptable arrangement with the underlying placer and lode claim owner and lessee could not be reached, resulting in Cortez postponing the planned construction of approved infiltration sites located on these claims." Id.

Cortez submits that the comprehensive mitigation measures imposed by BLM and the State, including an extensive plan for monitoring and controlling groundwater and seeps (EA, Appendix A) and the State-mandated water quality monitoring and reporting directives set forth in NDEP water pollution control permit NEV95111 authorizing it to construct, operate, and close ponds in accordance with detailed requirements, demonstrate that all practicable means to avoid or minimize unnecessary or undue degradation have been adopted. (Cortez Answer at 17; EA at 1-2, 2-9 to 2-10, 5-25.) In addition to those mitigation measures, Cortez notes that the Project will not change the dewatering rates approved in the FEIS; that the

infiltration facilities will utilize the allowed maximum 200 acres of pond surface only for short periods when new basins are brought online simultaneously with other basins being taken offline for resting and maintenance; and that, before infiltration sites in addition to the initially approved 72 acres can be developed**,** the location of those sites must be identified, extensive testing and investigation must be undertaken, Native American concerns must be addressed, additional bonding must be provided, and BLM and NDEP approval must be obtained. (Cortez Answer at 17-18; FONSI/DR at 2; EA at 1-2, 2-16; Decision at 2.)

Cortez further argues that the reclamation measures expressly included in the design, construction, operation, and closure of the Project and the post-reclamation monitoring of the infiltration basins will ensure that unnecessary or undue degradation does not occur. (Cortez Answer at 18-19; Plan Amendment at 6-1 to 6-2; FONSI/DR at 6.)

Cortez asserts that the EA analyzed the potential impacts for each of the resources WSDP contends may be degraded by the Project and determined that, with the additional mitigation measures and monitoring prescribed in the DR to protect those resources, the Project would prevent unnecessary and undue degradation of the public land. (Cortez Answer at 19; FONSI/DR at 2, 4-6.) BLM's unnecessary and undue degradation determination also examined the Project in relation to operations of similar character, Cortez submits, and focused on BLM and State groundwater protection and disturbed land reclamation regulations. (Cortez Answer at 20.)

As to water quality, Cortez reports that BLM concluded that groundwater quality at the sites would meet drinking water standards, except for transitory slight exceedances of total dissolved solids (TDS) that would generally dissipate within approximately 180 days. (Cortez Answer at 20; EA at 4-2.) Cortez adds that BLM's approval of the Project incorporates the hydrologic monitoring requirements described in the Integrated Monitoring Plan prepared as part of the FEIS to measure the effects of dewatering and infiltration operations. (Cortez Answer at 20; EA at 2-9 to 2-10.) BLM also determined, Cortez points out, that evaporative loss from the proposed infiltration facilities would be included as part of the total permitted consumptive use for the Pipeline Mine, which would remain less than the 2,000 gpm analyzed in the FEIS; that the Project should minimize or eliminate the creation of seeps downgradient from the basins in compliance with Nevada groundwater standards; that disturbed lands would be reclaimed to BLM and state requirements; that construction of the new ponds would conform to Cortez' NDEP permit; and that the Project comported with applicable Federal and state environmental protection statutes and regulations. (Cortez Answer at 20-21; EA at 2-10 to 2-11, 4-1 to 4-3.)

Cortez argues that WSDP has neither named a single environmental impact constituting unnecessary or undue degradation nor submitted any objective proof that the plan will cause that degradation, but simply relies on nonspecific and unsupported concerns and opinions inadequate to support a finding of unnecessary or undue degradation. According to Cortez, WSDP's allegation that insufficient information has been presented to determine whether the Project will, in fact, create unnecessary and undue degradation ignores the new geotechnical/geochemical tests, analyses, and monitoring performed by Cortez and reviewed by BLM, as well as the required mitigation and reclamation measures expressly incorporated into the Project, the EA, and the DR. (Cortez Answer at 21-22.)

Cortez acknowledges that the existing infiltration ponds have operated below the rates predicted in the FEIS. It asserts, however, that those ponds were developed using the investigational techniques standard at that time, which subsequently proved to be insufficiently detailed to predict actual infiltration rates, given the heterogeneity of the Crescent Valley alluvium. (Cortez Answer at 25; Davis Decl. at 4 ¶ 8.)

Cortez explains that the inadequacies of the science utilized in the FEIS led to its recognition that improved infiltration efficiency required additional data and study. It claims that it hired Geomega to determine the characteristics of the groundwater mounds that would form under the proposed infiltration sites, estimate the infiltration rates, and predict the changes in water quality caused by mobilization of soluble salts in the subsurface underlying the sites. (Cortez Answer at 23; Davis Decl. at 3 ¶ 5; Plan Amendment at 5-9; EA at 4-1.) Cortez notes that Geomega documented its procedures and analyses in the August 1998 Hydrogeochemical Report, which BLM incorporated into the EA. (Cortez Answer at 23-24; EA at 4-1 to 4-2, 5-6 to 5-10, 5-27 to 5-31, 5-33.)

Not only does WSDP neglect to mention the Hydrogeochemical Report, Cortez points out, but it also ignores Cortez' reevaluation of the modeling assumptions for groundwater flow in Crescent Valley. (Cortez Answer at 24; see EA at 5-19; Davis Decl. at 2 ¶ 4.) Cortez cites the detailed water management plan developed to operate the infiltration system as further evidence of its increased understanding of how to efficiently operate the infiltration system. (Cortez Answer at 24-25; EA, Appendix A.) Cortez maintains that these efforts refute WSDP's claim that the Infiltration Project is based on outdated science and demonstrate that BLM has adopted all practicable means to prevent unnecessary or undue degradation. (Cortez Answer at 25.)

Cortez asserts that evaporative loss under the Infiltration Project has been fully assessed and will not constitute unnecessary or undue degradation, noting that this

evaporative loss will be included in the total permitted consumptive use for the entire Pipeline Project. While acknowledging that evaporative loss will increase under the Project, Cortez points out that, even with that increased evaporation, Pipeline Project operations will still consume water at a rate less than the 2,000 gpm consumptive rate analyzed in the FEIS. It submits that, therefore, no additional analysis of that evaporation or groundwater recharge is necessary. (Cortez Answer at 26; EA at 2-10 to 2-11, 2-16, 4-2 to 4-3, 5-20.)

Nor, Cortez asserts, has WSDP shown that BLM's approval of the Infiltration Project improperly segments the analysis of infiltration impacts from other largely nameless impacts associated with the dewatering system, which were thoroughly discussed in the FEIS and Plan Amendment. (Cortez Answer at 28; see EA at 5-25; FEIS at 4-15 to 4-17, 4-19 to 4-26, 4-37 to 4-38, 4-40 to 4-44, and 4-47.) Although WSDP claims that BLM and Cortez have failed to address the relationship between the draining of the Old Cortez Lake and the Pipeline dewatering operations, Cortez points out that it has thus far commissioned two studies addressing the decline in pit water and groundwater levels at the Cortez pit, Analysis of Water Level Declines at the Cortez Pit Lake, Cortez Mine Site, Lander County, Nevada (1998) and 1999 Analysis of Water Level Declines at the Cortez Pit Lake, Cortez Mine Site, Lander County, Nevada, and has completed three additional monitoring wells sited to facilitate the ongoing study of the water levels and conditions. (Cortez Answer at 28-29; Collard Aff. at 4-5 ¶¶ 11, 12 and Ex. A.)

Those studies, Cortez submits, which were conducted by Brown and Caldwell Environmental Engineering and Consulting, identify several possible hypotheses to explain the decline, only one of which implicates the dewatering operation. Even if such declines were, in fact, caused by the dewatering operations, Cortez nevertheless maintains that the declines are not indicative of unnecessary or undue degradation. (Cortez Answer at 30-31; EA at 5-20; Collard Aff., Ex. A at 1, 15-19.)

Cortez denies WSDP's "unsupported" claims that BLM may have underestimated the amount of land subject to seepage and saturation and the amount of water traveling subsurface to springs and therefore may have understated evaporative loss from the Project. Cortez asserts that WSDP has failed to produce any evidence showing that the area saturated at the Frome site is greater than the area described as saturated in the EA. Cortez points out that one of the primary impetuses for the development of the Infiltration Project was the minimization or elimination of seeps. Construction and utilization of additional infiltration sites in areas with more favorable hydrogeologic conditions provides needed flexibility. (Cortez Answer at 31; Collard Aff. at 5-6 ¶ 14; EA at 1-2.)

Cortez maintains that, even if BLM had underestimated the amount of seepage and saturation, WSDP has neither presented any evidence establishing what the increase in evaporation would be nor established that the increase would elevate water consumption and evaporation above the level studied in the FEIS. (Cortez Answer at 32.)

WSDP's concerns that reinfiltration water is traveling subsurface to springs that feed the playa similarly fail, according to Cortez, because, although BLM acknowledges that upgradient groundwater mounding at the infiltration sites could elevate water levels in the playa, any resulting additional evaporative loss was addressed prior to Project approval by the groundwater flow simulations prepared by Geomega incorporated into the EA. (Cortez Answer at 32-33; Davis Decl. at 5-6 ¶ 10; EA at 5-21 to 5-22, 7-2.) Moreover, Cortez submits, recent surveys showing that the water level at the playa has been significantly higher in the past, consistently high flows in Indian Creek, and changes in approved irrigation uses refute WSDP's contention that mine dewatering and infiltration are primarily responsible for any increase in water in the playa. (Cortez Answer at 33-34; Collard Aff. at 6-7 ¶¶ 16, 18 and Exs. B and C.)

Cortez argues that the record clearly contradicts WSDP's claim that BLM failed to carefully consider the effects of seepage. It points out that not only were Geomega's analyses of seepage issues incorporated into the EA, but BLM also added extensive management procedures for monitoring and controlling seeps to the approved Infiltration Project. (Cortez Answer at 34; EA at 1-2, 4-2, 5-26, Appendix A at 7-9; FONSI/DR at 3, 5; Collard Aff. at 5-6 ¶ 14.)

As to seepage water quality issues, Cortez acknowledges that solute concentrations in groundwater adjacent to seepage areas exceed drinking water standards for TDS, chloride, and sulfate. It notes, however, that the water exceeds only the applicable TDS standard for livestock water quality; that the water is not toxic at the observed concentrations; and that arsenic and metals concentrations, if detectable at all, fall within State of Nevada water quality standards. (Cortez Answer at 34-35; EA at 5-26 to 5-27; Davis Decl. at 6 ¶ 11.) Nor, Cortez points out, do salt accumulations exceed ambient conditions in Crescent Valley. (Cortez Answer at 35; EA at 5-25; Davis Decl. at 6-7 ¶ 12 and Ex. D; Collard Aff. at 7 ¶ 17.) Cortez further asserts that the EA recognized the increased potential for the spread of salt cedar as a result of infiltration and associated local seepage and addressed that problem through the adoption of a weed control plan. (Cortez Answer at 35-36; EA at 2-11 to 2-14, 5-27; FONSI/DR at 5.)

WSDP's concerns to the contrary notwithstanding, Cortez argues that Geomega's investigation of the effects of infiltration on groundwater at the Pipeline Mine, documented in the Hydrogeochemical Report and incorporated into and summarized in the EA, clearly demonstrates that BLM carefully considered the effects of the Infiltration Project on aquifer water quality. (Cortez Answer at 36; EA at 3-25 to 3-26, 5-27 to 5-31.)

WSDP's unsupported and vague concerns that the Infiltration Project might adversely affect wildlife due to the bioaccumulation of naturally occurring elements such as arsenic in the infiltration ponds fail, Cortez submits, because analyses of surface water performed both by Cortez and by EVS Consultants in support of the FEIS show that any such bioaccumulation does not pose an ecological risk to wildlife. (Cortez Answer at 38-40; EA at 5-31; Davis Decl. at 6-8 ¶¶ 11, 14 and Ex. E; Collard Aff. Ex. D.) Cortez argues that the comments of State and Federal wildlife agencies reviewing the EA and the mitigation measures imposed as a result of those comments, in conjunction with the studies, amply refute WSDP's concerns that the Infiltration Project will lead to increased mortality due to roadkill and possible cyanide exposure on the heap leach pads and that seeps will attract wildlife to potentially dangerous water sources. (Cortez Answer at 40; EA at 5-2, 5-40 to 5-41.)

In response to WSDP's questions relating to the protection of Native American cultural resources and traditional values, Cortez contends that it and BLM have adopted measures to ensure that those resources and values are adequately identified and protected. Cortez asserts that it has already taken steps to discover and secure Native American cultural resources at the three sites analyzed in the EA, including relocating two of the proposed infiltration sites upon learning that an area sensitive to Native Americans was located near those sites. (Cortez Answer at 40-41.)

Cortez adds that, prior to building additional infiltration sites beyond the three approved in the EA, it must first identify those sites and contact Native Americans to gather information about traditional values connected to those sites. If conflicts develop, it will relocate the sites to acceptable areas or BLM will initiate consultations to resolve those conflicts. (Cortez Answer at 41; FONSI/DR at 6.) BLM must also conduct Class III cultural resources surveys on the proposed sites, Cortez notes, which will be used to ensure that the infiltration sites do not directly or indirectly impact the significant cultural resources uncovered in those surveys. (Cortez Answer at 41; EA at 2-16.)

In its answer, after noting that WSDP has simply rehashed its comments on the preliminary EA without even attempting to show error in BLM's treatment of those comments, BLM adopts Cortez' answer on the merits with a few minor additions and

modifications. BLM stresses that WSDP's objection to the lack of maps delineating the sites of possible additional infiltration facilities on the ground that, absent such maps, Native American traditional may be at risk, ignores the relevant discussion in the EA, the steps BLM and Cortez have agreed to take to prevent adverse effects to those values, and the continuing opportunities for local Native Americans to identify potentially affected sites. (BLM Answer at 6; EA at 3-48, 5-33.)

BLM discounts WSDP's speculation that infiltration has generated the large amount of water in the playa. BLM posits that the likely cause of the elevated water level was nearly twice the normal precipitation during 1997-98. (BLM Answer at 7; EA at 5-21 to 5-22.) In response to WSDP's contention that diagrams in BLM's files indicate that seepage from the Frome site saturated an area greater than the 17 acres described in the EA, BLM points out that, although one diagram based on visual observation at ground level on a relatively flat area may fit this description, the EA's estimate was based on aerial photography of the seep. BLM also provides the calculations underlying the EA's conclusion that the 71,500 million gallon [6/] capacity of the alluvium exceeds the projected 64,000 million gallons of infiltrated water. (BLM Answer at 7-8; EA at 2-8 Table 2, 5-23 to 5-24.)

WSDP's wildlife concerns are misplaced, BLM submits, because over the last three years only one animal has been reported killed by a vehicle in the Project area, no known wildlife mortalities have resulted from any seeps, and the cyanide levels in the leach pads are unlikely to cause wildlife mortality. (BLM Answer at 8-9.)

In a consolidated response to BLM's and Cortez' answers, WSDP contends that the newly released draft EIS (DEIS) for the South Pipeline Plan of Operations not only supports its earlier claim, denied by the Board in Great Basin Mine Watch, 146 IBLA at 251-53, that BLM had improperly segmented consideration of the Pipeline and South Pipeline Projects, but also demonstrates that BLM has abandoned its responsibilities to protect natural resources by permitting Cortez to evade both the letter and spirit of the law. (Consolidated Response at 2-4.) WSDP reiterates that BLM's approval decision allows Cortez to continue to degrade the waters of the State of Nevada, citing water quality records for the Filippini infiltration site which indicate that, contrary to Cortez' modeling-based prediction that exceedances of water quality would be temporary, the groundwater degradation which began in 1997 with exceedances in monitoring wells 13-16 for TDS, chloride, magnesium, and sulfate has not only continued, but has also grown with additional exceedances for selenium and boron and for antimony and selenium appearing in 1998 and 1999, respectively.

[6/] BLM notes that Cortez correctly observed that the EA contains a typographical error indicating the amount of water as “71,500 gallons.”

These exceedances are even more disturbing, WSDP submits, because Cortez stopped using the Filippini site in 1998 due to poor performance. (Consolidated Response at 12-13.)

WSDP speculates that the exceedances could be caused by the movement of degraded water from the Windmill and Rocky Pass infiltration ponds or by the spread of the contaminated plume from the old Cortez mine site currently under remediation, either of which would refute Cortez' claim that water degradation is limited to an area approximately 1500 feet in diameter from the ponds. Given the exceedance of even secondary TDS standards for months at a time and the use of the affected aquifer by Crescent Valley, the Dean Ranch, and the Dann Ranch for drinking water purposes, WSDP maintains that the current reinfiltration scheme is violating Nevada groundwater standards. Those standard, WSDP adds, do not permit temporary degradation of groundwater. According to WSDP, the South Pipeline DEIS confirms that the degradation will be allowed to continue because the dissolution of evaporite minerals as the infiltration water passes through the alluvium to the aquifer will create significant impacts to water quality. (Consolidated Response at 13-15.)

In its reply to WSDP's consolidated response, Cortez points out that the Board considered and rejected WSDP's allegation that the Pipeline and South Pipeline Projects were unlawfully segmented in its decision in Great Basin Mine Watch, 146 IBLA at 251-53. Cortez submits that WSDP has not produced any facts or law challenging the independent utility of the Pipeline and South Pipeline Projects and that its unsupported assertions not only are irrelevant to this proceeding, but are also flatly wrong. (Cortez Reply at 2-5.)

Cortez further argues that WSDP's concerns that the Infiltration Project will degrade the groundwater of Crescent Valley and that current infiltration procedures violate Nevada groundwater standards are undocumented and unsupportable. Cortez repeats that extensive tests, analyses, modeling, monitoring, mitigation measures, and conditions bolster BLM's finding that the Project will not significantly impact water resources. While acknowledging that groundwater solute concentrations at the Filippini infiltration site have been slower to return to ambient conditions than anticipated, Cortez notes that the site was constructed on private land early in the history of the Pipeline Project, has been inactive since October 1998, and is being reclaimed. (Cortez Reply at 7; Affidavit of Lawrence Goss, hydrogeologist for Cortez, attached to Cortez Reply as Ex. 1 (Goss Aff.) at 3 ¶ 7.) The site was deactivated, Cortez explains, because it was built in an area discovered to contain fine-grained playa lake sediments, resulting in poor infiltration performance. (Cortez Reply at 7; EA at 2-8; Goss Aff. at 3 ¶ 7; Affidavit of Andy Davis, Ph. D., Director of Geochemistry and Vice President at Geomega, attached to

Cortez Reply as Ex. 2 (Davis Aff.) at 2 ¶ 4.) Since this site pre-dated the reevaluation of the modeling and assumptions for groundwater flow in Crescent Valley incorporated into the Infiltration Project, Cortez maintains that the inefficiencies and problems associated with the Filippini site are not representative of infiltration under the Infiltration Project and cannot form a basis for claiming that the Project will cause unlawful degradation of groundwater. (Cortez Reply at 7; Davis Aff. at 2 ¶ 4.)

Cortez denies that the infiltration system for the Pipeline Mine violates Nevada groundwater standards. Cortez contends that the Nevada Administrative Code (NAC) does not prohibit the transitory and localized increases in solute concentrations involved here. It states that, while NAC § 445A.424 does incorporate drinking water standards, that regulation also recognizes that water quality and degradation are determined over time and that drinking water standards may not apply when the impacted groundwater is not a source of drinking water. (Cortez Reply at 11.) Cortez further asserts that, given both the transitory nature of the increases in solute concentrations which generally dissipate within approximately 180 days, and the abatement of potential downgradient impacts of transient TDS increases within 1,600 feet of the sites, the temporary and localized increase in analytes do not violate NAC § 445A.424 or degrade the drinking water resources of Crescent Valley, the Dean Ranch, or the Dann Ranch. (Cortez Reply at 11-12; EA at 4-2, 5-30 to 5-31; Davis Aff. at 6 ¶ 12.)

Also, Cortez has submitted a statement of supplemental evidence advising the Board that NDEP recently reviewed key positions espoused by WSDP in the context of renewing Cortez' water pollution control permit NEV95111 and found that the Infiltration Project had not degraded groundwater and was in compliance with Nevada water quality standards. (Cortez Statement of Supplemental Evidence at 1-3 and Ex. 2 (NDEP Notice of Decision), Response to Comments 1.1 through 1.7, 2.10 through 2.16; 2-18, 3.1, 4.1, 4.2, and 8.4.) Cortez submits that compliance with state groundwater standards and state law requirements should be left to state regulators and that the Board should therefore defer to NDEP's findings on those issues. (Cortez Statement of Supplemental Evidence at 3-4.)

In its reply, BLM denies that it has allowed Cortez to degrade state waters. BLM notes that the State of Nevada establishes applicable water quality standards and ensures compliance with those standards through NDEP permits and quarterly monitoring reports, pointing out that, as of submission of its reply, NDEP had not issued any violations to Cortez regarding the infiltration system. (BLM Reply at 2; Declaration of Helen Mary Johnson, BLM geologist, Battle Mountain Field Office, attached to BLM Reply (Johnson Decl.) at 3 ¶ 10.) Although it has an independent

obligation to assure conformity with Nevada water quality criteria, BLM asserts that NDEP's conclusions deserve some deference. (BLM Reply at 2.)

BLM acknowledges that the FEIS for the Pipeline Project recognizes that exceedances of water quality standards caused by analyte mobilization may occur but submits that the technical analyses incorporated into the EA establish that these exceedances will be transitory, a conclusion generally consistent with monitoring data. Id.; FEIS at 4-36 to 4-37; EA at 4-1 to 4-2; Johnson Decl. at 1-2 ¶¶ 2-4, 7-8.) BLM further observes that, should any exceedances create significant impacts, the FEIS requires the implementation of various applicant-committed mitigation measures, including modifications designed to eliminate analyte mobilization and utilization of alternative reinfiltration sites. (BLM Reply at 2-3; FEIS at 4-40.) While WSDP contends that this approach violates Nevada water quality standards, BLM submits that WSDP has cited no authority compelling the conclusion that transitory exceedances violate state standards or presented any evidence that the contingent mitigation measures will be unsuccessful. BLM adds that NDEP is aware of the temporary exceedances and has not found those exceedances illegal. (BLM Reply at 3.)

As an initial matter, we note that the only decision before us in this appeal is BLM's March 12, 1999, approval of the Infiltration Project. We therefore reject as irrelevant WSDP's arguments addressing the validity of BLM's earlier approvals of the entire Pipeline Project, including the allegedly improper segmentation of that Project and the South Pipeline Project, and of the first amendment to the Pipeline Project, because those issues are beyond the scope of this appeal. In any event, the Board finally decided those questions in Great Basin Mine Watch, supra, and WSDP has not shown that they warrant reexamination.

WSDP, as the party challenging BLM's decision, has the burden of showing error in the appealed decision. See, e.g., William J. Schweiss, 139 IBLA 10, 12 (1997), and cases cited. We find that none of its arguments demonstrates that BLM erred in concluding that the approved Infiltration Project with the required mitigation, monitoring, and reclamation measures will not cause unnecessary or undue degradation of public lands.

WSDP's questions concerning the accuracy of the scientific assumptions and modeling underlying the EA, FONSI/DR, and approval decision ignore the new comprehensive studies, analyses, and technical reports commissioned by Cortez to address the problems plaguing the previously approved infiltration sites. These detailed examinations fatally undermine WSDP's contention that approval of the Infiltration Project was based on inaccurate and outdated information. Additionally,

in contrast to WSDP's broad and largely unsupported allegations and suppositions of degradation, Cortez has presented evidence, documents, and citations to the record specifically refuting each of WSDP's concerns about the approved Project. Cortez has established that BLM carefully considered the Project's potential impacts, including those affecting groundwater quality and quantity, and conditioned approval of the Project on the performance of mitigation measures designed to prevent any unnecessary or undue environmental degradation. See Cortez Answer at 15-43; Cortez Reply to Consolidated Response at 6-14, summarized supra.

We also note that Cortez has provided evidence that NDEP considered and rejected WSDP's key water quality degradation arguments in the context of the renewal of Cortez' water pollution control permit. While not dispositive, the Board generally defers to the interpretation of relevant state statutes and regulations adopted by state officials or agencies charged with the administration of the program involved, in the absence of any contrary State court decisions adjudicating the question. See Office of Surface Mining Reclamation and Enforcement v. Thompson Brothers Coal Co., 148 IBLA 148, 158 (1999), and cases cited. Accordingly, we find no error in BLM's determination that the approved Infiltration Project, including the water management plan, the conditions of approval, and the required mitigation measures, incorporates all practicable means to avoid or minimize unnecessary or undue degradation of the public land and will likely prevent such degradation.

[2] WSDP also argues that BLM's decision violated NEPA, 42 U.S.C. § 4332(2)(E) (2000), by failing to examine any reasonable alternatives to the proposed action. Given the repeated difficulties with the infiltration system as originally conceived and the increased acreage now requested for those facilities, WSDP submits that the FEIS' dismissal of the alternative of reinjection wells because of the high cost and large area of surface disturbance of those wells must be re-evaluated, especially since that more expensive technique would reduce the impacts of the infiltration program. (SOR at 5-6.)

In response, Cortez submits that WSDP'S NEPA challenge fails because WSDP has not shown that BLM ignored reasonable alternatives to the Project. Cortez asserts that WSDP has not identified any purportedly reasonable alternative other than reinjection wells, nor has it shown that those wells or any other alternative would accomplish the purposes of the project and reduce the impacts of the infiltration program. (Cortez Answer at 43-44.) Since the purpose of the Project is to more efficiently manage infiltration in an environmentally sound manner (EA at 1-7), Cortez questions whether BLM has the obligation to consider alternatives such as reinjection wells which would not facilitate infiltration at the Pipeline Mine. (Cortez Answer at 44.) In any event, Cortez notes that the FEIS considered six alternatives for

the discharge of pumped water from pit dewatering, including two involving reinjection wells. Those alternative were rejected because of potential operating difficulties, high maintenance, relatively high reclamation and abandonment costs, and backwashing issues. (Cortez Answer at 45; FEIS at 2-43 to 2-46,)

In light of the analysis in the FEIS, Cortez maintains that BLM had no duty to reevaluate the reinjection well alternative in the EA. This is particularly true, Cortez asserts, because Geomega's October 1998 Injection Viability Report reevaluating reinjection wells as an alternative to infiltration concluded that sustained subsurface injection at rates meeting the needs of the Pipeline Project had not been achieved at other Nevada mining sites, despite favorable feasibility studies. Cortez further points out that BLM has recently observed that injection wells are not as efficient as infiltration ponds, are hard to maintain, and cannot be relied upon to operate continuously. (Cortez Answer at 45-46; Injection Viability Report at 43; Davis Decl. at 8 ¶ 16; Collard Aff. at 8 ¶ 20.) Accordingly, Cortez submits that BLM adequately considered reasonable alternatives to the Infiltration Project.

Section 102(2)(E) of NEPA, 42 U.S.C. § 4332(2)(E) (2000), directs an agency to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." See also 40 CFR 1501.2, 1508.9(b); Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228-29 (9th Cir. 1988), cert. denied, 489 U.S. 1066 (1989); Howard B. Keck, Jr., 124 IBLA 44, 53 (1992). BLM therefore is required to consider reasonable and feasible alternatives to the proposed action which will accomplish its intended purpose with lesser or no impact. Wyoming Outdoor Council, 147 IBLA 105, 114 (1998); Howard B. Keck, Jr., supra, and cases cited; see 43 CFR 1501.2, 1502.14, 1508.9.

The EA prepared for the Infiltration Project considered two alternatives: the proposed action and the no action alternative. WSDP insists that the EA should also have reconsidered the alternative of reinjection wells, even though that alternative was considered and rejected in the FEIS to which the Infiltration Project EA was tiered. WSDP has presented nothing in this appeal that would justify requiring BLM to reevaluate this alternative, especially considering the Injection Viability Report's reinforcement of the validity of FEIS's conclusion that reinjection wells were not a reasonable alternative to the Project. WSDP's mere disagreement or difference of opinion as to the proper alternative does not suffice to establish error in BLM's choice of alternatives. Blue Mountains Biodiversity Project, 139 IBLA 258, 267 (1997). Accordingly, we find that the EA and the FEIS adequately considered a reasonable range of alternatives to the Infiltration Project. See Blue Mountains Biodiversity Project, supra; Oregon Natural Resources Council, 115 IBLA 179, 186 (1990).

[3] WSDP further asserts that BLM's decision is probably based on an illegal plan of operations. WSDP points out that the mining laws limit the amount of acreage that can be used for ancillary facilities such as infiltration facilities and contends that BLM should have determined the validity of the claims and calculated the allowable mill site acreage before approving the Project. Although none of the environmental documents prepared for any aspect of the Pipeline Project has addressed the nature or validity of the claims involved, WSDP speculates that, given the size of the ancillary facilities, the Project most likely violates the limitations of the mining laws. (SOR at 6-7.)

In response, Cortez asserts that WSDP has presented no evidence that the Pipeline Mine constitutes an illegal use of public lands either because it includes excess mill site acreage or because some of the claims are invalid, nor can it do so because the mine fully complies with all applicable law. Cortez eschews WSDP's supposition that, since the Mining Law of 1872 has been interpreted as allowing the location of only one 5-acre mill site for each valid mining claim included in a plan of operations, the vast amount of acreage permitted for facilities other than pits suggests that Cortez is violating the 5-acre limit. Cortez acknowledges that Solicitor's Opinion M-36988, Limitations on Patenting Millsites under the Mining Law of 1872, issued on November 7, 1997, interpreted the Mining Law as proscribing the location of more than 5 acres of nonmineral land for mill site use in association with each valid mining claim, but correctly points out that section 3006(c) of the May 21, 1999, Supplemental Appropriations Act, P. L. No. 106-31(c) (1999), specifically prohibits BLM from denying a plan of operations submitted prior to May 21, 1999, pursuant to that Solicitor's Opinion. (Cortez Answer at 47-49.)

Cortez also contends that, even without the Supplemental Appropriations Act provision, BLM has the discretion to approve the Infiltration Project under the land use authorization provisions of section 302(b) of FLPMA, 43 U.S.C. § 1732(b) (2000). Cortez cites BLM Instruction Memorandum (IM) 98-154 (Aug. 17, 1998) as confirming BLM's discretion, under appropriate circumstances, to approve a plan of operations without regard to whether there is excessive mill site acreage. That IM also provides, Cortez asserts, that approval of a plan under 43 CFR 3809.1-6 (1998) effectively serves as a surface use permit under section 302(b) of FLPMA, as well as an authorization under the mining laws. Cortez submits that the only land at issue herein is the additional acreage covered by BLM's approval of the Infiltration Plan. That approval, it argues, not only was proper under the Supplemental Appropriations Act, but also serves as a surface use permit under section 302(b) of FLPMA. (Cortez Answer at 49-51.)

Cortez further maintains that the validity of its unpatented mining claims is not a proper issue for this appeal, but that even if it were, BLM has properly authorized use of all the public lands utilized in existing mining operations. Cortez submits that the purpose of the review of a plan of operations is to prevent unnecessary or undue degradation, not to determine the validity of mining claims or mill sites which is done by mining contest. Although the determination of whether the operation will create unnecessary or undue degradation generally assumes that the use is valid, Cortez concedes that BLM should reject a plan of operations and declare the claims invalid if the claims were located after withdrawal of the land and should initiate a contest and suspend consideration of a plan of operations pending the outcome of the contest if it determines that no discovery exists on the affected claims. Such cases represent extreme circumstances, Cortez submits, and BLM's normal procedure is to review the plan without investigating claim validity, other than to check the status of the involved lands for withdrawals or special designations. In short, Cortez contends that BLM is not required to investigate mining claim or mill site validity in order to evaluate and approve a plan of operations although it is free to so at any time. (Cortez Answer at 51-53.) Cortez asserts that WSDP has shown absolutely no basis on which to initiate an investigation in this case.

In its answer, BLM agrees with Cortez that both section 3006(c) of the May 21, 1999, Supplemental Appropriations Act, Pub. L. No. 106-31, and 43 U.S.C. § 1732(b), as interpreted in IM 98-154, clearly refute WSDP's challenge to the legality of the plan of operations. (BLM Answer at 9.)

In its consolidated response, WSDP reiterates its position that the entire Pipeline Project amounts to an illegal use of public lands. WSDP insists that BLM cannot legitimately approve a plan of operations based on either invalid claims or illegal uses of public lands because no right to mine exists absent a BLM determination that the claimant has complied with the laws of the United States and that, therefore, the question of claim validity must be an integral part of BLM's analysis of a proposed plan of operations. WSDP complains that neither BLM nor Cortez has provided data on the nature of the involved claims and their validity and suggests that the only way to obtain this information is through a hearing. (Consolidated Response at 16-20.)

In reply, Cortez again denies that the Pipeline Project is an illegal use of public land. Citing Board precedent, Cortez reiterates that WSDP as the party questioning the validity of the underlying claims has the burden of presenting evidence which establishes a reasonable basis for concluding that the claims are not supported by a discovery and that mere speculation does not suffice to meet this obligation. (Cortez Reply at 15.) Cortez repeats that, while WSDP disputes the validity of the entire Pipeline Project, this appeal concerns only BLM’s March 12, 1999, approval of the

Infiltration Project. (Cortez Reply at 16-17.) According to Cortez, WSDP's failure to satisfy its burden of showing why, under the circumstances here, BLM should have departed from its normal procedures and examined the validity of the claims defeats its challenge to the legality of the underlying claims. [7/] (Cortez Reply at 21-22.)

BLM also refutes WSDP's contention that BLM must conduct a validity examination prior to authorizing a plan of operations, asserting that none of the authorities WSDP cites supports that proposition. (BLM Reply at 3-4.) BLM further maintains that, consistent with Board precedent, WSDP's failure to present evidence establishing a credible basis for concluding that the claims are invalid requires rejection of that argument. Id.

As discussed above, the only decision properly before us is BLM's March 12, 1999, decision approving the Infiltration Project, and we therefore will not consider WSDP's arguments to the extent they challenge the validity of the entire Pipeline Mine Project and the first amendment to that Project. We also note that, contrary to WSDP's allegation that BLM and Cortez have not identified the claims involved in the Project, the Amended Plan, which was revised on February 22, 1999, to conform to the EA, states that the Project area consists entirely of the unpatented lode mining claims specifically identified in Appendix A to the Amended Plan. See Amended Plan at 4-1 and Appendix A. Since none of the affected claims are mill sites, we reject WSDP's mill site-related arguments as unsupported and irrelevant.

Although the mere filing of a plan of operations confers no rights in the claimant to have that plan approved (see Great Basin Mine Watch, 146 IBLA at 256), BLM generally does not determine the validity of the affected mining claims before approving a plan of operations. See, e.g., Southwest Resource Council, 96 IBLA 105, 122, 94 I.D. 56, 66 (1987). BLM always retains the right to examine the validity of the underlying claims, however, because, while the location of a mining claim, without more, affords a claimant protection under the doctrine of pedis possessio against subsequent intrusions of others, vested rights as against the United States are

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[7/] Cortez avers that, in the case of public land open to mineral entry, BLM normally checks the status of the lands to verify that the plan of operations was filed in the proper office and that the land has not been withdrawn. It does not, however, customarily investigate the validity of the unpatented claims included in the plan, absent extraordinary circumstances. Such circumstances, Cortez asserts, might be when claims are located within designated wilderness areas or on lands withdrawn either before or after claim location, or when other evidence suggests that the claims are not part of a bona fide mining operation. None of those circumstances are present here, Cortez argues.

obtained only upon a showing that the claim is supported by the discovery of a valuable mineral depsoit. See Ronald A. Pene, 147 IBLA 153, 157 (1999); Great Basin Mine Watch, supra; United States v. Conner, 139 IBLA 361, 365 (1997); Southwest Resource Council, 96 IBLA at 123, 94 I.D. at 67. Thus, the right to mine under the general mining laws derives from the discovery of a valuable mineral deposit, without which denial of the plan of operations is entirely appropriate. Great Basin Mine Watch, supra. If BLM has reason to question the validity of the mining claims included in a plan of operations, the proper course is for BLM to take steps to nullify them, for example, by declaring claims located on withdrawn land null and void ab initio and rejecting the plan covering those claims or by contesting claims allegedly unsupported by a discovery and suspending consideration of a plan of operations including those claims pending the outcome of the contest proceedings. Southwest Resource Council, 96 IBLA at 123-24, 94 I.D. at 67. See also Pass Minerals, 151 IBLA 78, 86-87 (1999).

On appeal, WSDP insists that BLM had an absolute duty to examine the validity of the involved claims before approving the Infiltration Project. As noted above, no such categorical requirement exists and, while BLM always possesses the authority to investigate the validity of unpatented mining claims, it is not required to do so, nor should it suspend consideration of a plan of operations even when it decides to conduct a validity examination of the affected claims to determine whether to initiate a contest. See Pass Minerals, Inc., 151 IBLA at 87 (holding that the pendency of a mineral examination does not constitute a proper basis for suspending consideration of a plan of operations); see also Mount Royal Joint Venture, 153 IBLA 90, 96-97 (2000) (holding that, while the pendency of a mineral examination does not justify suspending consideration of a plan of operations, such a suspension is warranted once a contest is initiated). In this case, BLM saw no reason to inquire into the validity of the claims. WSDP, as the party alleging that the claims are invalid, had an obligation to present evidence which, at a minimum, would establish a reasonable basis for questioning the validity of the claims. See Southwest Resource Council, 96 IBLA at 124, 94 I.D. at 67. WSDP submitted no information whatsoever; its "fanciful speculation will not suffice." [8/] Id. Since we find that WSDP has failed to produce any evidence supporting its supposition that the affected claims are invalid, we reject

[8/] The fact that some lode mining claims will be used for temporary infiltration facilities, which will be reclaimed after infiltration use ceases, does not in and of itself support the inference that those claims are not supported by a discovery absent evidence that this ancillary use precludes future mineral extraction from those claims. See Jan. 18, 2001, Solicitor's Opinion, "Use of Mining Claims for Purposes Ancillary to Mineral Extraction" (Ancillary Use Opinion), cosigned by Secretary Babbitt on Jan. 18, 2001, at 14-15. No such evidence has been presented here.

its contention that the Infiltration Project is based on an illegal plan of operations. [9/] For the same reason, we deny its request for a hearing.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, BLM's motion to dismiss is denied; WSDP's request for a hearing is denied; and the decision appealed from is affirmed.

_____
Bruce R. Harris
Deputy Chief Administrative Judge

I concur:

_____
T. Britt Price
Administrative Judge

_____

[9/] Because we find that WSDP has not met its burden of showing a reasonable basis for questioning the validity of the claims, we need not address whether use of the claims is independently authorized pursuant to section 302(b) of FLPMA, 43 U.S.C. § 1732(b) (2000). But see Ancillary Use Opinion at 11-13, 15-16 (discussing Secretary's discretion to approve use of invalid mining claims under FLPMA.)