Editor's note: 101 I.D. 52

RED THUNDER, INC.

IBLA 93-413 Decided April 29, 1994

Appeal of two decisions by the Montana State Office, Bureau of Land Management, requiring significant modifications to approved plans of operations. MTM-77778, MTM-77779.

Affirmed.

1. Federal Land Policy and Management Act of 1976: Surface Management

   The authority granted by FLPMA sec. 302(b), 43 U.S.C. § 1732(b) (1988), to prevent unnecessary or undue degradation of public lands authorizes BLM to order a cessation of mining operations if that action is necessary. BLM's authority entails not only acting to avert unnecessary or undue degradation before it occurs but also acting to abate degradation if it develops after a plan has been approved.

2. Environmental Quality: Generally--Environmental Policy Act--Federal Land Policy and Management Act of 1976: Surface Management--National Environmental Policy Act of 1969: Generally

   Regulations promulgated under NEPA provide an exception when compliance would be inconsistent with other statutory requirements. NEPA does not apply when there is a clear and fundamental conflict of statutory duty. The time required to prepare an environmental assessment to review remedial measures to abate acid rock drainage

prior to ordering them implemented would be fundamentally at odds with the need to abate damage to the environment and would be inconsistent with the duty to prevent unnecessary or undue degradation in 43 U.S.C. § 1732(b) (1988).

3. Federal Land Policy and Management Act of 1976: Plan of Operations--Federal Land Policy and Management Act of 1976: Surface Management--Mining Claims: Plan of Operations

When the record supports the State Director's determination under 43 CFR 3809.1-7(c)(2) and (c)(3) that a proposed modification of a mine plan of operations must be submitted and his determination under 43 CFR 3809.1-7(c)(4) that measures are needed to avoid unnecessary or undue degradation, the decision will be affirmed on appeal.

APPEARANCES: Donald R. Marble, Esq., Chester, Montana, Donald A. Carr, Esq., and LynDee Wells, Esq., Washington, D.C., for Red Thunder, Inc.; Patrick J. Garver, Esq., Jim Butler, Esq., Salt Lake City, Utah, Alan L. Joscelyn, Helena, Montana, for Zortman Mining, Inc.; Tommy H. Butler, Esq., Helena, Montana, for the Montana Department of State Lands; Karan L. Dunnigan, Esq., Office of the Field Solicitor, Billings, Montana, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE IRWIN

Red Thunder, Inc., a non-profit Montana corporation composed of traditional Native Americans at the southern end of the Fort Belknap Indian Reservation, has appealed two April 13, 1993, decisions by the Director of the Montana State Office, Bureau of Land Management (BLM), requiring Zortman Mining, Incorporated (ZMI) and its parent, Pegasus Gold Corporation, to submit significant modifications to the approved plans of operation for the

Zortman Mine and the Landusky Mine in the Little Rocky Mountains, Phillips County, Montana. These are heap leaching operations designed to recover silver and gold. The Zortman Mine covers more than 900 acres, approximately 40 percent of which are permitted for disturbance. Leaching but no mining operations are occurring while a proposal for expanding it is under review. It includes the 83/84 leach pad, the 85/86 leach pad, the Alder Gulch rock dump, and the OK Pit facilities referred to in this opinion. The Landusky Mine is located to the west of the Zortman Mine. It covers more than 1,200 acres (two-thirds of which are permitted for disturbance) and consists of seven heap leach pads, four waste rock dumps, three open pit mining areas, and a processing plant. It includes the Mill Gulch waste rock dump, the Gold Bug Pit, the Montana Gulch leach pad and waste rock dump, and the Sullivan Park (or 91) leach pad facilities referred to in this opinion. 1/

The decisions were issued because BLM found effluent containing "elevated metals and sulfates in association with lowered pH readings as well as other indicators of acid rock drainage [ARD]" downgradient from facilities at each mine (Decisions at 1). The decisions determined that significant modifications of the approved plan of operations for each mine were required and directed the Lewistown District Office, BLM, to prepare a supplemental environmental assessment (EA) "on the modification to determine

1/ References are provided to the volume or binder of the appropriate mine file. Thus, the description of the Zortman Mine is from Zortman Mine, MTM 77779, Zortman Reclamation Plan and Post-Mine Topography, February 1989, at page 2. The description of the Landusky Mine, however, is from the Supplemental Environmental Assessment, Landusky Mine Operating and Reclamation Plan Modifications, Acid Rock Drainage Control and Remediation, November 1993, at i, 1, a copy of which was submitted by BLM during the pendency of the appeal.

the adequacy of the proposed mitigation and reclamation procedures, and to determine if the action is 'significant' as contemplated in NEPA [the National Environmental Policy Act of 1969] Sec. 102.2.c [42 U.S.C. § 4332(2)(C) (1988)]" (Decisions at 2). The State Director allowed operations at both mines to continue under the approved plans, subject to "[a]ny immediate steps that the Lewistown District Manager determines are needed to prevent unnecessary or undue degradation." Id. Additionally, the State Director ordered changes in operations at the Landusky Mine.

Section 302 of the Federal Land Policy and Management Act of 1976 (FLPMA) 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." 43 U.S.C. § 1732(b) (1988). The surface management regulations at 43 CFR Subpart 3809, under which the State Director issued his decisions, were promulgated based on this and other statutory authority. See 43 CFR 3809.0-3(b). They define "unnecessary 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." 43 CFR 3809.0-5(k).

The regulations allow an authorized officer, i.e., the BLM District Manager (see 43 CFR 3809.0-5(a), 45 FR 78904, Nov. 26, 1980), to request an operator to submit proposed modifications to an approved plan of operations.

43 CFR 3809.1-7(a). If the operator does not do so within a reasonable time, the authorized officer may recommend to the State Director that the operator be required to do so. The recommendation is to be accompanied by a statement setting forth the facts and reasons for the recommendation.

43 CFR 3809.1-7(c)(1). The State Director may order the operator to submit a proposed modification if he determines, among other things, that "disturbance from the operations of the plan as approved or from unforeseen circumstances is or may become of such significance that modification of the plan is essential in order to prevent unnecessary or undue degradation * * *." 43 CFR 3809.1-7(c)(2)(ii). If the State Director determines a modified plan is required, the operator must submit it to the authorized officer for review and approval. 43 CFR 3809.1-7(c)(3). Meanwhile:

> Operations may continue in accordance with the approved plan until a modified plan is approved, unless the State Director determines that the operations are causing unnecessary or undue degradation to the land. The State Director shall advise the operator of those reasonable measures needed to avoid such degradation and the operation shall immediately take all necessary steps to implement those measures within a reasonable period established by the State Director.

43 CFR 3809.1-7(c)(4). 2/

Sulfide ores were known to be present when the Zortman and Landusky Mines were first permitted but were of little concern. The draft

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2/ These provisions for "an appeal procedure * * * to the appropriate State Director" were added "to provide a greater degree of assurance that approved operations already in progress will not be unreasonably interfered with because of a proposed modification of the plan of operations." 45 FR 13956, 13957 (Mar. 3, 1980).

environmental impact statement (Draft EIS) issued in 1979 reported they had been found at both minesites (Draft EIS at 3, 43), but stated: "The proposed mine pits would not mine into the sulfide ore body, but rather the oxide ore body which is not conducive to the formation of acid mine drainage. Acid drainage is therefore not considered a potential threat from the proposed projects." Id. at 75-76. Other indications that ore and waste rock were expected to have minimal, if any, acid generating potential appear throughout the record, including ZMI's 1985 application to amend the Landusky Mine permit to open new ore pits (Landusky Mine, MTM 777779, Vol. 2, Application at 81), the Montana Department of State Lands (DSL) review of ZMI's proposal to create the Mill Gulch waste dump (Landusky Mine, MTM 77779, Vol. 3, 1988 Preliminary Environmental Review at 12), and ZMI's 1989 Life of Mine Amendment application for the Landusky Mine proposing to construct the Sullivan Park heap leach pad and expand the 85-86 Montana Gulch leach pad (Landusky Life of Mine Amendment Binder at III-5 to 6; see also Statement of reasons (SOR) Exh. U).

The May 1990 EA prepared by BLM and DSL to review the Life of Mine Amendment noted that "ZMI is now in the process of developing the baseline information for a sulfide reserves application" and that because there was not an application, "[n]o part of the potential sulfide action is addressed in this EA" (Landusky Mine, MTM 77779, Vols. 7, 9, EA at 5-6; see also
Vols. 15 & 16, January 1991 Supplemental EA at 5-7). Nevertheless, several portions of the EA addressed possible mining of acid generating materials. Discussing the cumulative impacts of water quality due to mine pits, the EA reported that "some sulfide material is exposed in the walls of the pits"

and that analyses of rock samples from the Queen Rose and Gold Bug pits "indicate some types of rock have the net potential for acid generation and other rock types have a net neutralization potential." Id. at 44. The discussion of the cumulative impacts of water quality from waste rock dumps similarly noted the presence of rock types with "significant acid generation potential" as well as others with "a high potential for acid neutralization" and concluded:

> Based on projections, any acid generated by waste rock should be neutralized by other waste rock within the deposit. The potential does exist for acid-generation in small, isolated areas of waste rock. Potential for acid-generation would be reduced by the placement of a soil cover and revegetation of the depository during reclamation. Establishment of a soil and vegetative cover would reduce the amount of water infiltration and oxygen supply to waste rock and limit acid-generation. The acid-generation potential in isolated areas of waste rock would be mitigated through mixing of acid-generating and neutralizing waste rock or addition of limestone.

Id. at 59-60; see also Landusky Mine, MTM 77779, Vol. 9, June 1990 Addendum to EA at 22.

Apparently because ore and waste rock were expected to have minimal acid generating potential, the plans of operations for the mines did not call for testing to identify oxidized and sulfide materials prior to mining and moving ore and waste rock (Zortman Response at 12 and n.12). Based on a review of the February 1989 Reclamation Plan for the Zortman Mine, BLM asked about the potential for ARD from waste rock dumps (Zortman Mine, MTM 77778, Vol. 6, BLM Comments on Zortman Reclamation Plan, March 21, 1989). ZMI responded that since no previous acid-base data had been generated, it

would collect rock samples from active and inactive sites for acid-base balance testing and provide the results to DSL, stating (as it also did in the May 1989 Life of Mine Amendment application for the Landusky Mine) that: "Due to low-grade mineralization of Zortman and Landusky ore and waste rock, the acid generating potential of these materials at waste rock sites is expected to be minimal" (Zortman Mine, MTM 77778, Zortman Reclamation Plan and Post-Mine Topography binder at 4-a). Although sampling reports are not part of the record, apparently ZMI at some time did begin to classify material according to its degree of oxidation (see Zortman Mine, MTM 77778, Vol. 7, DSL memorandum re Zortman/Landusky AMD Accounting, Feb. 13, 1991).

It appears that by 1990 ZMI was aware that a limited amount of oxide ores remained. It conducted drilling for sulfide ores in November 1989 and, beginning about July 1990, it conducted test leaching of a mixture of oxide and sulfide ores (Zortman Mine, MTM 77778, Inspection & Enforcement File #1, BLM Compliance Inspection Reports Nov. 6, 1989, Oct. 18, 1990; DSL Field Inspection Reports July 26, 1990, Feb. 11, 1991). In August 1990, ZMI presented a mine expansion study plan for an additional 20 years of mining that included a discussion of the potential for acid mine drainage (Zortman Mine, MTM 77778, Vol. 6, Mine Expansion Study Plan, on
pages 42-44). In response, BLM and DSL again raised the need to evaluate both ore bodies and waste rock for ARD (Zortman Mine, MTM 77778, Vol. 7, DSL letter of Nov. 19, 1990, at 1, BLM letter of Nov. 21, 1990, at 4).

Water quality samples taken during site inspections in the summer and fall of 1992 indicated low pH and elevated cyanide readings at several

facilities. By October 1992, ZMI began to recover drainage from the 1991 (Sullivan Park) leach pad and Mill Gulch waste rock dump at the Landusky Mine and the 83/84 leach pad and Alder Gulch waste rock dump at the Zortman Mine (Landusky Mine, MTM 77779, Inspection and Enforcement Vol. 3, BLM Compliance Inspection Report Aug. 14, 1992, Oct. 19, 1992; DSL Field Inspection Report Aug. 14, 1992; SOR, Exh. E; ZMI Response at 2 n.1). BLM's October 19, 1992, inspection report concluded: "BLM should consider requesting a Plan Modification under 3809.1-7 to correct the problems; especially with regard to continued construction of the Mill Gulch waste rock dump."

On November 5, 1992, the Lewistown District Manager wrote to ZMI's general manager by certified mail:

> I wish to confirm the discussion you had with Scott Haight of my staff on November 3, 1992.
>
> As previously noted by BLM, DSL and ZMI personnel there is concern over development of low pH effluent from several facilities at the Zortman and Landusky Mines. Specific locations include the Zortman 85/86 leach pad underdrain in Ruby Gulch, the Alder Gulch waste rock dump underdrain, the Zortman 83/84 leach pad underdrain, the Landusky 91 pad underdrain, and the Mill Gulch waste rock dump underdrain. Partial capture of the effluent has been effected by ZMI; however, as was discussed, this is not recognized as a long-term solution by either yourselves or the involved agencies.
>
> On Tuesday you stated to Scott that by not later than December 1, 1992, ZMI would be submitting to the agencies proposals for correcting the problem areas. I look forward to receiving that material and will

> decide upon receipt whether it constitutes a significant modification under 43 CFR 3809.1-7.

(SOR, Exh. C). 3/

In a November 19, 1992, response, ZMI proposed removing 80 percent of the buttress of the Zortman 85/86 leach pad at the Zortman Mine by June 1993 and noted that it had resloped and reseeded the dike faces of the Zortman 83/84 leach pads and the Alder Gulch waste dump and diverted drainage away from the dump at that mine. At the Landusky Mine, ZMI stated it had diverted drainage around the Landusky 1991 leach pad and completed dike face reclamation, and was constructing a segregated underdrain for the lower portion of the Mill Gulch waste dump and would intercept water from the upper portion of the dump. ZMI also stated that changes in construction procedures for the Mill Gulch waste dump (e.g., "construction of the lower portions of the dump in 50 foot lifts * * * and positioning of the most reactive waste in the center cells of the dump where they will be hydrologically isolated") "are expected to preclude further development of the subject problems" (Zortman Mine, MTM 77778, Vol. 9, ZMI letter of Nov. 19, 1992; Landusky Mine, MTM 77779, Vol. 23; id.).

After a series of consultations and a meeting with ZMI during December, the Lewistown District Manager and the Chief of the Hard Rock Bureau, DSL, notified ZMI by letters dated January 15 and February 1, 1993, that several

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3/ Apparently the District Manager regarded this letter as a request to ZMI for plan modifications in accordance with 43 CFR 3809.1-7(a).

changes were needed in the operating and reclamation procedures at each mine (SOR, Exhs. J, K).

ZMI's initial response to these letters came on February 22, 1993 (SOR, Exh. P). It found three of the proposed actions sensible and agreed to implement them: (1) initiating a program to characterize waste prior to its removal; (2) mapping and characterizing existing pit floors and benches to identify areas of high acid-generating potential; and (3) placing waste rock material as backfill in the Gold Bug pit at the Landusky Mine. Other proposals it found to be "based on what appears to be inaccurate assumptions or incomplete data, or to be ineffective to address the environmental concerns outlined in the letters," and proposed a meeting "to develop a complete and accurate understanding of the underlying data and to discuss the range of options available for action by Zortman." Id.

ZMI then commmented that

> the letters do not conform to existing processes for modification of a reclamation plan or mine plan of operations under either state or federal law. Under existing law, modifications of an existing plan cannot simply be imposed upon Zortman. Rather, Zortman is entitled to notice and an opportunity to a hearing prior to a revision of its reclamation plan by the state and is entitled to propose appropriate modifications to its operating plan before any action may be taken by BLM through its State Director. * * * [W]e assume, in view of the limitations imposed by law, that the various items in the letters are suggestions for further discussions concerning modifications, except insofar as Zortman has agreed (as described above) to incorporate certain modifications into its existing plans.

Id.

ZMI met with BLM and DSL on February 24. On March 16, 1993, it submitted a "schedule for attainment of objectives which were agreed upon," plans to reslope and reclaim the Mill Gulch waste dump and the Sullivan Park dike, and plans for construction of the Gold Bug waste dump and for waste characterization (SOR, Exh. R). The schedule included other steps for these facilities as well as for the submission of plans for reclamation of material removed from the buttress of the Zortman 85/86 leach pad and placed in the OK Pit.

In his April 13, 1993, decisions the State Director stated:

> The ZMI responded on March 16, 1993, to the Lewistown District Manager's recommendations [of January 15 and February 1] by sending "Reclamation Plan Revisions" to the DSL and the BLM. The Lewistown District has asked for our determination as to whether a significant modification is to be required for the Landusky [and Zortman] Mine Plan of Operations.

(SOR, Apps. 1 and 2 at 1).

In accordance with 43 CFR 3809.1-7(c)(2), the State Director determined, for each mine, that:

> (1) all reasonable measures were taken by the Lewistown District Manager at the time the Plan of Operations was approved to ensure unnecessary or undue degradation would not occur.
>
> (2) the current ARD situation represents circumstances that require modifications to the existing Plan of Operations that are essential in order to prevent unnecessary or undue degradation.

(3) the current ARD situation can be minimized using reasonable means.

Id. at 2.

As the rationale for item 1 for the Landusky Mine, the State Director stated:

> The most recent environmental assessment (EA) for operating and reclamation plan approval (Amendment No. 10 to MTM-77779), analyzed various rock types and concluded that, although certain mine material is known to have acid generating potential, the neutralizing capacity of rock would be significantly greater than its acid-generating capacity. The EA also discusses general guidance for mitigating ARD that "may occur" in isolated areas within waste-rock dumps (EA of 5/11/90, Pages 59-60). This constitutes due consideration of the matter by the District Manager during the plan approval process.

The State Director's rationale for item 1 for the Zortman Mine states:

> ARD concerns were reviewed during approval of the last amendment (Zortman Reclamation Plan and Post-Mine Topography) to the Zortman Plan of Operations. At that time (1989) mine monitoring data supported the prevailing opinion of technical reclamation specialists who felt it to be unlikely that mining of syenite porphory within the naturally occurring oxide zone would create a source of acid-producing material.

As the rationale for item 2 for both mines, the State Director stated: "New information indicates an ARD potential that is more widespread and demands more specificity than what is covered in the existing approved Plan of Operations."

The State Director's rationale for item 3 for both mines was: "A variety of technical solutions are available within the means of the operator to address the ARD problems. Several have already been applied. Additional mitigating measures would not be unreasonable."

The State Director determined, based on "review of the ZMI proposed revisions of March 16, * * * recent site information and the above criteria," that significant modifications to each plan were required in accordance with 43 CFR 3809.1-7(c)(3). He directed the Lewistown District Office to prepare supplemental Environmental Assessments on the proposed modifications to determine their adequacy and whether they were significant within the meaning of section 102(2)(C) of NEPA. See 43 CFR 3809.1-7(b); 3809.2-1(a). In the decision on the Zortman Mine the State Director gave the District Manager discretion to combine the supplemental EA concerning that mine with "the significant modifications that have already been submitted by ZMI for the Zortman Mine Expansion Project."

Citing 43 CFR 3809.1-7(c)(4), the State Director determined that at the Zortman Mine, where ore is not being mined pending review of the Zortman Mine Expansion Project, leaching operations could continue in accordance with the existing plan until the modified plan is approved, subject to ZMI's compliance with any immediate steps required by the Lewistown District Manager to prevent unnecessary or undue degradation (SOR, App. 2 at 2). At the Landusky Mine, the State Director also allowed operations to continue in accordance with the existing plan, but ordered ZMI to "discontinue waste rock disposal in the Mill Gulch waste rock dump"

(allowing it "to place waste rock as engineered back-fill into the Gold Bug pit" as an interim measure) as well as to comply with any immediate steps required by the Lewistown District Manager (SOR, App. 1 at 2).

Since the State Director's April 13, 1993, decisions ZMI has supplemented its March 16 submission for the Landusky Mine with Revisions to the Reclamation Plan for Portions of the Landusky Mining Area, submitted July 23, and a Mine Products Characterization Program, submitted July 30. BLM and DSL issued a supplemental EA on ZMI's proposed modifications for this mine in November 1993 (EA MT065-063-93), and held a hearing on it in December. On January 25, 1994, ZMI submitted an addendum to its July 23 submission. On March 4, 1994, BLM and DSL decided to require eight further immediate operating, control, and interim reclamation modifications to the plan of operations for the Landusky Mine and to defer approving final designs for ARD prevention, control and treatment until they "have undergone additional environmental analysis in an environmental impact statement." Several specific items relating to reclamation and closure at the Landusky Mine are to be covered in an environmental impact statement (EIS), and the agencies decided "to combine this analysis with the EIS for the Zortman Mine Expansion Project" (Decision Record, Landusky Mine Operating and Reclamation Plan Modifications, Acid Rock Drainage Control and Remediation, March 4, 1994, at 1, 4). On April 8, 1994, Red Thunder appealed Part 1, Item 2 of the March 4, 1994, decision (IBLA 94-390).

In October 1993, ZMI submitted a list of reclamation activities for the Zortman Mine and its plans for the material removed from buttress below the

85/86 leach pad. In December, BLM informed ZMI that it intended to analyze the proposed expansion of the Zortman Mine and the corrective measures for the ARD problem called for by the State Director's April 13, 1993, decision in a single EIS and requested ZMI to provide a detailed proposal for those corrective measures. On February 2, 1994, ZMI submitted Alternative Reclamation Plans for the Zortman Mine. BLM and DSL completed their initial review of these plans on March 4, 1994.

The Montana Department of Health and Environmental Sciences, Water Quality Bureau, investigated possible water quality violations at the mines (SOR at 13, Exh. S). With its reply brief Red Thunder provided a copy of a suit filed by that agency against ZMI (Red Thunder Reply, Exh. C). The suit was dismissed and refiled in a different county (ZMI Reply at 4 n.4, Exh. 1). Red Thunder has also provided a copy of a notice of violation the U.S. Environmental Protection Agency sent to ZMI for each mine (Red Thunder Reply, Exh. B). On Aug. 9, 1993, BLM issued a notice of noncompliance for each mine, citing 43 CFR 3809.2-2. 4/ They were affirmed by the Montana State Director in a decision dated Nov. 24, 1993. ZMI has appealed that decision to this Board (IBLA 94-260). Briefing of that appeal was stayed by our order of February 1, 1994.

Red Thunder argues BLM failed to comply with FLPMA and NEPA. First, it asserts that the State Director, knowing acid mine drainage was occurring at

4/ See also 43 CFR 3809.0-5(k): "Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation."

both mines, failed to carry out his duty under section 302(b), 43 U.S.C. § 1732(b) (1988), to prevent unnecessary and undue degradation by allowing ZMI to continue operations (SOR at 1). Red Thunder "submits that the State Director was required by the authority and policies embodied in the Federal Land Policy and Management Act and the agenc[y's] own regulations at 43 C.F.R. [Subpart] 3809 to find that the operations currently are causing unnecessary and undue degradation. The State Director, therefore, should have ordered the mining operations to discontinue to prevent further deterioration" (SOR at 13-14).

Second, Red Thunder argues that, because the acid-generating potential of ores and waste rock has not been addressed in an EIS, the decision to approve remedial measures and allow operations to continue prior to preparing an EIS violated NEPA (SOR at 2, 14, 18). In support, Red Thunder contends that BLM's actions are environmentally significant, that the changes BLM approved are substantial, that ARD and sulfide ore mining constitute significant new circumstances or information, and that allowing operations to continue prior to environmental review constitutes post hoc compliance with NEPA (SOR at 17-25). 5/ Red Thunder also asserts that interim remedial measures will have an adverse effect on the environment and limit the choice of reasonable alternatives (SOR at 14, 17). For these

5/ Red Thunder frames these arguments in terms of the need to prepare a supplemental EIS, apparently because an EIS was prepared by DSL in 1979 to examine the "broad cumulative environmental impacts" of the two mines (Zortman Vol. 1, EIS at i). Red Thunder states that the draft was "apparently never made final" (SOR at 2). The record is ambiguous. The copy of the EIS included with the Zortman Mine file identifies it as a draft (Zortman Mine, MTM 77778, Vol. 1); however the copy of the front page included in the Landusky Mine file bears a handwritten note that there was a final EIS (Landusky Mine, MTM 77779, Vol. 1).

reasons Red Thunder sought to have us direct BLM to order ZMI to halt operations at the mines pending completion of a supplemental EIS (SEIS) (SOR at 25). Red Thunder withdrew its motion for a stay of operations at the mines pending disposition of this appeal, which incorporated the arguments in its SOR by reference. In its Reply, however, Red Thunder requests us to issue an order staying any expanded operations including, but not limited to (1) continued loading of the Sullivan leach pad, (2) expansion of the 1986 Montana Gulch leach pad, and (3) loading of the Gold Bug Pit until full NEPA studies have been completed. Red Thunder also requests us to order a full SEIS for the modifications (Reply at 3, 14-15).

[1] The requirement of section 302(b), 43 U.S.C. § 1732(b) (1988), that in managing the public lands the Secretary shall take any action necessary to prevent unnecessary or undue degradation of the lands authorizes BLM to order a cessation of mining operations if that action is necessary. This statutory language "includes expansive powers" and the nondegradation duty is mandatory. Cf. Sierra Club v. Hodel, 848 F.2d 1068, 1078, 1091 (10th Cir. 1988) (concerning the parallel language in section 603(c), 43 U.S.C. § 1782(c) (1988)). Management of the public lands is an ongoing responsibility, and the Secretary's authority "to provide that prospecting and mining under the Mining Law will not result in unnecessary or undue degradation of the public lands" 6/ entails not only acting to avert unnecessary or undue degradation before it occurs (i.e., at the plan

6/ "[T]he Secretary of the Interior is given specific authority, by regulation or otherwise, to provide that prospecting and mining under the Mining Law will not result in unnecessary or undue degradation of the public lands. The Secretary is granted general authority to prevent such degradation." Report No. 94-1163, House of Representatives, 94th Cong., 2d Sess., at 6.

approval stage, 43 CFR 3809.1-6(a)) but also acting to abate degradation if it develops after a plan has been approved, e.g., from unforeseen circumstances.

We do not, however, agree with Red Thunder that the automatic result of the State Director's determining that mining operations are causing undue or unnecessary degradation is that he must order a cessation of those operations. 43 CFR 3809.1-7(c)(4) provides that operations may continue in accordance with the approved plan until a modified plan is approved "unless the State Director determines that the operations are causing unnecessary or undue degradation to the land." If the State Director makes that determination, he "shall advise the operator of those reasonable measures needed to avoid such degradation and the operator shall immediately take all necessary steps to implement those measures." Read in relation to 43 CFR 3809.1-7(c)(2), it is clear that the State Director may order an operator to submit a proposed modification of a plan even if he does not determine that the disturbance is causing unnecessary or undue degradation. In such a case, operations may continue under the approved plan until the proposed modification is approved. If, however, the State Director determines the operations are causing unnecessary or undue degradation, he must order reasonable measures that differ from the approved plan, i.e., measures needed to reduce the degradation so that it is no longer unnecessary or undue. If the nature or degree of the degradation were such that the only effective way to prevent it were a complete cessation of mining operations, then under section 302(b) the State Director would be authorized and obligated to order a complete cessation. A complete cessation would be one

of the "reasonable measures needed to avoid such degradation" under 43 CFR 3809.1-7(c)(4), perhaps in conjunction with reasonable reclamation measures. 7/ A fortiori, if the nature or degree of the unnecessary or undue degradation were such that reasonable measures short of a complete cessation of operations would be effective to prevent it, the State Director would be authorized to direct those measures. In this case, for example, the State Director in effect ordered a partial cessation of operations in ordering ZMI to discontinue waste rock disposal in the Mill Gulch waste rock dump, and was well within his authority to do so.

Thus, the FLPMA issues in this case are whether the record supports the State Director's determination under 43 CFR 3809.1-7(c)(2) and (c)(3) that a proposed modification must be submitted and whether, if the State Director determines under section 3809.1-7(c)(4) that the operations are

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7/ Unnecessary or undue degradation includes "[f]ailure to initiate or complete reasonable mitigation measures, including reclamation of disturbed areas." 43 CFR 3809.0-5(k). Reclamation means "reasonable measures as will prevent unnecessary or undue degradation of the Federal lands." 43 CFR 3809.0-5(j); 3809.0-6. Reclamation includes measures to isolate, remove, or control toxic materials. 43 CFR 3809.1-3(d)(4)(iii); 43 CFR 3809.1-5(c)(5); see United States v. Peterson, 125 IBLA 72, 90-91 (1993).

"[N]umerous comments stated that authority to require reclamation, like bonding, was taken out of the Federal Land Policy and Management Act by the Conference Committee and, therefore, should not be required by this rulemaking. Reclamation is an integral part of any effort to prevent unnecessary or undue degradation of the lands. Failure to require reclamation of disturbed areas may lead to scars on the lands that may remain for years. Likewise, failure to revegetate the surface of the lands may cause increased erosion of watersheds and lead to siltation and pollution of streams and other water resources. The failure to use reasonable means to reclaim the lands and eliminate these disturbances may constitute unnecessary or undue degradation and, thus, constitute a direct violation of section 302(b) of the Federal Land Policy and Management Act. In addition, the Bureau of Land Management is also responsible for implementing the Mining and Minerals Policy Act which requires reclamation of mined areas." 45 FR 78907 (Nov. 26, 1980).

causing unnecessary or undue degradation, the measures he directs the operator to implement are needed to avoid it.

Ultimately, Red Thunder's NEPA issues depend on a factual inquiry. NEPA requires BLM to prepare an EIS if approval of a proposed action constitutes a major Federal action "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C) (1988). In most cases the determination whether to prepare an EIS is made by preparing an EA. See 40 CFR 1501.4. The surface management regulations require an EA to be prepared for a plan of operations or a significant modification in order "to identify the impacts of the proposed operations on the lands and to determine whether an environmental impact statement is required." 43 CFR 3809.2-1(a). They further require that the EA be used "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." 43 CFR 3809.2-1(b). 8/ In addition, "[a] significant modification of an approved plan must be reviewed and approved by the authorized officer in the same manner as the initial plan." 43 CFR 3809.1-7(b). Thus, the significant modifications required by the decisions on appeal must be reviewed under NEPA. The State Director's decisions recognize this by requiring the Lewistown District to prepare supplemental EAs, allowing the option of combining review for the Zortman Mine with review of the Zortman Mine Expansion Project for which BLM had previously published notice of intent to prepare an EIS. 57 FR 56588-89 (Nov. 30, 1992).

8/ The relation between BLM's duty to review for significant impacts and its responsibility to prevent unnecessary and undue degradation was addressed in Nez Perce Tribal Executive Committee, 120 IBLA 34, 36 (1991).

To the extent Red Thunder argues that NEPA requires BLM to prepare an EIS rather than an EA to review the significant modifications to the operation and reclamation plans prior to approving them, we agree with BLM, DSL, and ZMI that the argument is premature (BLM Answer at 2, 7; DSL Answer at 3, 10; ZMI Response at 18-19). Those modifications are not before us. Nor are the Zortman Mine Expansion Project and the EIS being prepared for it before us. Rather, our review is concerned with the remedial measures accepted and directed in the State Director's decisions.

[2] To the extent Red Thunder argues that NEPA required BLM to undertake environmental review prior to the State Director's decisions requiring remedial measures, we conclude that NEPA does not impose such a requirement. The NEPA regulations promulgated by the Council on Environmental Quality state they are "applicable to and binding on all Federal agencies for implementing the procedural provisions of [NEPA] * * * except where compliance would be inconsistent with other statutory requirements." 40 CFR 1500.3. The Supreme Court has held that NEPA does not apply when there is "a clear and unavoidable conflict in statutory authority" or a "clear and fundamental conflict of statutory duty." Flint Ridge Development Co. v. Scenic Rivers Association, 426 U.S. 776, 788, 791, reh'g denied, 429 U.S. 875 (1976). Although such a conflict has been found in relatively few circumstances, 9/ in this case the time required to prepare an EA, and

9/ See Merrell v. Thomas, 807 F.2d 776, 778 (9th Cir. 1986), cert. denied, 484 U.S. 848 (1987); Cities of Lakeland & Tallahassee & Gainesville Regional Utilities v. Federal Energy Regulatory Commission, 702 F.2d 1302, 1314 (11th Cir. 1983); Pacific Legal Foundation v. Andrus, 657 F.2d 829, 835 (6th Cir. 1981) (NEPA conflicts with Endangered Species Act "and thus an impact statement is not required when a species is listed as endangered or threatened"); Natural Resources Defense Council v. Berklund, 609 F.2d 553,

perhaps an EIS, to review remedial measures prior to ordering ZMI to undertake them would be fundamentally at odds with the need for action to

abate damage to the environment and would thus be inconsistent with the Secretary's duty to prevent unnecessary or undue degradation in section 302(b). It would, of course, be contrary to NEPA to allow this exception

to be used as a pretext for avoiding environmental review or to excuse from NEPA review actions which are not necessary to abate degradation. Cf. Pacific Legal Foundation v. Andrus, 657 F.2d 829, 833 (6th Cir. 1981) (NEPA's "to the fullest extent possible" language is "not intended to be

a loophole"). Accordingly, the factual issue raised by Red Thunder's NEPA arguments is whether the remedial measures accepted or directed by BLM were designed to abate the ARD occurring at the mines. Measures not designed to have immediate effect are not within the exception and may be implemented only after BLM has conducted the environmental review mandated by NEPA.

An interim action implemented without NEPA review would be subject to NEPA review if its continuation were included in a proposed modification.

Many of the actions required by BLM or taken by ZMI are only indirectly related to abating the ARD which developed at the mines. Additional ground

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558 (D.C. Cir. 1979) (NEPA does not apply when the Secretary lacks discretion to deny a lease to a qualified applicant); American Smelting & Refining Co. v. Federal Power Commission, 494 F.2d 925, 947-48 (D.C. Cir. 1974) (prompt action required by duty to prevent discriminatory practices in times of gas shortage in conflict with NEPA), cert. denied sub nom. Southern California Gas Co. v. Federal Power Commission, 419 U.S. 882 (1974); Hovsons, Inc. v. Secretary of the Interior, 519 F. Supp. 434, 445
(D. N.J. 1981), aff'd, 711 F.2d 1208, 1214 (3rd Cir. 1983); National Association of Property Owners v. United States, 499 F. Supp. 1223, 1266-68 (D. Minn. 1980) (preparation of EIS inconsistent with Boundary Waters Canoe Area Wilderness Act), aff'd sub nom. Minnesota v. Block, 660 F.2d 1240, 1259 (8th Cir. 1981), cert. denied, 455 U.S. 1007 (1982); State of Alaska v. Carter, 462 F. Supp. 1155, 1161 (D. Alaska 1978) (NEPA does not apply to emergency withdrawal under 43 U.S.C. § 1714(e) (1988)).

water and surface water monitoring can provide greater information about fluids produced at the mines and should allow BLM and ZMI to respond more quickly to ARD, heavy metal contamination, and escaped cyanide. Monitoring sites, however, do not change the effluents monitored or abate ARD, although wells may be used to remove contaminated water for processing. Similarly, the requirements to map and characterize mine pits for acid producing potential and to propose a program to identify the acid producing potential of material to be mined will provide information but will have consequence only when the information is used to make operational changes which either stop ARD or prevent ARD from occurring. In relation to the issues on appeal, these actions do not raise any significant question. They are needed to provide information necessary to prevent unnecessary or undue degradation.

Other measures, such as drainage diversions to prevent surface water from reaching sulfide materials and capturing effluent for return for processing, are of immediate benefit in abating ARD. For this reason they are exempt from review under NEPA.

In addition to these matters, BLM's decisions accepted or directed three specific actions--removal of the buttress to the 85/86 leach pad at the Zortman Mine, cessation of use of the Mill Gulch waste rock dump and placement of future wastes into the Gold Bug Pit at the Landusky Mine.

In its reply brief Red Thunder expresses particular concern with the conditions in Ruby Gulch at the Zortman Mine and, although it does not object to the order to cease using the Mill Gulch waste rock dump at the

Landusky Mine, argues that the Gold Bug Pit should not be used as a waste repository and objects to continued loading of the Sullivan leach pad.

The Zortman Mine

Ruby Gulch is the primary drainage for the mine pits at the Zortman Mine and the 85/86 and 89 leach pads as well as potential drainage for portions of the 79 through 83 pads (SOR, Exh. L, Zortman Mine Situation Report at 5). Problems with the 85/86 leach pad were first noted in the latter half of 1987 when cyanide was found to be leaking from its underdrain in Ruby Gulch (see generally Zortman Mine, MTM 77778, Vols. 4, 5). Later, leakage at the dike face was discovered to have a pH of approximately 3.5, possibly because "water may be picking up acidity from the sulfides in the mine pit, above the leach pad, and passing into the underdrain" (Zortman Mine, MTM 77778, Inspection & Enforcement File #1, Compliance Inspection Report Oct. 22, 1987; see also SOR, Exh. L, Zortman Mine Situation Report at 4). The solution level within the pad was lowered to limit further drainage but the record is not clear as to the result.
In May 1990 drainage at the toe of the dike was reported to have a pH of approximately 3 (Zortman Mine, MTM 77778, Inspection & Enforcement File #1, Compliance Inspection Report May 24, 1990), and on June 26, 1991, surface water at monitoring site Z-1 had a pH of 2.5 along with high concentration of sulfate and elevated levels of metals (see SOR, Exhs. A, B). A report written following a subsequent inspection listed the adit of the old Ruby Gulch Mine, Ruby Pit, and old tailings as possible contributors (SOR, Exh. A). The Zortman Mine Situation Report identified possible causes of

deterioration as "increased disturbance in the pit area and seepage of precipitation into the pit floor, construction of the 85-86 pad and dike,

or placement of the 85-86 butress" (SOR, Exh. L at 4).

During 1992 consistently low pH readings were reported for site Z-1

as well as Z-15, an additional surface site in Ruby Gulch (1992 General Water Resources Annual Monitoring Report, Appx. 1 at 125-31, 159-64).

Water resource monitoring reports for both sites for January through May showed pH levels in the 3 range (Zortman Mine, MTM 77778, Vols. 7, 8). In June pH readings at site Z-1 varied from 2.4 to 4, while those for site Z-15 ranged from 2.6 to 5 (Zortman Mine, MTM 77778, Vol. 8). During July reports for both sites declined to the 2.5 to 2.9 range, rising again to the low 3s in the latter part of August (Zortman Mine, MTM 77778, Vol. 8). The same levels continued to be reported through the remainder of the year (Zortman Mine, MTM 77778, Vols. 9-11). In January 1993 readings rose to the 4 range but declined again to approximately 3.2 in February (Zortman Mine, MTM 77778, Vol. 12). A groundwater monitoring site in Ruby Gulch, RG-109,

also showed pH levels of 3.5 throughout 1992 and the first 2 months of 1993 and was one of four groundwater monitoring sites showing detectable levels of cyanide during 1992 (Zortman Mine, MTM 77778, Vols. 7-12; Zortman Mining Inc. 1992 General Water Resources Annual Monitoring Report at 15, 17 & Appx. 1 at 12, 14). Groundwater monitoring site RG-99 also showed consistently low pH levels (Zortman Mining Inc. 1992 General Water Resources Annual Monitoring Report, Appx. 1 at 9).

ZMI reports that it has removed 200,000 tons of material from the buttress to the 85/86 leach pad; has constructed temporary diversion structures to prevent water from contacting acid generating material; and has installed a capture and pumpback system to remove low pH water from the drainage and return it to the process circuit (ZMI Response at 8; Exh. B at 5). ZMI has also initiated studies to determine sources of effluents in the drainage and asserts that water samples show water quality to have returned to normal levels (ZMI Response, Exhs. B at 6, D).

Removal of the buttress to the Zortman 85/86 leach pad was not specifically required by BLM. Work had been begun by Zortman toward the end of 1992 in response to earlier discussions concerning problems at the mine (Zortman Mine, MTM 77778, Vol. 9, ZMI letter of Nov. 19, 1992). The buttress, however, was identified by BLM as a clear contributor to ARD because it had been constructed of sulfide materials and placed atop springs without an underdrain (SOR, Exh. K at 2; Exh. L, Zortman Mine Situation Report at 4). It appears that removal of the buttress was completed sometime in April 1993 with the material placed into the OK pit (Zortman Mine, MTM 77778, Inspection & Enforcement File #1, BLM Compliance Inspection Report Apr. 14, 1993).

Because removal of the buttress was undertaken in response to BLM's prior actions and was directly related to abating ARD in Ruby Gulch, it is properly regarded as a remedial measure which did not require prior NEPA review.

The Landusky Mine

The Landusky Mine was addressed in two prior appeals brought by Red Thunder. Red Thunder, Inc., 117 IBLA 167, 97 I.D. 263 (1990), concerned amendment No. 10 to construct the Sullivan Park leach pad which BLM had approved with 11 stipulations. BLM's decision to allow Zortman to begin loading ore onto the Sullivan Park pad and initiate leaching operations was the subject of Red Thunder, Inc., 124 IBLA 267 (1992). These decisions were predicated on the understanding that sulfide ore was not being mined. See Red Thunder, Inc., 117 IBLA at 179, 97 I.D. at 270.

The Sullivan Park leach pad was constructed on the uppermost portion of Sullivan Gulch which is part of the headwaters of Rock Creek. Water quality deteriorated significantly during construction of the pad with monitoring sites showing dramatically lower pH readings, increased sulfates, nitrates and cyanide, and problems with arsenic and cadmium (SOR, Exh. L, Landusky Mine Situation Report at 6-7; Landusky Mine, MTM 77779, Inspection & Enforcecement Vol. 3, Dec. 29, 1992, L-28 sample; 1992 General Water Resources Annual Monitoring Report, Appx. 1 at 40-43, 119-22). BLM found that:

> Potential sources of acid drainage in Rock Creek include the leach pad dike (which was constructed with waste rock) and the bedrock beneath the leach pad (which was exposed by excavation of surficial deposits during pad site preparation). The lack of cyanide contamination at [monitoring site] L-28 indicates that the source of the acid water is not from within the pad itself. The leach pad certainly contains sulfide bearing ore, which may

become acid generating after the leach pad is rinsed and decommissioned.

(SOR, Exh. L, Landusky Mine Situation Report at 7). ZMI has constructed drainage diversions around the pad, begun directing effluent into a contingency pond for return to the process circuit, installed a capture system below the pond, and proposed changes in the reclamation plan (ZMI Response Exh. A at 9-10, Exh. B at 4-5; Red Thunder Reply Exh. B at 10).

Red Thunder contends that the pad is leaking and that continued loading with ore will make correcting leaks impossible (Red Thunder Reply at 4-5, 7). The deficiency in this argument is that the reports found in the record do not support it. As in the instance quoted above, the reports indicate that the ARD originates from beneath the pad, and possibly from its dike, rather than from within the pad (see SOR, Exh. D; Landusky Mine, MTM 77779, Inspection & Enforcement Vol. 3, Compliance Inspection Report Aug. 14, 1992, Vol. 4, Inspection Summaries April 15 & 16, May 11 & 12, 1993 at 4-5). Also as quoted above, monitoring does not show elevated cyanide readings, as might be expected if the sulfates originated from within the pad. Because information about the actual source of ARD associated with the pad is limited, it is not possible to say that Red Thunder is wrong; however, at present there is no basis for granting its request to halt further loading of the pad.

Nevertheless, BLM correctly determined that operations at the Landusky Mine had encountered significant quantities of unoxidized sulfide material and some amount had been placed onto the Sullivan pad. The material was the

source of ARD in the drainages at the mine and the basis of BLM's directive to cease using the Mill Gulch waste rock dump and to put waste material into the Gold Bug pit. The mining of unoxidized sulfide material is also shown by the exposed sulfide bearing pit walls, benches, and floors left behind from mining sulfide material as well as by use of material removed from the pits to construct facilities which are now acid producing (see ZMI Response Exh. B at 2 item 4). As stated in the District Manager's January 15, 1993, letter, greater quantities of unoxidized sulfides were mined than anticipated in the permit application and the mine facilities were not designed in anticipation that ARD might develop. Indeed, ZMI acknowledges that it is mining material which is potentially acid generating, although it describes such materials as waste and asserts that it is not mining sulfide ore (ZMI Response at 10 n.9, 11; see ZMI Reply at 11-12). The type of ore being put on the Sullivan pad, however, is not determinative. The matter of concern is that ARD has resulted from sulfide material present in both ore and waste rock.

Because considerable quantities of sulfide material were mined and transported to leach pads and the Mill Gulch waste rock dump, because the plan of operations and EA for the mine anticipated that only minimal amounts of sulfide materials would be put onto leach pads and that rock placed into the waste dump would have a net neutralization effect, and because facilities at the mine were not designed to prevent ARD, BLM correctly required ZMI to submit significant modifications to its plan of operations. For the same reasons, BLM correctly ordered ZMI to cease placing waste material into the Mill Gulch waste rock dump. We additionally conclude that, contrary

to Red Thunder's arguments, BLM properly designated the Gold Bug Pit as an

alternative waste disposal site without prior NEPA review, due to the need not to place additional waste into the Mill Gulch waste rock dump.

[3] The record in this case supports the State Director's decisions under 43 CFR 3809.1-7(c)(2) and (c)(3) to require ZMI to submit proposed modifications to the Landusky and Zortman plans of operation. Red Thunder has not demonstrated that the measures he accepted and directed were ineffective measures to abate ARD, however. We conclude that the measures he accepted and directed under 43 CFR 3809.1-7(c)(4) were needed to avoid unnecessary or undue degradation.

In addition, the interim measures accepted and directed by the State Director under 43 CFR 3809.1-7(c)(4) were exempt from review under NEPA, as discussed above.

To the extent appellant's arguments have not been expressly addressed in this opinion, they have been considered and rejected.

Accordingly, pursuant to the authority delegated to the Interior Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the April 13, 1993, decisions by the State Director, Montana State Office, BLM, are affirmed.

Will A. Irwin
Administrative Judge

I concur:

Franklin D. Arness
Administrative Judge