

FEDERAL REGISTER: 48 FR 29802 (June 28, 1983)

DEPARTMENT OF THE INTERIOR

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM)

30 CFR Parts 701, 785, and 822

Permanent Regulatory Program; Alluvial Valley Floors

ACTION: Final rule.

SUMMARY: The Office of Surface Mining Reclamation and Enforcement (OSM) is issuing rules governing surface coal mining operations on or near alluvial valley floors (AVF's). The rules amend several definitions, permit requirements and performance standards associated with AVF's, and provide regulatory authorities with flexibility as to the amount of information that has to accompany permit applications for mining on or near AVF's. They allow permit applicants to request expedited determinations of whether statutory exclusions apply. In addition, they conform the rules to a district court decision which caused OSM to suspend a number of provisions dealing with AVF's.

EFFECTIVE DATE: July 28, 1983.

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SUPPLEMENTARY INFORMATION:

- I. Background.
- II. Discussion of comments and rules adopted.
- III. Procedural matters.

I. BACKGROUND

On June 11, 1982 (*47 FR 25486*), OSM published a notice of proposed rulemaking to amend 30 CFR Parts 701, 785 and 822 relating to permit requirements and performance standards governing surface coal mining operations on or near alluvial valley floors. No public hearings or public meetings were requested. During the comment period, which extended to September 10, 1982, OSM received numerous comments from State agencies, industry and environmental groups.

THE ACT

The Surface Mining Control and Reclamation Act of 1977, *30 U.S.C. 1201* et seq. (the Act), provides specific protection for AVF's in addition to the general environmental protection performance standards applicable to AVF's. Section 701(1) of the Act defines alluvial valley floors as "unconsolidated stream laid deposits holding streams where water availability is sufficient for subirrigation or floor irrigation agricultural activities * * *," excluding upland areas.

Section 510(b)(5) of the Act requires surface coal mining operation permit applications to demonstrate affirmatively and the regulatory authority to find in writing that a number of requirements unique to AVF's will be satisfied. That section applies only to proposed surface coal mining operations located west of the 100th meridian west longitude. Section 510(b)(5)(A) requires a permit application to demonstrate that the surface coal mining operation would "not interrupt, discontinue, or preclude farming on alluvial valley floors that are irrigated or naturally subirrigated * * *." Two exceptions from this requirement are provided in Section 510(b)(5)(A). The first is for undeveloped rangeland which is not significant to farming. The second allows mining when the regulatory authority finds that mining activities will interrupt "such small acreage as to be of negligible impact on the farm's agricultural production."

In addition, Section 510(b)(5)(B) of the Act requires a demonstration that the mining would not materially damage the quantity or quality of water in surface of underground water systems that supply the AVF's referred to in Section 510(b)(5)(A) of the Act on which farming cannot be interrupted, discontinued, or precluded.

A proviso in Section 510(b)(5) of the Act exempts from the requirements of Section 510(b)(5) those surface coal mining operations which in the year preceding the enactment of the Act (August 3, 1977) produced coal in commercial

quantities and were located within or adjacent to AVF's or had specific permit approval from the State regulatory authority to conduct surface coal mining operations on AVF's.

A further proviso, in Section 506(d)(2) of the Act, excludes from the requirements of Section 510(b)(5) of the Act any land that is the subject of an application for renewal or revision of a permit issued under the Act which is an extension of the original permit, insofar as: (1) The land was previously identified in a reclamation plan submitted under Section 508 of the Act, and (2) the original permit area was excluded from the requirements of Section 510(b)(5) of the Act under the proviso of Section 510(b)(5) for operations which produced coal in the year preceding enactment of the Act.

Regardless of whether the standards of Section 510(b)(5) of the Act for protection of AVF's apply, the hydrologic protections of Section 510(b)(3) and 515(b)(10)(F) on the Act apply. Section 515(b)(10)(F) requires mining operations to minimize disturbances to the prevailing hydrologic balance at the minesite and in associated offsite areas and to the quality and quantity of water in surface and ground water systems both during and after surface coal mining operations and during reclamation by preserving throughout the mining and reclamation process the essential hydrologic functions of AVF's in the arid and semiarid areas of the country.

REGULATORY IMPLEMENTATION OF AVF REQUIREMENTS

The Act's AVF requirements have been implemented in three principal places in 30 CFR Chapter VII. The major terms pertaining to AVF's are defined in 30 CFR 701.5. Specific permit application requirements for AVF's are set forth in 30 CFR 785.19. Finally, additional specific performance standards for AVF's are set forth in 30 CFR Part 822.

A discussion of particular features of the amended rules are included below in "II. Discussion of Comments and Rules Adopted."

II. DISCUSSION OF COMMENTS AND RULES ADOPTED

A. GENERAL COMMENTS

Some commenters were concerned about the deletion of much of the informational requirements and explanations contained in the previous rules. The commenters felt that this information was valuable in providing guidance to both operators and regulatory authorities and that it should not be deleted for the purpose of reducing the overall size of the regulations. One of the commenters felt this information was necessary to assure consistency among States.

OSM carefully evaluated the detailed informational requirements contained in the previous alluvial valley floor regulation. The changes to the alluvial valley floor rules will eliminate much of the confusion about protection requirements of the Act and will provide regulatory authorities with flexibility to reflect site-specific conditions. Much of the technical information being eliminated, while not wrong, adds unnecessary length and confusion to the regulatory structure. Most of the eliminated material will continue to be available in guidelines and is the type of information likely to be valuable in assisting the regulatory authority in making its determinations. Elimination of the detailed informational requirements from every permit application will not result in the regulatory authorities making unsupported or technically inadequate determinations with respect to alluvial valley floors. Every decision must be based on and supported by adequate technical data and analyses regardless of whether each detail or study is enumerated in the rules.

Comments were received by OSM with regard to the usage of various "areas" used in the alluvial valley floor rules. For example, in Section 785.19(a)(1) of the proposed rules, one commenter pointed out that the term "potentially impacted area" was used, but the term was not defined and did not offer the same degree of protection as the term "mine plan and adjacent area" which was used in the previous regulations. Similarly, one commenter noted the proposed substitution of the term "outside the mine site" for "not within the affected area" in Section 822.11 was not clear since this new term was not defined.

OSM has evaluated the commenters' concerns noted above and has reviewed proposed Section 785.19 and Part 822 with respect to the use of terms relating to "areas." Based on this review, OSM has made changes to Sections 785.19(a)(1), 785.19(b)(1), 785.19(d)(1), 822.11(a), 822.11(b) and Section 822.13 to provide clarification. OSM intends that a broad area should be referenced in Section 785.19 (a) and (b) with respect to alluvial valley floor determinations and applicability of statutory exclusions. Thus, determinations as to the presence or absence of alluvial

valley floors or the applicability of statutory exclusions by the regulatory authority will relate to the "permit area and adjacent area." The adjacent area, in this context, will be the area outside the permit area where an alluvial valley floor is or reasonably could be expected to be adversely impacted by proposed surface coal mining operations, including probable impacts from underground workings. Thus, OSM has maintained the introduction of Section 785.19(a)(1) which refers to permit and adjacent area, but has not included the term "potentially impacted" as a modifier for "area" in this section since this phrase is not defined.

With regard to Section 785.19(d)(1), OSM has used the phrase "permit area or adjacent area" for the phrase "potentially impacted area" which was used in the proposed rules. Use of the new terms will clarify that permit applications for proposed operations potentially affecting alluvial valley floors must cover both the permit area and the adjacent area.

Similarly, in proposed Section 822.11(a), relating to the essential hydrologic functions of alluvial valley floors, OSM has deleted the proposed language "in associated offsite areas" and "outside the mine site" because these terms are not defined and may be confusing in the context used. OSM has replaced these phrases with the phrase "not within the permit area." Similar changes have been made to Sections 822.11(b) and 822.13. These changes will provide improved clarity to the rule.

A commenter asked OSM to clarify whether all hydrologic, geologic, and biologic permitting requirements under other parts of the permanent regulatory program are applicable in addition to specific requirements for alluvial valley floors. The specific requirements for AVF's complement the other requirements of the permanent regulatory program which continue to be applicable by their own terms.

B. SECTION 701.5 -- DEFINITIONS

ALLUVIAL VALLEY FLOORS: One commenter recommended deletion of the current definition for the term "alluvial valley floors" since it merely mirrors the statute. The commenter also suggested a definition which requires that subirrigation or flood irrigation agricultural activities exist. In addition, the commenter noted that the concept of "potential" alluvial valley floors (from the standpoint of potential flood irrigation or subirrigation agricultural activities) should be deleted from the rules since it is inconsistent with Section 510(b)(5)(A) of the Act. The commenter provided a more concise definition which deleted reference to areas excluded under the definition of alluvial valley floors. The commenter asserted that such exclusions should be addressed under the definitions of particular terms related to the alluvial valley floors provisions.

OSM considered the commenter's recommendations and concerns and has elected to maintain the existing definition for the term "alluvial valley floor." Because this definition is workable, and is derived directly from Section 701(1) of the Act, it has been retained. OSM disagrees with the commenter's concern about "potential" alluvial valley floors. An area either is an alluvial valley floor or it is not. The key to the definition is the relationship between the hydrology of the area and agricultural activities. The definition in Section 701(1) of the Act requires that "* * * water availability is sufficient for subirrigation or flood irrigation agricultural activities * * *." Thus, the definition included in the statute requires that there be sufficient water available for flood irrigation or subirrigation agricultural activities. This requirement implies that an area may be designated as an alluvial valley floor (assuming other applicable criteria are met) based on the availability of sufficient water to support potential flood irrigation or subirrigation agricultural activities, even if there were no such activities currently in existence within the area.

AGRICULTURAL ACTIVITIES: Various comments were made with respect to the proposed definition of the term "agricultural activities." One commenter suggested that agricultural activities, with respect to alluvial valley floors, be a "controlled and managed" use (i.e., not to include undeveloped rangeland with natural vegetative growth). Another commenter recommended substituting "agricultural products" for "animal and vegetable life" to clarify that wildlife usage is not an agricultural activity. One commenter suggested that the definition be modified to: (1) Include only areas where a reasonable attempt has been made to incorporate modern agricultural practices; (2) eliminate the phrase "but are not limited to" since all types of agriculture which could benefit from the increased availability of water are in fact listed; and (3) state that areas with flood irrigation or subirrigated vegetation which are not commonly grazed, hayed, or cropped due to inaccessibility and/or "poor palatability" do not constitute agricultural activities. It was also suggested by one commenter that the examples of agricultural activities be eliminated due to redundancy.

OSM has reviewed and evaluated the general comments submitted on the proposed definition of the term "agricultural activities" and related comments pertaining to "farming." Although the Act and OSM's rules use both terms, the meaning of both terms, as regards AVF's is the same. Therefore the final definition of "agricultural activities" will also serve as the definition of "farming." The usage of one of these terms rather than the other in Part 822 and Section 785.19 is discussed later in this preamble.

OSM agrees with the commenter that agricultural activities must be "controlled and managed." However, no change is necessary in the final rule since agricultural activities are related to "production" which includes deliberate management of the property to produce commercial animal or vegetable life. The definition does include pasturing and grazing lands. The legislative history supports the concept that these valley floors provide for subirrigation or flood irrigation of crops and grazing lands (e.g. see H.R. Rept. No. 95-218, 95th Cong. 1st Sess. at 116 (1977)).

No change in the rule is necessary to exclude wildlife usage as an agricultural activity. The definition excludes wildlife usage as an agricultural activity through the phrase "for the production of animal or vegetable life." In addition, OSM considers the list of examples of agricultural activities to be informative and not redundant.

There is no statutory basis for requiring that agricultural activities, with respect to alluvial valley floors, must include only areas where attempts have been made to incorporate modern agricultural practices. Thus OSM has rejected that suggestion. The phrase "but not limited to" is appropriate terminology to assure that all agricultural activities either enhanced or facilitated by subirrigation or flood irrigation are included in the definition. In response to the commenter who felt that the definition should clearly state that areas not commonly grazed, hayed, or cropped do not constitute agricultural activities, this concern is adequately addressed under the definition of "alluvial valley floor" which requires that sufficient water be available for subirrigated or flood irrigated agricultural activities. If the valley area in question is not suitable for flood irrigated or subirrigated agricultural activities, the area should not qualify for alluvial valley floor designation.

Two commenters expressed concern with respect to the addition of the phrase "based on regional practices" to the definition of the term "agricultural activities." One commenter asserted that there is no statutory justification for addition of this phrase. This commenter went on to note that, contrary to the proposed preamble, adding this phrase to the definition causes the definition to be confusing. It was pointed out that the addition of a reference to regional practices would result in: (1) Considerable differences of opinion as to what constitutes "accepted" regional agricultural practices; (2) discrimination against innovation; and (3) the tendency to foreclose the potential for technological advances or market changes that would significantly alter regional agricultural practices (particularly as it applies in Section 785.19 (a) and (b)(2)). The other commenter stated that addition of regional agricultural practices to the definition would expand alluvial valley floor designations in some places and diminish such designations in others (e.g., what areas can be farmed and what areas cannot be farmed). The commenter stressed that the use of regional agricultural practices in the definition or agricultural activities results in ambiguity.

OSM disagrees with the comments received with respect to the addition of the phrase "based on regional practices" and has included the phrase in the final definition of agricultural activities. The determination of whether an alluvial floor exists should be based on agricultural practices within the region encompassing the AVF and not upon speculation on what changes in agriculture may take place at some indeterminate time in the future or on agricultural activities that may be accepted in other parts of the country or the world. For example, it would be inappropriate to judge the existence of an alluvial valley floor in Wyoming by whether it fits the category for agricultural activities in Illinois or Indiana and vice versa.

Moreover, the addition of this phrase is not inconsistent with the Act. In fact, the Act itself recognizes the regionalized importance and character of AVF's and has applied the special requirements only to arid and semi-arid regions of the country. As included in Sections 785.19(a)(2)(ii)(B) and 785.19(b)(2)(ii), regional agricultural practices will play an important part in assessments of flood areas to farming.

Two commenters expressed concern with the portion of the proposed definition of agricultural activities which referred to "watering of livestock." Both commenters stated that watering of livestock is not an agricultural activity related to the availability of water of subirrigation or flood irrigation agricultural activities. More specifically, one commenter stated that the definition, as proposed, implies that watering of livestock is enhanced by subirrigation or flood irrigation.

OSM agrees that watering of livestock in and of itself is not related to subirrigation or flood irrigation and has revised the definition accordingly. However, although it is not necessary to list this activity in the definition, the watering of livestock, when considered in context with "grazing" of livestock, could be an activity included within the meaning of grazing and can be considered to be an integral component of livestock grazing operations.

One commenter noted that with respect to alluvial valley floors, the Act references arid and semiarid areas of the country west of the 100th meridian west longitude. The commenter went on to note that in the area of the Pacific Northwest, west of the Cascade Mountains, average annual precipitation is greater than 40 inches, and therefore, the area should not be classified as arid and semiarid. The commenter encouraged OSM to recognize such areas for exclusion from the alluvial valley floor requirements.

OSM considered these comments with respect to the applicability of the alluvial valley floor requirements to areas of relatively high precipitation west of the 100th meridian and agrees that the alluvial valley floors protection provisions are applicable to only arid and semiarid areas (i.e., areas experiencing water deficits, where water use by native vegetation equals or exceeds that supplied by precipitation) in the western United States. A specific exclusion for the kinds of areas mentioned by the commenters is unnecessary within the context of this rule and is already accounted for in the definition of "arid and semiarid area" in 30 CFR 701.5. State and regional specific differences can be accommodated through the individual State program development and approval process, under Subchapter C of 30 CFR Chapter VII.

ESSENTIAL HYDROLOGIC FUNCTIONS: The proposed rule identified two alternative definitions for the term "essential hydrologic functions." The first proposed alternative (Alternative 1) retained the operative portion of the previous definition but eliminated the explanation of various terms used in the definition. Alternative 2 would have separately defined essential hydrologic functions of an alluvial valley floor for the periods during and after mining.

Numerous comments were received with respect to these alternative definitions for the term. The vast majority of commenters favored Alternative 1 over Alternative 2. The principle reason stated for this preference was that Alternative 2 appeared to many commenters to be more of a performance standard than a definition. In addition, one commenter noted that the split in the definition as function of the phase of mining was confusing when considered in light of the performance standards of Section 822.11 (a) and (b). One commenter pointed out that the essential hydrologic functions of an alluvial valley floor do not change because the phase of the mining operation has changed. One commenter stated that he believed Alternative 2 represented a duplication of performance standards in Part 822 and that the proposed reference to not destroying natural vegetation would have been unduly restrictive since this activity is allowed if the area can be reclaimed in accordance with the Act. One commenter asserted that the definition of the term should be based on the physical and hydrologic characteristics of the alluvial valley floor, irrespective of the mining activity. Another concern voiced with respect to Alternative 2 was that this definition would have implied that mining an alluvial valley floor would be allowed even where the alluvial valley floor has been designated significant to farming by the regulatory authority. Another commenter maintained that Alternative 2 would limit the essential hydrologic functions to maintenance of the water balance upstream and downstream to preserve natural vegetative cover and erosional balance. This commenter also asserted that Alternative 2 would allow greater disruption of mines adjacent to alluvial valley floors. In addition, with respect to Alternative 2, one commenter stated that there was no basis in the Act or the legislative history to define essential hydrologic functions as a function of the mining process. This same commenter also noted that Alternative 2 would have included no protection for agricultural activities during mining and that making water usefully available following mining does not provide the same degree of protection as the previous rule and is inconsistent with previous Section 785.19(d)(2).

Finally, two commenters endorsed Alternative 1 but recommended that the definition be modified to state clearly that essential hydrologic functions for an alluvial valley floor protect and support flood irrigation or subirrigation agricultural activities. One commenter also stated that if Alternative 1 were selected that the word "extended" be eliminated because this term implies a long period of time and thus would rule out any functions that support the use of spreader irrigation. Several other commenters stated their preference for Alternative 2.

OSM has reviewed the comments with respect to Alternative 1 and 2 for the definition of the term "essential hydrologic functions" and has selected Alternative 1 in this final rule. This definition, which is a continuation of the key portion of the previous rule, meets the intent of the Act and provides consistency with Parts 785 and 822 of the rules with respect to alluvial valley floor protection. The final definition is based on physical and hydrologic characteristics which support flood irrigation or subirrigation agricultural activities on alluvial valley floors (irrespective of the particular phase of the

mining activity). Use of the phrase "provides a water supply during extended periods of low precipitation" is consistent with the basic water supply situation in alluvial valley floor areas and does not rule out consideration of spreader irrigation.

One commenter asserted his support for general shortening of the definition of "essential hydrologic functions." However, two commenters expressed concern that elimination of Paragraphs (a)-(d) represented a significant deletion since information contained in these paragraphs was substantive and valuable with respect to the definition. One of these commenters stated that OSM is wrong in saying in the preamble to the proposed rules that this information was excessive. The commenter argued that this information helped distinguish the functions of collecting, storing, regulating, and making water available to agricultural activities on the alluvial valley floor. Another commenter expressed concern that deletion of an explanation of the specific roles of alluvial valley floors in the water supply for agricultural activities makes the role of the regulator in preventing damage more difficult. This commenter went on to note that guidelines which contain such information will not have the same force as regulations and will be subject to interpretation and different implementation. The commenter also asserted that the shortened version of the definition would work against consistency (particularly on Federal lands).

OSM has reviewed and evaluated the concerns expressed by the commenters with respect to the shortening and simplification of the definition of the term "essential hydrologic functions." As discussed elsewhere in this preamble, the technical information contained in the deleted paragraphs will continue to be available and is more appropriately addressed in guidelines related to alluvial valley floor protection (see OSM's Alluvial Valley Floor Identification and Study Guidelines). The fact that these explanations are in guidelines and not in regulations does not dilute the protection of AVF's because the operative portion of the definition is retained as is the performance standard using the phrase in Section 822.11.

A few commenters recommended completely new definitions for the term "essential hydrologic functions." One commenter suggested adding the two alternatives together to define the term in general and also to describe how the definition would be applied during and after mining. The commenter also suggested some wording changes (i.e., substitution of the word "capability" for the word "role;" adding "to plants" after the words water supply; and deleting "maintenance of water balance") since the Act requires minimizing disturbance to the hydrologic balance. Two commenters recommended a definition of the term "essential hydrologic functions" which consolidates Alternatives 1 and 2. This recommended definition attempted to combine the concept to maintain the overall erosional balance of the area while supporting agricultural activities with adequate water.

OSM has evaluated the definitions for the term "essential hydrologic functions" recommended by the commenters. For reasons previously cited in this preamble in support of Alternative 1, OSM finds that definitions for the term which incorporate elements of Alternative 2 are inappropriate. With regard to specific recommendations for wording changes in the definition, the language provided in Alternative 1 is similar to that proposed by the commenters and provides equal protection under the Act. With respect to the recommendation to add language noting that water is to be supplied "to plants," this addition is not needed since the previous sentence refers to supplying water which is usefully available to agricultural activities.

MATERIALLY DAMAGE THE QUANTITY OR QUALITY OF WATER: With respect to the proposed definition of the phrase "materially damage the quantity or quality of water," one commenter recommended that deletion of the phrase "agricultural activities" from the definition and substitution of the term "farming." The commenter asserted this term was more appropriate for the definition because Section 510(b)(5) of the Act is specifically concerned with farming rather than agricultural activities. Another commenter requested that the language "any portion of an alluvial valley floor" be reinstated in the definition. A commenter also pointed out that the supporting preamble to this definition infers that material damage would be allowed if no "systemwide" impacts would result. This commenter went on to state that the preamble is in error and that under the previous rules, specific factors such as flow rate and storage volumes had to be considered. Finally, one commenter requested that the following phrase be retained from the previous definition: "changes that significantly and adversely affect the composition, diversity, or productivity of vegetation dependent on subirrigation, or which result in changes that would limit the adequacy of the water for flood irrigation of the irrigable land and acreage existing prior to mining."

OSM has evaluated the comments noted above with respect to this definition, and has elected to adopt the definition, as proposed, with two minor revisions. The first includes changing the word "and" to "or" in the defined phrase. Use of

the word "and" in the proposed rules was inadvertent. It is clear from the wording of Section 510(b)(5)(B) of the Act that the correct terminology should be "materially damage the quantity or quality of water." (Emphasis added.) This correction has also been made where the phrase is used in Section 785.19(e)(2)(ii) and in Section 822.13(a)(3). The second change is the insertion of the word "coal" in the phrase "surface coal mining and reclamation operations" because that is a defined phrase. Thus, the new definition provides that "materially damage the quantity or quality of water" means to degrade or reduce by surface coal mining and reclamation operations the water quantity or quality supplied to the AVF to the extent that resulting changes would significantly decrease the AVF's capability to support agricultural activities.

In response to the specific comments noted above, OSM has amended the definition of the term "materially damage the quantity or quality of water" to simplify and clarify its application and to reflect a district court decision in *In re: Permanent Surface Mining Regulation Litigation*, Civ. No. 79-1144 (February 26, 1980). That case held that the material damage requirements of Section 510(b)(5)(B) of the Act only apply to alluvial valley floors to which the exclusions of Section 510(b)(5)(A) of the Act do not apply.

Although Section 510(b)(5)(A) of the Act uses the term "farming," it is appropriate to use the term "agricultural activities" in the definition of "materially damage the quantity or quality of water." First, as defined in Section 785.19(b)(3), a farm is one or more land units on which agricultural activities are conducted. Therefore, assessing the impacts of the surface coal mining and reclamation operation on the quantity or quality of water that is supplied for the agricultural activities which comprise the farming operation is equivalent to assessing the impacts on the farming operation. Therefore, the use of the term "agricultural activities" in the definition is consistent with the Act.

In response to the commenter's concern about the deletion of the phrase "any portion of an alluvial floor" and also to the commenter's concern that material damage is now allowed under the definition if "systemwide" impacts do not occur, the definition does not change the level of protection of water systems that supply alluvial valley floors which are significant to farming. Although some impacts to the water systems of such alluvial valley floors may occur as a result of surface mining, this is allowed under the Act. These impacts, whether systemwide or occurring on a portion of the alluvial valley floor, must not be of such magnitude as to significantly decrease the capability of the alluvial valley floor to support agricultural activities.

The language of the previous definition which related to adversely affecting vegetation or limiting flood irrigation is not necessary in the definition. Such impacts on the alluvial valley floor will be identified under the new definition in the determination whether the quantity or quality of water that supplies the alluvial valley floor will be degraded or reduced. By focusing the definition on the capability of the alluvial valley floor to support agricultural activities, the emphasis is properly placed on providing the protection that Congress intended.

One commenter pointed out that proposed Section 785.19 allowed material damage to waters supplied to an alluvial valley floor that may be mined under exclusions of Sections 510(b)(5)(A) and 506(d)(2) of the Act. The commenter went on to note that this appears to be in direct conflict with Sections 510(b)(3) of the Act and 515(b)(10)(F) of the Act.

OSM has evaluated the commenter's concerns and has concluded that Sections 785.19 and 822.12 are in conformance with the Act, comply with the district court's decision as to the applicability of Section 510(b)(5)(B) of the Act, and do not conflict with Sections 510(b)(3) or 515(b)(10)(F) of the Act. More specifically, if the exclusions of Sections 510(b)(5)(A) and 506(d)(2) of the Act do not apply, then the material damage requirements of Section 510(b)(5)(B) apply. In all cases, the essential hydrologic functions of alluvial valley floors must be preserved (or restored) under Section 515(b)(10)(F) of the Act and the requirements of Section 510(b)(3) of the Act, relating to prevention of material damage to the hydrologic balance outside the permit area, must also be met. Regulations implementing Section 515(b)(10)(F) of the requirements are properly included in Section 822.11 and 30 CFR 786.19(c), respectively. (The requirements of Section 510(b)(3) of the Act will continue to be implemented in the final revisions to the hydrology and permitting rules that are now pending.) Previous Section 785.19 attempted to combine the requirements of Sections 510(b)(3) and 510(b)(5)(B) of the Act. These final rules do not combine these statutory requirements.

A commenter stated that the shorter and more general definition of the term "materially damage the quantity or quality of water" would weaken alluvial valley floor protection required by the Act. In addition, the commenter asserted that the proposed definition would lead to problems in consistency in measuring material damage (i.e., the regulatory authorities implementing the Act would use inconsistent criteria). This comment was also related to the proposed removal of criteria

in previous Section 785.19(e)(3) for assessing material damage. In addition, one commenter stated his belief that elimination of the criteria of previous Section 785.19(e)(3) for determining whether an operation will cause material damage does not eliminate counterproductive or burdensome rules. The commenter asserted that removal of the criteria in and of itself is actually counterproductive to the intent of the Act in setting national standards. The commenter went on to remark that it is burdensome to applicants and affected citizens to attempt to discern the meaning of the term with the criteria given in the proposed rules. The commenter also asserted that criteria themselves should be left in the rules (rather than in guidelines) to assure appropriate public notice, the opportunity for public comment, and a more accountable program if changes are proposed.

OSM has carefully evaluated the comments received on shortening of the definition of the phrase "materially damage the quantity or quality of water" and also with respect to deleting from the rules the specific criteria for determining material damage. As noted earlier, the deletions from the definition refocus but do not narrow the definition. The principal elements of the previous definition are maintained in the definition, albeit in a more general manner. Deletion of the specific material damage criteria from Section 785.19(e) is also justified. The performance standard regarding material damage is retained. Detailed technical information is more appropriately addressed in guidelines. More specifically, OSM's Alluvial Valley Floor Identification and Study Guidelines address various criteria and approaches for assessing material damage of the quantity or quality of water that supplies alluvial valley floors. The national standard adopted allows regional considerations to be dealt with. Inclusion of the detailed criteria in guidelines will allow regulatory authorities to determine which criteria are relevant in particular situations.

One commenter recommended amending the definition of "materially damage the quantity of water" to specify that the use of adjudicated water rights by an operator shall not constitute material damage to water supplying an alluvial valley floor. The commenter went on to assert that it was not the intent of Congress to preempt provisions of State law with regard to adjudicated water rights.

The requirements related to material damage are not related to provisions of State law with regard to adjudicated water rights. No change in the regulation is necessary.

One commenter argued that the proposed definition of "materially damage the quantity or quality of water" significantly alters the interpretation of material damage and the applicability to water supplying alluvial valley floors. The commenter noted that OSM's basis for this change is the February 26, 1980, district court decision which, at the time of the comment, was under appeal. The commenter noted the basis for the appeal (including the requirements of Section 510(b)(3) of the Act) and also asserted that promulgation of this rule prior to resolution of the issue by the U.S. Court of Appeals is premature on the part of OSM. This same commenter, in commenting on proposed Section 785.19, expressed concern that this section reflected an "abandonment" by OSM of its appeal.

In response to the February 1, 1983, remand order of the U.S. Court of Appeals, No. 80-1810 (D.C. Cir.), OSM has reconsidered the issues contained in the briefs of the parties. OSM has determined that Judge Flannery's interpretation of the scope of Section 510(b)(5)(B) of the Act is consistent with the Act's intent. Thus, the definition of the term "materially damage the quantity or quality of water" has been amended to reflect that material damage requirements of Section 510(b)(5)(B) of the Act apply only to alluvial valley floors where the exclusions of Section 510(b)(5)(A) of the Act do not apply.

SUBIRRIGATION: Two commenters expressed concern with the proposed definition of the term "subirrigation" since technical information present in the previous definition was deleted in the proposed definition. One of these commenters specifically stated that information in the previous rule as to how to identify subirrigation is valuable and should be maintained. However, another commenter expressed general support for shortening of the definition. One commenter, in addition to noting concern with deletion of technical factors describing subirrigation, also expressed a concern that no reference was included in the rule or the preamble to guidelines which could assist in determination as to the presence or absence of subirrigation. This commenter went on to contend that as a result of this deletion of technical information, consistency would suffer, mining on Federal lands would not be uniformly administered, and that States will seek to gain advantages over each other by varying definitions of the term. This commenter went on to assert that the overall effect of this change would be the undermining of the program.

OSM rejects the commenters' concerns and concludes that the deletion of technical factors from the definition of the phrase, considering the extensive treatment of the concept of subirrigation in OSM's guidelines, will not lead to

inconsistency, undermining of the program, nonuniform administration of mining on Federal lands, or the use of a modified definition by States to gain advantage over each other. Under the final definition, "subirrigation" means the supplying of water to plants from underneath or from a semisaturated or saturated subsurface zone where water is available for use by vegetation. The complex (and often site-specific) technical factors relating to subirrigation are addressed in detail in OSM's Alluvial Valley Floor Identification and Study Guidelines.

A number of commenters expressed concern that the proposed deletion of technical factors from the definition of the term "subirrigation" would result in expansion of areas which would be classified as being subirrigated. More specifically, one commenter asserted that the proposed definition expanded the scope of potential subirrigation acreage considerably (to include almost every valley in the West). This commenter went on to recommend the deletion of the phrase "from underneath or from a semi-saturated or saturated subsurface zone where water is available for use by vegetation." Another commenter echoed the same concerns and also suggested including the concept of capillary action from underlying aquifers and related root penetration. The latter comment was supported by another commenter who noted that root penetration and capillary rise is important to include in the definition since they represent the major biologic and hydrologic mechanisms by which water is made available to agricultural plants from underlying water sources. Another commenter suggested adding the phrase "underlying alluvial aquifers" to distinguish from colluvial water bearing material which is not protected by the alluvial valley floor provisions. Similarly, one commenter recommended the deletion of the language "or the existence of a semi-saturated or saturated subsurface zone" since semi-saturated conditions may occur in upland areas and be associated with the soils' moisture-holding capacities and not subirrigation related to a shallow alluvial water table. Finally, one commenter recommended insertion into the definition of the phrase "in sufficient quantity to support farming during moisture deficient months," thereby, reinforcing the focus of subirrigation in alluvial valley floors to provide water during the dry months.

OSM has carefully reviewed the specific comments noted above with respect to the definition of "subirrigation." There was no intent in the proposed rules to expand the definition of the term, the previous definition of which included the criticized language. The proposed definition appropriately defined the term when considered in the context of the other terms associated with alluvial valley floor protection (e.g., alluvial valley floors, agricultural activities and essential hydrologic functions). The comments expressed above, regarding colluvial water, upland areas, and supplying sufficient water, are addressed in the definitions of these other terms.

One commenter recommended adding the word "agricultural" to modify "plants" to focus the definition on agriculturally useful species based on the objectives of alluvial valley floor protection.

The commenter's recommended addition to the definition is unnecessary because the term is used in the context of alluvial valley floors for which water is available for flood irrigation and subirrigation agricultural activities. Therefore, when the definition of subirrigation is considered in association with other terms related to alluvial valley floor protection (e.g., alluvial valley floors and agricultural activities), the term relates primarily to vegetative species which are useful from an agricultural standpoint.

One commenter recommended a total revision to the definition because virtually all water is supplied to plants from "underneath" and subirrigation waters are not defined separately from water normally available to plant roots through precipitation, infiltration, and percolation. The commenter's proposed new definition included the following: (1) Water delivered to the soil profile rooting zone is in quantities greater than normally available from precipitation, infiltration, and percolation; (2) subirrigation is normally derived from capillary rise from saturated shallow subsurface zones to provide water in moisture deficient months; and (3) subirrigation is identified by a significant portion of the root mass within the capillary fringe area.

OSM agrees that the points the commenter has raised are important aspects of subirrigation. However, the more general definition of this term, as adopted, is more appropriate given variations in site-specific conditions associated with subirrigation agricultural activities on alluvial valley floors. Further, the technical aspects proposed by the commenter for inclusion in the definition are more appropriately addressed in guidelines associated with the alluvial valley floor protection provisions of the Act and the rules. The commenter is referred to OSM's Alluvial Valley Floor Identification and Study Guidelines which provide extensive guidance as to the technical aspects of subirrigation. Therefore, OSM rejects the proposed definition of the commenter.

UNCONSOLIDATED STREAMLAID DEPOSITS HOLDING STREAMS: A number of comments were submitted on the definition of the phrase "unconsolidated streamlaid deposits holding streams." Three commenters stated that the definition, as proposed, was inappropriate because the scope of the definition would have been broadened by the inclusion of perennial, intermittent and ephemeral streams. In particular, the commenters asserted that the inclusion of ephemeral streams in the definition was inappropriate. The commenters recommended changes to the definition that stated that only streams of significant size and with seasonally consistent flow to enhance agriculture should be considered under definition of unconsolidated streamlaid deposits holding streams for the purpose of alluvial valley floor protection. One commenter recommended deletion of all references to stream type due to redundancy. Two other commenters recommended that the definition be modified to acknowledge the importance of the hydrologic aspects of streamlaid deposits in sustaining agricultural productivity.

One commenter suggested that the term "geologic deposits comprising" floodplains be added to the definition of "unconsolidated streamlaid deposits holding streams" for technical correctness. Two commenters suggested that the definition be revised to state clearly that upland areas are not unconsolidated streamlaid deposits.

One commenter suggested that floodplains and terraces with slopes greater than 2 percent should not be considered floodplains for the purpose of alluvial valley floor designation because under these slope conditions, alluvial deposits begin to feather out and a mixture of alluvial deposits begin to feather out and a mixture of alluvium and colluvium occurs. Another commenter pointed out that the width of the valley often restricts farming, and this should have a bearing on alluvial valley floor designation. This commenter went on to assert that an alluvial valley floor less than 100 feet in width represents a practical farming limit.

One commenter expressed concern that the deletion of the quantitative size-related criteria for channels (i.e., bankfull width and depth) would lead to inconsistency in implementation of the alluvial valley floor protection provisions. This commenter also noted that no technical justification had been provided to support this deletion. However, one commenter expressed support for elimination of the numerical channel size criteria.

One commenter requested that the definition for this term be deleted in its entirety since the proposed definition: (1) Defined only where these deposits may be found and not what they are; and (2) improperly included all streams and did not consider whether the stream (and its related aquifer) supply water in sufficient quantities for flood irrigation and/or subirrigation agricultural activities. One commenter proposed a definition which: (1) Is restricted to sediments in lower portions of valleys laid down by streams; (2) excludes colluvial deposits; and (3) contains streams with sufficient water for subirrigation or flood irrigation agricultural activities.

OSM has evaluated the concerns of all of these commenters and has decided to accept the suggestion to delete the definition of "unconsolidated streamlaid deposits holding streams." OSM has concluded that the statutory language "unconsolidated streamlaid deposits holding streams," is the clearest statement of congressional intent regarding the applicability of the alluvial valley floor requirements. E.g., see 123 Cong. Rec. S8083 et seq. (Daily ed., May 20, 1977), or H.R. Rep. 95-218, 95th Cong., 1st Sess. (1977) at 119. The legislative history of the Act demonstrates that Congress was vitally concerned with the definition of the term "alluvial valley floor" and carefully chose the geologically derived phrase "unconsolidated streamlaid deposits holding streams." A regulatory gloss in this instance would be overly restrictive.

The proposed definition was not intended to broaden the types of streams covered by the rule. The type or size of the stream is relevant only in determining the availability of water for flood irrigation or subirrigation agricultural activities. The proposed rule was intended to remove an unnecessary technical stream size threshold from the rules which would not be correct in all instances. The removal of the definition accomplishes this.

As a general approach, regulatory authorities must consider the nature of the deposits, their geomorphic characteristics, and stream and valley characteristics (e.g., type stream, channel size, valley width, and area) during the evaluation of alluvial valley floors and related unconsolidated streamlaid deposits holding streams. OSM's Alluvial Valley Floor Identification and Study Guidelines address the issue of unconsolidated streamlaid deposits in relation to flood irrigation and subirrigation agricultural activities and include specific reference to the channel dimension criteria which have been deleted in the final rules.

C. SECTION 785.19 -- PERMIT APPLICATION REQUIREMENTS

The rules on permit application requirements for surface coal mining and reclamation operations involving alluvial valley floors which are contained in previous Section 785.19 have been amended in this final rulemaking to delete duplicative information contained in other parts of the rules; delete detailed technical information and requirements that are not necessary for the protection of alluvial valley floors; respond to the February 26, 1980, district court decision; and establish a procedure by which the regulatory authority, as early in the permit process as possible, can identify alluvial valley floors and determine whether the statutory exclusions are applicable.

The final rule eliminates previous Section 785.19 (a) and (b) in order to avoid repeating regulatory language adequately covered by other provisions of the rules. The "Scope" paragraph is unnecessary because the succeeding paragraphs describe the persons to whom the rule will apply. Similarly, the prohibition in previous Section 785.19(b) against mining without a permit is also covered elsewhere in the rules.

Section 785.19(a) Alluvial valley floor determination: Final Section 785.19(a)(1) allows applicants to request the regulatory authority to make a determination whether, in an arid and semiarid area, valley floors in the proposed permit area or adjacent area are alluvial valley floors. It also requires sufficient data be submitted by the applicant to make this determination and allows the regulatory authority to request additional information from the applicant. Final Section 785.19(a)(2) requires the regulatory authority to make a written determination and requires it to determine an alluvial valley floor exists if unconsolidated soil deposit holding streams are present and sufficient water is available to support agricultural activities as evidenced by certain activities. Final Section 785.19(a)(3) allows that further consideration of Section 785.19 is not required if an alluvial valley floor is found not to exist in the proposed mining area or adjacent area pursuant to Paragraph (a)(2).

Final Section 785.19(a) has only a few changes from the proposed rules and they are discussed with the following comments. One of the changes was made in final Section 785.19(a)(1). As an initial step in the permit process, permit applicants "may" (as opposed to "shall" in the proposed rules) request the regulatory authority to make an alluvial valley floor determination. This request should be discretionary on the part of permit applicants. The regulatory authority has the responsibility in each case to determine whether an AVF is present. The discretion is provided to allow an operator to seek such a determination at the outset of the permit application process.

Previous Section 785.19(c) enabled the operator to obtain a determination of the existence of an alluvial valley floor prior to submittal of the permit application. Unfortunately, in every situation it required an extensive amount of information to be submitted for the regulatory authority to base its determination of the existence of an AVF. This included results of a field investigation of the proposed permit area and adjacent area. The investigation had to include detailed geologic, hydrologic, land use, and soils and vegetation studies. The studies had to include maps of unconsolidated streambed deposits holding streams, maps of streams, surface watershed, flood plains, terraces, maps of land subject to agricultural activity, etc. In addition, documentation based on environmental monitoring, measurements, and representative sampling was required, together with infrared aerial photographs.

Previous Section 785.19(c) is renumbered as Section 785.19(a). OSM is amending this section by deleting the unnecessary detailed technical information and study requirements. The changes do not alter the requirement that adequate data and analysis are required to support an alluvial valley floor determination by the regulatory authority. The primary difference is that these rules allow the regulatory authority to adjust the type of information and level of analysis to better reflect site-specific conditions. The enumeration of the specific types of maps, monitoring, documentation, and photographs that has to be included in all studies is eliminated. This change should result in substantial time and cost savings in those situations where the presence or absence of an alluvial valley floor is obvious and not controversial. A new Section 785.19(a)(3) is included to clarify that, if alluvial valley floor areas are not identified, the applicant could complete the permit application process without further consideration of Section 785.19.

One commenter requested deletion of the term "alluvial valley floor" in Section 785.19(a) and insertion of the term "significant agricultural activities in the valley floor."

OSM has evaluated the commenter's request and finds that this section properly uses the term "alluvial valley floor." More specifically, Sections 510(b)(5) and 515(b)(10)(F) of the Act use the term "alluvial valley floor" and not "significant

agricultural activities on the valley floor." The term "alluvial valley floor" is defined in Section 701.5 of the rules which parallels the definition in Section 701(1) of the Act. The Act is not limited in its application to "significant agricultural activities on the valley floor." Therefore, OSM finds that the use of the term alluvial valley floor in Section 785.19(a) is appropriate.

A few commenters expressed concern with respect to the use in proposed Section 785.19(a)(2)(ii)(B) of the phrase "capability of an area to be flood irrigated." One commenter suggested deletion of this phrase because there is no statutory basis for the concept. For example, the commenter noted that Section 510(b)(5)(A) of the Act refers only to alluvial valley floors that are irrigated or naturally subirrigated and that there is thus no inference to "capability" for irrigation.

The commenter went on to assert that congressional intent was to protect farming on alluvial valley floors which benefit from existing irrigation or subirrigation. Further, the commenter asserted that this portion of the rule imposes an intolerable burden on operators because virtually every acre of the West has "potential for irrigation" if economic, environmental, and technological constraints are ignored. Two commenters also recommended that the regulatory authority should consider "historically proven" capability rather than potential alone for determining flood irrigation capability.

The definition of the term "alluvial valley floor" in Section 701(1) of the Act speaks to water "availability" for subirrigation or flood irrigation. There is no requirement that the area be currently irrigated or have a "historically proven" capability for irrigation to be classified as an alluvial valley floor. In this instance, final Section 785.19(a)(2)(ii)(B) has continued the requirements of previous Section 785.19(c)(2). OSM does not concur with the commenter's assertion that "virtually every acre of the West" has the potential for irrigation. Past alluvial valley floor evaluations by OSM and State regulatory authorities have led to negative determinations of the potential for flood irrigation. OSM's Alluvial Valley Floor Identification and Study Guidelines provide guidance with regard to factors upon which to evaluate the potential for flood irrigation. More specifically, the guidelines refer to evaluations of regional flood irrigation practices and of water quantity and quality, soils, and topography to assess the potential for flood irrigation in valley areas. Economic, environmental, and technological factors are integral to the assessment of the potential for flood irrigation. Therefore, OSM rejects the recommendations and rationale of the commenters with respect to this issue.

Two commenters expressed support for early identification of alluvial valley floors without the submission of a complete permit application. However, one commenter expressed a number of concerns with regard to this idea. The commenter contended that the alluvial valley floor determination, as proposed, would require the regulatory authority to make a determination as to the existence of an alluvial valley floor on the basis of information available at an early stage of permitting. This commenter also pointed out that seldom, if ever, was there sufficient information available at the initial, pre-permitting stage of the approval process to make a final determination of the existence of an alluvial valley floor. The commenter went on to also point out that information needed for an alluvial valley floor determination is required in a normal permit application (e.g., hydrology data base) and therefore, it is illogical to require its presentation prior to permit application submission.

OSM has evaluated the commenter's concerns noted above and offers the following response. First, as was allowed by the previous rules, it is entirely appropriate for the alluvial valley floor permitting rules to provide for an operator to submit information prior to submission of a complete permit application relating to the presence or absence of alluvial valley floors in areas which will or may be affected by surface coal mining and reclamation operations. A resolution of this issue, or of the related issue pertaining to the applicability of a statutory exclusion, could be determinative as to whether mining will be allowed. An early determination that mining will be prohibited could spare an operator the expense associated with the filing of a complete permit application.

With regard to a commenter's inference that such preapplication determinations will be made with incomplete data, Section 785.19(a)(1) specifies that the "regulatory authority may require additional data collection and analysis or other supporting documents, maps, and illustrations in order to make the determination." OSM wants to emphasize that in order for the regulatory authority to make a pre-application alluvial valley floor determination, sufficient data must be available. OSM agrees with the commenter that the data base for an alluvial valley floor determination and the hydrology data base are closely related, but this should not preclude early submission of such data to support an alluvial valley floor determination. However, in many cases, a complete permit application may be needed to assess the significance of an alluvial valley floor to farming, whether the quantity or quality of water supplying the alluvial valley floor will be

materially damaged, and whether the alluvial valley floor's essential hydrologic functions will be preserved (or reestablished). Such information will be required for the regulatory authority to make the finding or Section 785.19 (b) and (c).

One commenter suggested that OSM should incorporate into the alluvial valley floor rules a procedure for an early determination of alluvial valley floors without expensive preapplication studies.

Such a procedure is possible under the new rules. The extent of the information necessary to make the determination will depend upon the individual site. The commenter is referred to OSM's Alluvial Valley Floor Identification and Study Guidelines which provide various levels of analysis with respect to possible alluvial valley floors. More specifically, the commenter is referred to Part I of the guidelines which provides for basic geomorphic, water availability, and land use investigations which may indicate conclusively at an early stage of the proceeding, the presence or the absence of alluvial valley floors.

One commenter expressed concern with the application of the phrase "adjacent area" in the section and maintained that it is not defined in the rules nor used in the Act. This commenter went on to state that submittal of a complete alluvial valley floor permit application should not be required if the mine area is a small contributor to the total water flow in the valley. The commenter also suggested that Part 785 be changed to reduce the application requirements for these areas that contribute insignificant quantities of water to the alluvial valley floor.

Alluvial valley floor determinations and appropriate studies must be undertaken for proposed operations within a valley holding a stream or in a location where the adjacent area includes any stream in the arid and semiarid regions of the United States. With regard to alluvial valley floor protection, the concept of "adjacent area" is consistent with Sections 510(b)(5) and 515(b)(10)(F) of the Act because these sections intend protection of all alluvial valley floors that may be affected.

The term "adjacent area" is defined in the rules and refers to the area where a resource outside the permit area is or could reasonably be expected to be adversely impacted by mining (*48 FR 14814*, April 5, 1983). It is important to evaluate the presence of alluvial valley floors in these areas associated with surface mining and reclamation operations. If alluvial valley floors are present in the adjacent area, it is important to identify the importance of these alluvial valley floors to farming, to evaluate the potential of the proposed operation to materially damage the quantity or quality of water supplying them, and to assess their essential hydrologic functions. If it is determined that the area upon which the surface coal mining operations will be conducted contributes insignificant amounts of water to an alluvial valley floor in an adjacent area, the necessary studies should be designed accordingly. Again the commenter is referred to OSM's Alluvial Valley Floor Identification and Study Guidelines which provide guidance as to recommended studies for operations which may encounter alluvial valley floors in adjacent areas.

One commenter recommended deletion in Section 785.19(a)(1) of the phrase "or in a location where the adjacent area includes any stream" because there is no justification to require an alluvial valley floor determination for areas that hold streams which are adjacent to alluvial valley floors.

OSM has reviewed the proposed language of Section 785.19(a)(1), and concludes that the scope of this paragraph is correct in requiring an alluvial valley floor determination for areas adjacent to surface coal mining and reclamation operations which themselves are not immediately adjacent to alluvial valley floors. Therefore, OSM rejects the point of concern raised by the commenter.

One Commenter recommended replacement language regarding the studies necessary to demonstrate the existence of an alluvial valley floor as given in proposed Section 785.19(a)(1). The commenter recommended the same studies be required but stated the studies should specifically be required to address the criteria of Section 785.19(a)(2) and that the section should list sufficient information so that the regulatory authority can make an alluvial valley floor determination.

The commenter's suggestion with regard to the sufficiency of information is already included in Section 785.19(a)(1) by the requirement for the regulatory authority to determine, based on either available data or field studies submitted by the applicant (or a combination of available data and field studies) the presence or absence of an alluvial valley floor. Information sufficiency is also emphasized by the last sentence of Section 785.19(a)(1) which states that the "regulatory authority may require additional data collection and analysis or other supporting documents, maps, and illustrations in

order to make the (alluvial valley floor) determination." OSM's Alluvial Valley Floor Identification and Study Guidelines also provide guidance as to geologic, hydrologic, land use, soils, and vegetation data and analyses which are oriented to the criteria of Section 785.19(a)(2).

Two commenters expressed concern that use of the phrase "or historical" flood irrigation in Section 785.19(a)(2)(ii)(A) presupposes that flood irrigation was successful and indicates that sufficient water is available to support flood irrigation agricultural activities. One commenter noted that abandoned facilities could be a strong indicator of non-alluvial valley floor status if abandonment was related to adverse hydrologic or soil conditions, The other commenter recommended that language be added to modify "historical flood irrigation" to specify that the mere existence of historical flood irrigation may or may not provide evidence of sufficient water availability to support agricultural activities. This commenter recommended the addition of the phrase "demonstrated success" to modify historical flood irrigation.

OSM concurs with the concerns expressed by the two commenters and agrees that proposed Section 785.19(a)(2)(ii)(A) was not clear with respect to this matter. Therefore, OSM has modified Section 785.19(a)(2)(ii)(A) to refer simply to the "existence of current flood irrigation in the area in question," and has modified Section 785.19(a)(2)(ii)(B) to refer to the "capability of an area to be flood irrigated, based on evaluations of typical regional agricultural practices, historical flood irrigation, streamflow, water quality, soils, and topography." (Emphasis added.) This modification clarifies the role of historical flood irrigation as an indicator of sufficient water availability for flood irrigation. The term "water yield" has been deleted from the revised Section 785.19(a)(2)(ii)(B) since it was considered superfluous to the term "streamflow" which has been maintained in the paragraph. OSM's Alluvial Valley Floor Identification and Study Guidelines also address the studies necessary to evaluate historical flood irrigation as an indicator of sufficient water availability to support agricultural activities.

One commenter suggested a modification of the subirrigation criterion of Section 785.19(a)(2)(ii)(C) to add "as evidenced by the presence of significant agricultural activities." The commenter went on to assert that this would cut down on field studies because if manageable agricultural activities are present and no obvious flood irrigation is present, one can infer that subirrigation is present.

OSM has evaluated the commenter's suggestion relative to the proposed language of Section 785.19(a)(2)(ii)(C) and finds no basis in the Act of include the term "significant agricultural activities" with respect to an evaluation of the presence of subirrigation. The language of proposed Section 785.19(a)(2)(ii)(C) appropriately addresses the criterion of subirrigation as provided for in the Act. ASM's Alluvial Valley Floor Identification and Study Guidelines address subirrigation field investigations in considerable detail.

One commenter stated his belief that the absence of currently developed agricultural activity should settle whether an area is a significant alluvial valley floor. This commenter also contended that such an absence of agricultural activity represents a threshold decision that no alluvial floor exists unless the interruption is due to artificial interruption such as mining.

The commenter's proposal conflicts with the term of the statute. Specifically, the definition of "alluvial valley floors" in Section 701(1) of the Act refers to water availability for flood irrigation or subirrigation activities with no reference to currently developed agricultural activities in the determination of alluvial valley floors.

One commenter expressed the opinion that the presence or abandoned spreader dikes or other abandoned agricultural improvements should be accepted as conclusive proof of the insignificance of the area to agriculture, provided that it can be documented that abandonment was due to long-term inability of the land to support agricultural use.

OSM intends that in the evaluation of flood irrigated agricultural activities, an assessment of abandoned flood irrigation should be undertaken. Abandoned spreader dikes may be an indication that flood irrigation agricultural activities in a particular valley are not feasible. However, OSM does not concur with the position advanced by the commenter that abandoned spreader dikes (or other abandoned agricultural improvements) should be accepted as conclusive proof of the insignificance of the area to agriculture. Flood irrigation systems may be abandoned for a variety of other reasons (e.g., water rights) and these should be evaluated in the course of the alluvial valley floor assessment. Based on this reasoning, OSM rejects this suggestion of the commenter.

One commenter recommended the addition of language to proposed Section 785.19(a)(1) to require that data only with respect to "agriculturally significant" vegetation be collected. The commenter went on to emphasize that Congress was very specific about addressing only the agricultural aspects of alluvial valley floors. Therefore, the commenter contended that only data relative to agricultural production is important.

Final Section 785.19(a)(1) specifies that studies shall include sufficiently detailed vegetation data and analysis to demonstrate the probable existence of an alluvial valley floor. OSM agrees with the commenter that the focus of the vegetative studies and analysis should be with respect to agriculturally important vegetative species. Final Section 785.19(a)(1) contains general references to geologic, hydrologic, land use, soils, and vegetation data and analyses needed to demonstrate the probable existence of an alluvial valley floor. (The commenter is referred to OSM's Alluvial Valley Floor Identification and Study Guidelines which address the elements of an appropriate vegetation study related to alluvial valley floor assessments.)

Section 785.19(b) Applicability of statutory exclusions: The previous rules required that a complete permit application for mining operations be filed, including all hydrologic data, before the regulatory authority could make a determination of the applicability of the various statutory exclusions. In some cases, this procedure created an unnecessary amount of uncertainty and expense for the applicant and did not contribute to a higher level of environmental protection of the alluvial valley floor.

OSM is amending this procedure. If an alluvial valley floor is present, final Section 785.19(b) provides that the operator may request that the regulatory authority make a determination of the applicability of the statutory exclusions of Section 510(b)(5) of the Act. The operator must submit sufficient data, information, and analyses to the regulatory authority to support the determination, and the regulatory authority may make the determination, based on this supporting material. The proposed phrase "applicant-submitted data" has not been adopted since it is subsumed within the term "available data." If the regulatory authority needs further information to determine whether the exclusions of the Act apply, it may request additional data collection and analyses, including submittal of a complete permit application.

Those circumstances excluded from the requirements of Section 510(b)(5) of the Act are set forth as statutory exclusions in Section 785.19(b)(2). The first exclusion is for undeveloped rangeland that is not significant to farming and is set forth in Section 785.19(b)(2)(i). The second exclusion, in final Section 785.19(b)(2)(ii), is for small acreage with negligible impact on a farm's agricultural production.

The previous test for compliance with the small acreage exclusion was set forth in suspended Section 785.19(e)(2) which provided: "The effect of the proposed operations on farming will be concluded to be significant if they would remove from production, over the life of the mine, a proportion of the farm's production that would decrease the expected annual income from agricultural activities normally conducted at the farm."

The February 26, 1980, district court decision, *In re: Permanent Surface Mining Regulation Litigation*, supra, at pp. 45-53, held that this test was inconsistent with the Act because even interference with a small number of acres, a situation in which the Act does not intend mining to be precluded, may result in a decrease in a farm's income.

Under the final rule, negligible impact of the proposed surface coal mining and reclamation operation on farming will be based on the relative importance of the affected vegetation and water of the developed grazed or hayed AVF to the farm's production. This rule encompasses the salient non-suspended portion of previous Section 785.19(e)(2).

The statement of what constitutes a farm is moved from previous Section 785.19(e)(4) to final Section 785.19(b)(3), but remains unchanged.

The third circumstance that would provide an exclusion from the requirements of Section 510(b)(5) of the Act, in final Section 785.19(b)(2)(iii), accounts for the proviso in Section 510(b)(5) of the Act and its extension in the proviso in Section 506(d)(2) of the Act. Rather than having the substance of the provisos repeated a number of times in the rules, final Section 785.19(b)(2)(iii) cross-references Section 822.12(b) (3) and (4), which describes the provisos.

Several comments were received about the provisions of Section 785.19(b). One commenter felt that the proposed change in Section 785.19(b)(1) allowing the applicant to request a separate determination as to the applicability of a statutory exclusion could result in an interruption of the review process and the submission of data out of phase with

other parts of the review process. Another commenter suggested that the proviso of Section 510(b)(5) of the Act should be contained in Section 785.19(b)(2)(iii) and that this section be referenced in Section 822.12(c) rather than as proposed (the reverse organization). One commenter indicated that the phrase "significant to agricultural activities" in proposed Section 785.19(b)(2)(i) should be deleted because it expands the requirements of previous Section 785.19(e)(2) that stated significance to agricultural activities is based on the relative importance of the vegetation and water of the developed grazed or hayed alluvial valley floors area to the farm's production. Finally, this same commenter felt the proposed Section 785.19(b)(2)(ii) would have established an economic test for significance to farming, but in reality, there is no economic loss because the land owner is compensated by the operator.

OSM has reevaluated the requirements of Section 785.19(b)(1) that provide for a separate determination of the applicability of the statutory exclusions from Section 510(b)(5) of the Act and finds no basis for the commenters' concern that these provisions could interrupt the review process. The regulatory authority may need to adjust its procedures slightly but this is certainly within the realm of reasonable administrative practice. With respect to the suggestion that OSM reverse the organization of Sections 785.19(b)(2)(iii) and 822.12(c), the change is unnecessary.

Finally, with respect to the comment concerning the application of the proposed phrase "not significant to agricultural activities," OSM has modified the final rule to refer to land on which "the premining land use is undeveloped rangeland which is not significant to farming." This properly describes the first circumstance excluded from the requirements of Section 510(b)(5) of the Act. The language the commenter referred to in previous Section 785.19(e)(2) concerning the "relative importance" of the "developed" AVF area is not pertinent in considering undeveloped rangeland.

Under these final rules, it is necessary to determine the "significance to farming" only with regard to the statutory exclusions for undeveloped rangeland. The applicability in Section 785.19(b)(2)(ii) of the second statutory exclusion is dependent upon the finding that small acreage affected will cause negligible impact on a farm's agricultural production. Also, the finding in final Section 785.19(e)(2)(i) relates to whether the proposed surface coal mining operation will interrupt, discontinue or preclude farming. Since neither of these other provisions relates specifically to a finding of "significance to farming," the language of previous Section 785.19(e)(2) referred to by the commenter is unnecessary.

A commenter expressed concern that the provisions of Section 785.19(b)(2) for identifying statutory exclusions before a complete permit application is submitted would burden the regulatory authority with a responsibility to make a determination without adequate information. This commenter also requested that the detailed technical data and informational requirements of the previous rule be retained.

The requirements of Section 785.19(b) do not require the regulatory authority to make a preliminary determination on the applicability of the statutory exclusions. The rules emphasize the importance of adequate information to support the determination. A regulatory authority that cannot make a supportable determination based on information submitted by the applicant must request additional data and/or analyses. This additional material could include a complete permit application.

As stated earlier, the detailed technical information of the previous rules need not be contained in the rules. Much of the material is already included in the guidelines on alluvial valley floors.

One commenter asserted that rangeland without improvements to increase productivity of vegetation should not be considered improved even if cross fencing, watering ponds, and other facilities normally associated with western rangeland are present.

OSM has reviewed the use of the term "undeveloped rangeland" in Section 785.19(b)(2)(i) and concludes that this subparagraph correctly implements the requirements of Section 510(b)(5)(A) of the Act with respect to undeveloped rangeland. The definition of "undeveloped rangeland" in Section 701.5 of the rules simply refers to lands where the use is not specifically controlled or managed. Therefore, although not specifically stated in the rules, if fencing, watering ponds, and other facilities have been implemented to specifically support subirrigation or flood irrigation agricultural activities on the alluvial valley floor, such rangeland would be considered "improved." This is consistent with the guidelines and the approach taken by a number of western State regulatory authorities in implementation of the alluvial valley floor protection provisions of the Act.

One commenter pointed out that the Act is clear that unconsolidated streamlaid deposits alone do not constitute an alluvial valley floor. This commenter also noted that it is necessary to make a threshold determination that an alluvial valley floor does not exist where no consistent water supply is available to sufficiently sustain irrigated agricultural activities.

OSM concurs with the points made by the commenter. The necessary elements of an alluvial valley floor are addressed in Section 785.19(a)(2). Namely, the regulatory authority shall determine that an alluvial valley floor exists if unconsolidated streamlaid deposits holding streams are present and there is sufficient water available to support agricultural activities. No changes are required in the rules to reflect the points made by this commenter.

One commenter suggested that easily applied criteria on such characteristics as stream size and vegetation should be developed to exclude areas from alluvial valley floor studies.

In response to this comment, such uniform national standards are not easily developed. OSM has decided that detailed criteria should be included in technical guidelines which support implementation of the alluvial valley floor protection provisions of the Act rather than in rules. The commenter is again referred to OSM's Alluvial Valley Floor Identification and Study Guidelines. These guidelines provide sizing criteria with respect to channel width and depth, valley width, and valley size and provide guidance with respect to criteria which may be used to exclude areas from consideration as alluvial valley floors. As with any guidelines, they may not be appropriate in every instance and a regulatory authority has the responsibility for making the final determinations based on the facts of the specific situation.

Two commenters pointed out that the proposed addition to Section 785.19(b)(2)(ii) on "determining negligible impact on farming, if farming is already precluded because of physical or economic consideration," would have been an unnecessary addition. Both commenters noted that this was adequately covered under the statutory exclusion of Section 785.19(b)(2)(i). Further, one of the commenters felt that the area would not be classified as an alluvial valley floor in the first place when regional agricultural practices are evaluated.

OSM has reevaluated the need for the additional regulatory language in Section 785.19(b)(2)(ii) and agrees with the commenters that the proposed addition was not necessary and could have added confusion. The final rules have been modified to remove this language.

One commenter requested that the proposed sentence in Section 785.19(b)(2)(ii) describing how to determine negligible impact on a farm's agricultural production be deleted from the rule and that the States be allowed to establish standards for negligible impact. This commenter pointed out that under the proposed rule, the regulatory authority would have to assess the life-of-mine effects rather than those over the permit term.

OSM has carefully evaluated the proposed changes to Section 785.19(b)(2)(ii) concerning the determination of negligible impact on a farm's agricultural production. The agency disagrees with the commenter's assertion that requiring consideration of impacts of mining on alluvial valley floor production over the life of mine would be excessive and impose an unnecessary burden on both the operator and the regulatory authority. As indicated in the proposed rule, a time frame is necessary to measure the impact of mining on a farm's production. The expected life of the mine is the most reasonable and accurate time frame and was included in the previous rule. Further, consideration of impacts over such an extended period will reduce errors in measurement associated with normal expected fluctuations in a farm's annual output. Since an operator must submit information on all alluvial valley floors both in the permit area and in the adjacent area, the requirement should not significantly change the burden on the operator.

The final rule does not adopt the proposal to measure a farm's production based solely on typical farming practices in the region.

In reviewing the legislative history, it is apparent that the comparison to determine whether impacts are negligible must be made on a farm-by-farm basis rather than on a regional basis (123 Cong. Rec. S8039, May 19, 1977). While it may be appropriate to utilize typical farming practices in the region to assist in evaluating the impacts of mining on a farm, farm-specific practices may also be appropriate for consideration in a particular case. Therefore, OSM has dropped the proposed language for this rule and has maintained language similar to that contained in the previous rule. The phrase "The significance of the impact" contained in the previous Section 785.19(e)(2) has been changed to "negligible impact" to be consistent with other changes to this section.

Varied opinions were expressed by commenters with respect to the definition of the term "farm" in Section 785.19(b)(3). Three commenters recommended that the definition of farm be retained in the rules, as proposed, to provide clarity and avoid future controversy. However, two other commenters suggested that the definition of the term be deleted from the rules to provide flexibility. More specifically, these commenters suggested that the term "farm" be defined on a case-by-case basis to reflect variability in regional farming practices. One commenter also noted that considerable confusion existed in the proposed rules due to the unpatterned, interchangeable use of the terms "farming" and "agricultural activities."

OSM has considered the comments with respect to the definition of the term "farm" in Section 785.19(b)(3), and concludes it is important to include the definition of this term in the rules to provide necessary clarification. In addition, the definition of farm in the rules provides the necessary flexibility to take into account regional agricultural practices and also provides important information with respect to the relationship of a "farm" and "agricultural activities."

To provide further clarification, a number of changes have been made in the rules to provide consistency in the use of the term "farming" and "agricultural activities." More specifically, the term "farming" has been substituted for the term "agricultural activities" in Sections 785.19(b)(2)(i), 785.19(d)(2)(ii), 822.12(a)(1), and 822.13(a)(2) to provide consistency with the Act. These substitutions have been made where the rules implement the requirements of Section 510(b)(5)(A) of the Act. This section of the Act refers to the protection of "farming" (while the definition of alluvial valley floor in Section 701(1) of the Act uses the more general term "agricultural activities"). Therefore, substitution of the term "farming" for "agricultural activities" has occurred in the sections noted above which relate to the statutory exclusions if the area is undeveloped rangeland not significant to farming or relate to whether the operation will avoid the interruption, discontinuance, or preclusion of farming. These changes will provide needed clarification and consistency in the rules and will more closely meet the intent of the statute with respect to alluvial valley floor protection.

Section 785.19(c) Summary denial of permit: If the regulatory authority were to determine under final Section 785.19(b)(2) that the statutory exclusions of Section 510(b)(5) of the Act do not apply to the applicant, the applicant would have a number of choices: (1) Attempt to obtain a permit by meeting the standards of Section 510(b)(5) of the Act; (2) Withdraw its application; or (3) Under new Section 785.19(c), request the regulatory authority summarily to deny the permit prior to submittal of the entire permit application based on a finding that mining would be precluded under Section 510(b)(5) of the Act. Such a denial could enable the applicant to initiate a request for an exchange of land under the coal exchange program required by Section 510(b)(5) of the Act. This is a more logical procedure than previously existed and its implementation will avoid the problem with the previous rules that possibly required the operator to collect and submit unnecessary data and analyses.

One commenter fully supported proposed Section 785.19(c) to enable the regulatory authority to determine that an alluvial valley floor area is significant to farming without the operator having to submit a complete application. Another commenter noted that the proposed addition might lighten the workload of the regulatory authority without compromising environmental protection. But the commenter pointed out the potential for abuse through collusion using such procedures. Finally, a commenter felt it was unclear how the regulatory authority can deny the application if it cannot make the findings of Section 785.19(e)(1). The commenter felt the regulatory authority would have to make the finding in Section 785.19(e)(1) to assure the exclusions are not applicable and that the property shall be considered for coal exchange.

Some of the commenters' confusion concerning the findings in proposed Section 785.19(e) were related to the order of proposed Paragraphs (e)(1) and (e)(2). In the final rule, these paragraphs have been reversed and renumbered accordingly. If the statutory exclusions of Section 785.19(b)(2) do not apply then the findings of Section 785.19(e)(2) (i) and (ii) will have to be made in order for the operator to mine on the alluvial valley floor. (The finding of Section 785.19(e)(2)(iii) does not relate to the exclusions in Section 510(b)(5) of the Act and is always required prior to the issuance of a permit for mining on an AVF.) By denying a permit based on the inability to make the findings in Section 785.19(e), the regulatory authority will, in fact, be certifying that the impacts addressed by Section 510(b)(5) (A) or (B) of the Act would occur. This could make the area available for consideration for the coal exchange program.

Based on additional analysis of proposed Section 785.19(c), OSM has determined that an additional paragraph was needed to enable the regulatory authority to prohibit surface coal mining and reclamation operations in all or parts of the

area to be affected by mining. This addition will enable the regulatory authority, at the request of the applicant, to apply the summary denial provisions to all or parts of the area to be affected by mining.

Section 785.19(d) Application contents: The previous rules in Section 785.19(d)(1) provided that once land within the proposed permit area or adjacent area was identified as an alluvial valley floor and the proposed mining operation could have affected an alluvial valley floor or waters that supply alluvial valley floors, the applicant had to submit a complete application for the proposed mining and reclamation operations. The complete application had to include detailed surveys and baseline data required by the regulatory authority for a determination of --

(i) The characteristics of the alluvial valley floor which are necessary to preserve the essential hydrologic functions during the after mining;

(ii) The significance of the area to be affected to agricultural activities;

(iii) Whether the operation will cause, or presents an unacceptable risk of causing, material damage to the quantity or quality of surface of ground waters that supply the alluvial valley floor;

(iv) The effectiveness of proposed reclamation with respect to requirements of the Act and the regulatory program; and

(v) Specific environmental monitoring required to measure compliance with Part 822 during and after mining and reclamation operations.

Previous Section 785.19(d) (2) and (3) described in detail the information and surveys required to be submitted as part of the application in addition to the information required for the identification of the AVF's.

This final rule generally retains the above-described requirements of previous Section 785.19(d)(1), with a few variations in language to parallel the Act. Previous Sections 785.19(d) (2) and (3) have been removed.

If the regulatory authority has already determined that any of the statutory exclusions in final Section 785.19(b)(2) apply, then the applicant will not have to submit information in the permit application, as required by Section 785.19(d)(2) (ii) and (iii), as to whether the proposed operation would interrupt, discontinue, or preclude farming on the AVF or whether it would materially damage the quantity or quality of the surface or ground water supplied to the AVF. However, regardless of whether the statutory exclusions were to apply, the applicant must provide data, as required by Section 785.19(d)(2)(i), to show that the essential hydrologic functions of the AVF will be preserved throughout the mining and reclamation process.

Final Section 785.19(d) will not enumerate the technical data, information, and analysis required for a complete permit application contained in previous Section 785.19(d) (2) and (3), but will continue to require generally that sufficient information be submitted to enable the regulatory authority to make the necessary determinations. Because the determinations will have to be supported, the final rules should not change the level of protection afforded AVF's. The principal difference is that the regulatory authority will have the flexibility to adjust the type of data and level of analysis necessary on which to base its determinations.

Two commenters asserted that no documentation is needed with regard to the essential hydrologic functions of an alluvial valley floor (per Section 785.19(d)(2)(i)) if the exclusions of Section 510(b)(5)(A) of the Act apply (i.e., if the alluvial valley floor is undeveloped rangeland not significant to farming). One of the commenters went on to reference a footnote in the district court's decision of February 26, 1980 (footnote No. 28, page 53). The other commenter simply asserted that where the statutory exclusions of Section 510(b)(5)(A) of the Act apply, the operation should be exempt from the requirements of Section 515(b)(10)(F) of the Act.

OSM has evaluated the commenters' assertions regarding the footnote in the district court's decision. OSM concludes that regardless of the applicability of the statutory exclusions of Section 510(b)(5) of the Act, the performance standard of Section 510(b)(10)(F) of the Act applies with respect to alluvial valley floors. The wording of Section 510(b)(10)(F) itself requires preservation of the essential hydrologic functions of alluvial valley floors throughout the mining and reclamation process, with no mention of whether the alluvial valley floor meets the statutory exclusions of Section

510(b)(5) of the Act. This concept is supported by a statement in the district court's decision on page 50 that "If the permit area encompasses an alluvial valley floor, the hydrologic protections of Sections 510(b)(3) and 515(b)(10)(F) apply regardless of whether farming occurs." (Emphasis added.) The footnote related only to the validity of OSM's previous rule implementing Section 510(b)(5)(B) of the Act. As discussed elsewhere in this preamble, OSM agrees with the district court's decision that Section 510(b)(5) clearly legislates an exemption to the hydrology protection requirements of Section 510(b)(5)(B) of the Act for operations which will have a negligible impact on the farm's production or where the alluvial valley floor is undeveloped rangeland not significant to farming. However, it is not correct that this is also an exemption from the more general hydrologic protection provisions of Sections 510(b)(3) and 515(b)(10)(F) of the Act.

One commenter requested that in order to provide clarity, the rules should make specific reference to the permit and denial provisions of the Act. More specifically, the commenter suggested that Section 510 of the Act be referenced in Section 785.19(d)(2) (ii) and (iii) which implement this section of the Act in terms of supplying such information in permit applications.

OSM has evaluated the commenter's concerns and concludes that the rules appropriately implement the provisions of Section 510(b)(5) (A) and (B) of the Act with respect to alluvial valley floor protection and that specific reference to Section 510 of the Act is unnecessary.

One commenter expressed concern with the change in terminology of Section 785.19(d)(2)(i) from "during and after mining" to "throughout the mining and reclamation process." The commenter went on to assert that this change will not provide the same protection as the previous rule due to long-term ground water quality changes due to mining.

OSM made this change in terminology to more closely reflect the language of the statute. More specifically, Section 515(b)(10)(F) of the Act calls for "preserving throughout the mining and reclamation process the essential hydrologic functions of alluvial valley floors in the arid and semiarid areas of the country * * * " (Emphasis added.) The previous phrase "during and after mining" was ambiguous in being open-ended and not providing closure regarding an operator's responsibility. Under the new rule, the operator's responsibility and a regulatory authority's permit evaluation must proceed through the reclamation process until bond release.

Two commenters contended that in cases where the essential hydrologic functions of alluvial valley floors must be restored, the restoration plan should focus on duplicating the pre-mining agricultural productivity as opposed to duplicating the exact pre-mining hydrologic details. One of these commenters pointed out that achieving the latter may be counterproductive in achieving the former. It was suggested that restoration of a topography conducive to flood irrigation ought to be permissible where subirrigation existed previously, provided that agricultural productivity is restored. The commenter went on to assert that the rules should not contain the implication that an identical hydrologic regime must be reconstructed to preserve the essential hydrologic functions.

OSM has evaluated the comments noted above with respect to the suggestion to require restoration of "modified" essential hydrologic functions which maintain the agricultural utility of the alluvial valley floor. The principal objective of Section 515(b)(10)(F) of the Act is to preserve (or restore) the essential hydrologic functions of alluvial valley floors throughout the mining and reclamation process. This statutory provision is implemented in Section 822.11 of the alluvial valley floor rules. Permit applications must demonstrate that the essential hydrologic functions of an alluvial valley floor will be preserved outside the permit area and restored within the permit area. The four major components of the essential hydrologic functions of alluvial valley floors include the collection, storage, and regulation of the flow of water and making this water available for agricultural purposes. (See H.R. Rept. No. 95-218, 95th Congress 1st Session at 111-112, 116-118 (1977).)

With respect to the reestablishment of essential hydrologic functions on alluvial valley floors, the components of the essential hydrologic functions (or characteristics which support the components) of an alluvial valley floor do not have to be restored to be identical to their premining state. For example, in a situation where flood irrigation is the essential hydrologic function, a restored ditch system does not have to be replaced in exactly the same location, or with respect to a subirrigated alluvial valley floor, a restored shallow ground water system does not have to be comprised of the same geologic materials or strata. Stated in a different way, particular characteristics of the alluvial valley floor which are necessary to preserve the essential hydrologic function may be modified in the restoration effort so long as they are functionally equivalent to the premining feature.

However, OSM finds no statutory basis for the recommendation of the commenters that the substitution of flood irrigation for subirrigation on affected alluvial valley floors should be permissible. The language of Section 515(b)(10)(F) of the Act is quite clear in that the essential hydrologic functions of alluvial valley floors must be preserved. Although flood irrigation may achieve the same agricultural productivity as subirrigation under a given hydrologic regime, it is generally understood that, in most cases, subirrigation (where it occurs) represents a more reliable water source and is less costly (from an operational and equipment standpoint) than flood irrigation. Therefore, in addition to achieving similar agricultural productivity, there are other important considerations in the replacement of subirrigation with flood irrigation on alluvial valley floors. Thus, OSM has elected not to modify the subject rule.

One commenter noted that the first sentence of proposed Section 785.19(d)(1) was redundant in that both the terms "potentially impacted area" and "mining operation may affect" would have been used in the same sentence. The commenter also pointed out that land would not be included within the potentially impacted area unless it might be affected. The commenter recommended that the following language be substituted: "If land within the potentially impacted area is identified as an alluvial valley floor, the applicant shall submit a complete permit application * * *."

OSM has considered the commenter's concerns and agrees that the proposed use of the term "potentially impacted area" and "mining operation may affect" was confusing. As noted earlier in this preamble, OSM has made several modifications to references to various "areas" throughout the alluvial valley floor protection rules. Therefore, with respect to Section 785.19(d)(1), OSM has reinstated language from the previous section which called for the submission of an application if land within the "permit area or adjacent area" is identified as an alluvial valley floor. Substitution of this language should clarify the areas of consideration for application contents for operations that may affect AVF's or waters supplied to AVF's.

One commenter expressed concern with respect to the clause in proposed Section 785.19(d)(1), which states that if an exclusion of Paragraph (b) of Section 785.19 applies, then the applicant need not submit the information required in Paragraph (d)(2)(iii) which relates to material damage to the quantity or quality or surface and ground water supplied to an alluvial valley floor. The commenter contended that based on this clause, the applicant will be exempt from supplying pertinent information and reclamation plans to avoid material damage.

This commenter went on to assert that the rules, as specified in Section 785.19(d)(1) will allow degradation or diminishment of water supplying an alluvial valley floor.

OSM has evaluated the commenter's concerns noted above. The sentence in Section 785.19(d)(1) referenced by the commenter has been inserted to reflect the district court's decision which specified that Section 510(b)(5)(B) of the Act only applies to alluvial valley floors where the statutory exclusions of Section 510(b)(5)(A) of the Act do not apply. In other words, the requirement not to materially damage water supplying an alluvial valley floor only applies where the alluvial valley floor is significant to farming. However, it should be emphasized that regardless of the applicability of Section 510(b)(5)(B) of the Act, the hydrologic protection provisions of Sections 515(b)(10)(F) and 510 (b)(3) of the Act apply, together with their implementing regulations. Therefore, OSM rejects the commenter's concerns and finds that the requirements of Section 785.19(d) appropriately implement the statutory provisions relating to hydrologic protection of alluvial valley floors.

One commenter noted concern with respect to modification of Section 785.19(d)(2)(ii) to substitute "absolute" test language for the "significance" test of the previous rule. The commenter went on to assert that because Section 510(b)(5) of the Act mentions significance, this modification of the rule would violate the Act.

OSM has evaluated the commenter's concerns and has concluded that the proposed Section 785.19(d)(2)(ii) better implements Section 510(b)(5)(A) of the Act than did the previous provision. The final rule states that the complete application shall include detailed surveys and baseline data for a determination by the regulatory authority of whether the operation will avoid during mining and reclamation the interruption, discontinuance, or preclusion of farming on the alluvial valley floor. This provision focuses the determination on the requirements of Section 510(b)(5)(A) of the Act and is more encompassing than the previous requirement to "determine the significance of the area to be affected to agricultural activities." Therefore, OSM does not concur with the commenter's opinion that this change would violate the Act.

One commenter contended that the deletion of the requirement for a determination of whether the operation "presents an unreasonable risk of causing" damage to water systems from previous Section 785.19(d)(2)(iii) will restrict the regulatory authority in making critical borderline decisions on the type and amount of protection afforded alluvial valley floors.

OSM has evaluated the commenter's expressed concern and concludes that the final rule, which is the same as the proposed rule, more closely parallels the statute than the previous rule and thus provides the required protection for alluvial valley floors. More specifically, final Section 785.19(d)(2) requires the submission of data so that the regulatory authority may make a determination of whether the operation will cause material damage to the quantity and quality of surface or ground waters that supply the alluvial valley floor (i.e., an alluvial valley floor to which the exclusions of Section 785.19(b) do not apply). This language directly parallels the language of Section 510(b)(5)(B) of the Act. If the regulatory authority concludes that there is an unreasonable risk of causing material damage based on information submitted in accordance with Section 785.19(d), then the regulatory authority is required to make a negative finding under Section 785.19(e)(2)(ii) of the final rule.

Section 785.19(e) Findings: Previous Section 785.19(e) was a confusing section that set forth the findings that have to be made by the regulatory authority to allow mining on or adjacent to an AVF, the applicability of the statutory exclusions of Section 510(b)(5) of the Act, and the criteria for determining whether the facts would support particular statutory exclusions.

Final Section 785.19(e) substantially shorter than previous Section 785.19(e). As described above, the applicability of the statutory exclusions is covered by final Section 785.19(b) and need not be contained in final Section 785.19(e).

Final Section 785.19(e) will not change the basic requirements for permit approval for mining on or near an AVF and these requirements are presented in a straightforward and simplified manner that closely parallels the Act. The regulatory authority must find that the proposed operations will not interrupt, discontinue, or preclude farming on an AVF and that the quantity and quality of surface and underground waters supplying the AVF will not be materially damaged. These two findings do not have to be made if any of the statutory exclusions apply. However, regardless of whether the statutory exclusions apply, the regulatory authority must find that the proposed operation will comply with Part 822, including preservation of the AVF's essential hydrologic functions (to be discussed in the next section of this preamble) and the other requirements of the regulatory program.

Upon review of proposed Section 785.19(e), OSM has reversed proposed Paragraphs (e)(1) and (e)(2). This organizational change will clarify, at the beginning of the paragraph, the findings necessary if the statutory exclusions of Section 785.19(b)(2) are applicable.

One commenter was concerned with the deletion in the proposed rules of the criteria for material damage from previous Section 785.19(e)(3). The commenter went on to state that the criteria of the previous rules were well documented and widely accepted. This commenter also maintained that without such criteria in the rules and with no reference to a guideline, consistency will be impossible, environmental protection will be compromised, and the efforts of the regulatory authorities will be diluted.

OSM takes exception to the commenter's statement that criteria for material damage are well documented and widely accepted. Such criteria must vary widely, given site-specific conditions relating to alluvial valley floor characteristics such as water quality, vegetation, and general water use. Such criteria are better addressed in guidelines rather than in these rules in order to allow the proper consideration of site-specific conditions. OSM's Alluvial Valley Floor Identification and Study Guidelines address the issue of material damage in considerable detail. In addition, the guidelines (when used in association with the regulatory requirements) will provide necessary guidance to operators and regulatory authorities with respect to material damage to maintain consistency and assure that the environmental protection of alluvial valley floors is not compromised.

One commenter expressed concern with respect to the proposed deletion of previous Section 785.19(e)(1)(iv) which required that any change in the land use of lands covered by the proposed mine plan area from its pre-mining use in or adjacent to the alluvial valley floor will not interfere with or preclude the reestablishment of the essential hydrologic functions of the alluvial valley floor. The commenter asserted that the proposed deletion would allow changes in runoff

and ground water characteristics of alluvial valley floors, and therefore, the rule change would not support the special protection afforded alluvial valley floors.

OSM has evaluated this comment and concludes that the protection provided by the previous rule is afforded by other sections of these final rules. More specifically, final Section 785.19(e)(1)(iii) requires that a finding be made by the regulatory authority that the proposed operations will comply with Part 822 (which includes the requirement to preserve the essential hydrologic functions of alluvial valley floors throughout the mining and reclamation process) and also with other applicable requirements of the Act and the regulatory program. Sections 816.133 and 817.133, which establish the criteria for allowing alternative postmining land uses, do not supersede Section 822.11. Therefore, the deletion of previous Section 785.19(e)(1)(iv) is inconsequential in terms of the protection afforded alluvial valley floors.

D. PART 822--PERFORMANCE STANDARDS FOR ALLUVIAL VALLEY FLOORS

Section 822.1 Scope: Final Section 822.1 explains that Part 822 contains performance standards for surface coal mining and reclamation operations on or which affect AVF's in the arid and semiarid regions of the country. This section received no comments and is adopted as proposed. Previous Section 822.2, which contained the objectives of the part, is removed to eliminate unnecessary repetitive language.

Section 822.10 Information collection: As proposed, the final rule adds a new Section 822.10 on information collection. It will be a codification of the note previously at the beginning of the part that reflects approval by the Office of Management and Budget of the information collection requirements of Part 822. No comments were received on this section.

Section 822.11 Essential hydrologic functions: Previous Section 822.11 implemented the performance standard of Section 515(b)(10)(F) of the Act that the essential hydrologic functions of AVF's be preserved throughout the mining and reclamation process. It had three paragraphs. Paragraph (a) of previous Section 822.11 established the statutory standard of preserving essential hydrologic functions for AVF's not in the affected area. Paragraph (b) of the previous section, recognizing that mining operations would cause disturbances, required surface coal mining and reclamation operations to reestablish the essential hydrologic functions for AVF's within the affected area. Previous Section 822.11 (a) and (b) also required the maintenance or reestablishment of the geologic, hydrologic, and biologic characteristics that support the essential hydrologic functions. Previous Section 822.11(c) provided an explanation of the supporting geologic, hydrologic, and biologic characteristics.

OSM has made several changes to previous Section 822.11 to make it shorter and to make it more understandable. Paragraphs (a) and (b) in final Section 822.11 are similar to their previous counterparts. In these paragraphs, reference to the statutory language of minimizing disturbance to the hydrologic balance will be included in order to clarify the statutory context of Section 515(b)(10) of the Act in which this requirement was developed by Congress. Reference to the particular characteristics to be maintained or reconstructed is eliminated because the essential hydrologic function of the alluvial valley floor can be protected without preserving or reestablishing the exact geologic, hydrologic, and biologic conditions. The environmental conditions of an AVF, including geologic, hydrologic and biologic characteristics, vary widely with site-specific conditions and may be modified so long as the essential hydrologic function retains or is restored to its premining functional equivalent.

Further, maintenance or reconstruction of the geologic or biologic characteristics would not necessarily ensure that the essential hydrologic functions are preserved. Previous Sections 822.11(c) and 785.19(d)(3), which identified these characteristics, are removed entirely. Such characteristics are addressed, however, in OSM's AVF guidelines.

The previous rules often confused protection of the hydrologic functions of alluvial valley floors with the physical characteristics of those valley floors. While in some cases the physical characteristics must be recreated to reestablish a certain function, such as water storage, in other situations the function of the alluvial valley floor may be preserved by an alluvial valley floor with slightly different physical characteristics. The final rules recognize this difference.

Two commenters expressed concern as to the deletion of previous Section 822.11(c), which provided a cross-reference to Section 785.19(d)(3). The latter section included information about the hydrologic, geologic, and biologic characteristics that support the essential hydrologic functions of alluvial valley floors. Both Commenters maintained that this cross-reference would provide valuable information to individuals in the future.

OSM finds that the deletion of Paragraph (c) of previous Section 822.11 does not weaken the protection for AVF's because the requirement to identify the characteristics that support the essential hydrologic functions of alluvial valley floors is included in Section 785.19(d)(2)(i). A cross-reference in Part 822 is superfluous. The definition for the term "essential hydrologic functions" in 30 CFR 701.5 will lead to an identification of the characteristics that must be considered in particular situations.

One commenter also remarked upon the proposed substitution of the phrase "outside the minesite" for the phrase "not within an affected area" in Section 822.11(a). The commenter contended that this substitution moves the area of preservation inward toward the mine to some degree; however, the commenter also stated that this is a minimal change. One commenter asserted his full support for the proposed changes to this section of the rules.

OSM proposed to substitute the term "outside the minesite" for "not within the affected area" in Section 822.11(a) to track the phrase used in Section 515(b)(10) of the Act. The final rule does not adopt this change. Instead it uses the phrase "not within the permit area" in Section 822.11(a) and the phrase "within the permit area" in Section 822.11(b). These changes have been made to reflect the recent revisions to the terms "permit area" and "affected area" (*48 FR 14814*, April 5, 1983) and to track the intent of the language of Section 515(b)(10) of the Act, using terms that are defined in the rules.

The phrase "in associated offsite areas" has also been deleted as discussed earlier under General Comments.

Previous and final Section 822.11 apply to all alluvial valley floors, irrespective of the area's significance to farming. The concern of Congress for alluvial valley floors that would be mined or affected by adjacent mining was that long term permanent damage not be caused to the AVF's hydrologic system. Recognizing that total prevention of hydrologic effects from mining was impossible, Congress required minimization of the effects (including those on the hydrologic function of alluvial valley floors) to assure the impacts "are not irreparable" (H. Rept. No. 95-218, cited previously, p. 110). Thus, the purpose of Section 822.11 is the longer term protection of essential hydrologic functions while the shorter term effects on agricultural activities on alluvial valley floors is protected by the "materially damage" requirements of Section 510(b)(5) of the Act implemented by Section 822.12 of the rules.

Section 822.12 Protection of agricultural activities: Previous Section 822.12 implemented the requirements of Section 510(b)(5) of the Act that surface coal mining operations should not interrupt, discontinue, or preclude farming and should not materially damage the quantity and quality of surface or underground waters supplying AVF's. However, in previous Section 822.12 the undeveloped rangeland and small acreage statutory exclusions were applied in a manner inconsistent with the February 26, 1980, district court decision, described earlier in this preamble.

The statutory exclusions in the provisos of Sections 510(b)(5) and 506(d)(2) of the Act were also implemented imprecisely in previous Section 822.12(d). Previous Section 822.12(d) incorrectly limited the applicability of the Section 510(b)(5) proviso to lands which were identified in a reclamation plan approved by the State prior to August 3, 1977. This language was inserted in the March 13, 1979, rules (*44 FR 15284*) in an unsuccessful attempt to implement the proviso of Section 506(d)(2) of the Act.

In addition to implementing the requirements and exclusions of Section 510(b)(5) of the Act, previous Section 822.12 (b) and (c) also required that when environmental monitoring shows that operations are violating the requirements of Section 822.12, the operations must cease and remedial actions that are approved by the regulatory authority must be taken.

As proposed, the title of Section 822.12 has been changed to "Protection of agricultural activities" to clarify the purpose of the section. The section has been reorganized to implement the February 26, 1980, district court decision. Final Section 822.12(a) sets forth the prohibitions of Section 510(b)(5) of the Act. The exclusions relating to agricultural activities are included in final Section 822.12(b) (1) and (2) and final Section 822.12(b) (3) and (4) correctly implement the statutory exclusions established by the provisos of Sections 506(b)(2) and 510(b)(5) of the Act.

Final Section 822.12 has been reorganized from the proposed rule for clarity. To assist the reader in understanding the redesignations the following derivation table shows the relationship of final Section 822.12 to the proposed Section 822.12.

DERIVATION TABLE -- SECTION 822.12

Final rule	Proposed rule
(a) Intro	(a) Intro and (b) Intro.
(a)(1)	(a).
(a)(2)	(b).
(b)	(b) and (c).
(b)(1)	(a)(1).
(b)(2)	(a)(2).
(b)(3)	(c)(1).
(b)(3)(i)	(c)(1)(i).
(b)(3)(ii)	(c)(1)(ii).
(b)(4)	(c)(2).
(b)(4)(i)	(c)(2)(i).
(b)(4)(ii)	(c)(2)(ii).

The requirement to cease mining and to take remedial action contained in previous Section 822.12 (b) and (c) is deleted. Contrary to the statement in the March 13, 1979, Federal Register preamble adopting the previous requirements (*44 FR 15283*), such requirements are not necessary to make clear the duty of the regulatory authority and the permittee.

These responsibilities are adequately stated in existing 30 CFR 786.29 which requires a permittee to take all possible steps to minimize any adverse impact on the environment resulting from any term or condition of the permit. Such steps include the immediate implementation of measures necessary to comply. If the only means for the permittee to comply with the terms or conditions of the permit is to cease mining, the permittee must cease mining under Section 786.29. The requirements of Section 786.29 have been proposed for retention in 30 CFR 773.17(e) as set forth in OSM's "Final Environmental Impact Statement OSM EIS-1: Supplement," Volume III, p. 53.

One commenter stated that the preamble assurances that Sections 510(b)(5) and 515(b)(10)(F) of the Act require protection of agricultural uses is ludicrous because OSM consciously decided not to implement that protection by explicit rulemaking.

OSM has considered this comment and concludes that Section 822.12 of the proposed rules correctly implements the agricultural protection provisions included in the Act with respect to alluvial valley floors. Therefore, OSM rejects this comment.

Section 822.12(a)(2) has been modified from the proposal to delete "agricultural activities" and substitute the term "farming." This change in the rules provides greater consistency with Section 510(b)(5)(A) of the Act. (Further discussion of this change is provided in the preamble to Section 785.19(b)(3) which discusses the definition of the term "farm" and the relationship of the terms "farming" and "agricultural activities.")

Two commenters expressed concern about the deletion of previous Section 822.12 (b) and (c) which called for the cessation of mining operations until remedial measures are taken if environmental monitoring shows that a surface coal mining operation is interrupting, discontinuing, or precluding farming on alluvial valley floors or is materially damaging the quantity or quality of water that supplies alluvial valley floors, respectively. One of the commenters asserted that these paragraphs should be retained so that the option remains to cease mining. This commenter also maintained that without these paragraphs, OSM's ability to regulate would be limited. The other commenter noted that the proposed changes would allow mining to proceed, leaving mitigation of the conditions to the regulatory authority, which violates the Act. One other commenter stated that Section 786.29, which was referenced in the preamble to the proposed rules, does not adequately protect alluvial valley floors from damage. He asserted that this section deals with public health and safety and does not explicitly require a cessation order until approved remedial

measures are taken by the operator. This commenter also asserted that the proposed rule substantially weakens enforcement.

OSM disagrees with the commenters. Section 786.29(a) provides a degree of protection and enforcement capability comparable to the deletion section. More specifically, Section 786.29 requires that "The permittee shall take all possible steps to minimize any adverse impact to the environment or public health and safety resulting from noncompliance with any term or condition of the permit * * *." (Emphasis added.) Section 786.29 is applicable to environmental impacts in addition to health and safety concerns. Possible steps to minimize adverse impacts may include cessation of mining operations with respect to alluvial valley floors. Therefore, the deletion of these paragraphs of previous Section 822.12, considering the protection afforded by Section 786.29, does not represent a weakening of enforcement or a violation of the Act. Therefore, OSM rejects the comments noted above with respect to this matter.

OSM has characterized the "small acreage statutory exclusion" in final Section 822.12(b)(2) to include situations "where farming on the alluvial valley floor that would be affected by the surface coal mining operation is of such small acreage as to be of negligible impact on the farm's agricultural production." These changes from proposed Section 822.12(a)(2) will provide consistency with the Act and will minimize any confusion with respect to the exclusions of Section 510(b)(5).

One commenter expresses concern that proposed Section 822.12(c)(1)(ii), which implemented the "grandfather" proviso of Section 510(b)(5) of the Act, says only "regulatory authority" while the statute in Section 510(b)(5) of the Act uses the term "State regulatory authority." The commenter asserted that this improperly lumps Federal regulatory authorities with the States. The commenter urges that the original intent of honoring only State approvals should be continued.

In response to this comment, OSM has modified the language of final Section 822.12(b)(3)(ii) to refer to approval of the "State regulatory authority" in order to provide consistency with the proviso of Section 510(b)(5) of the Act and to minimize any confusion with regard to the source of the approval necessary to take advantage of the proviso. It should be noted that in the year preceding the passage of the Act, there was no "State regulatory authority" or "regulatory authority" as those terms are defined in the Act, and therefore the term is used in this context to refer to the State agency with responsibilities for surface coal mining operations prior to passage of the Act.

Final Section 822.12(b)(4), which was proposed as Section 822.12(c)(2), implements Section 506(d)(2) of the Act which states that if surface coal mining operations authorized by a permit issued pursuant to the Act were not subject to the standards contained in Sections 510(b)(5) (A) and (B) of the Act by reason of complying with the proviso of Section 510(b)(5), then the portion of the application for renewal of the permit which addresses any new areas previously identified in the reclamation plan submitted pursuant to Section 508 of the Act shall not be subject to the standards of Sections 510(b)(5) (A) and (B). A commenter asserted that the addition of proposed Section 822.12(c)(2) to the rules improperly extends the statutory exclusion of Section 510 of the Act for a renewal or an extension of an existing permit. The commenter then went on to state that an operation that was an expansion of another must have approved alluvial valley floor compliance responsibilities.

OSM has carefully reviewed the language of final Section 822.12(b)(4) and finds that it is consistent with the language and intent of Section 506(d)(2) of the Act. It should be emphasized that for an existing operation to take advantage of the exclusion provided by this portion of the statute and rules the land must have been previously identified in a reclamation plan submitted under Part 780 or Part 784 and the original permit area of the operation was excluded from the protections of Section 510(b)(5) (A) and (B) of the Act by virtue of the proviso of Section 510(b)(5) of the Act. Since the proposed rule is consistent with the Act, it is not necessary to modify the rule.

Section 822.13 Monitoring: Previous Section 822.13, entitled "Protection of agricultural uses," required the reestablishment of agricultural utility and levels of productivity of AVF's in affected areas. OSM has deleted Section 822.13 because it was unnecessary. The postmining land use provisions in Sections 816.133 and 817.133 already necessitate the restoration of the land to the same capability as existed before mining. Also, the revegetation rules in Sections 816.111 through 816.116 and Sections 817.111 through 817.116 and, to the extent applicable, the prime

farmland rules of 30 CFR Part 823 require the reestablishment of premining vegetation. Finally, the requirements of Sections 510(b)(5) and 515(b)(10)(F) of the Act assures the protection of agricultural uses.

Previous Section 822.14 is revised and redesignated as Section 822.13 and the basic monitoring scheme is retained. Previous Section 822.14 required the establishment and maintenance of an environmental monitoring system on AVF's during surface coal mining and reclamation operations and continuation until all bonds are released. OSM has made changes to clarify that the requirements for monitoring on AVF's should parallel the requirements of Sections 510(b)(5) and 515(b)(10)(F) of the Act and the performance standards in Sections 822.11 and 822.12.

A number of concerns were raised by commenters with respect to changes in the monitoring requirements for alluvial valley floors proposed in Section 822.13. One commenter noted that the proposed changes shift the emphasis from protection of characteristics supporting the essential hydrologic functions to compliance with Section 822.11 and from protection of agricultural utility to compliance with Section 822.12. The commenter went on to note that since all specific references to essential hydrologic functions and agricultural utility have been excised from the requirements of Part 822 no specific direction is available with respect to these terms. The same commenter also took issue with the proposed deletion of previous Section 822.14(c) which called for monitoring to identify previously unidentified characteristics of alluvial valley floors and to evaluate the importance of these characteristics. In addition, one commenter noted that certain terminology in the alluvial valley floor monitoring requirements (namely, "at adequate frequencies" and "routinely be made available to the regulatory authority") can be interpreted and enforced by the regulatory authority in an arbitrary manner. Therefore, the commenter requested that OSM provide guidance in the rules concerning such monitoring activities. The commenter went on to recommend that because it is "long-term trends" that the data are to indicate, quarterly monitoring with annual reporting is reasonable. One commenter also recommended deletion of the term "agricultural activities" in Section 822.13(a)(2) and substitution of the term "farming" to provide consistency with Section 510(b)(5)(A) of the Act.

OSM has reviewed the comments received with respect to alluvial valley floor monitoring. In response to these specific comments, OSM finds that requiring monitoring of the essential hydrologic functions (as protected under Section 822.11) and of agricultural activities (as protected under Section 822.12) results in no lesser protection than the previous rules. Information with respect to the characteristics supporting the essential hydrologic functions and the agricultural utility of the alluvial valley floor will be included in permit applications. The applicable performance standards of Part 822 and the monitoring system will be based on conditions described in the permit application. Thus, monitoring of essential hydrologic functions and agricultural activities in accordance with Sections 822.11 and 822.12, respectively, will provide an equal degree of protection. This commenter's concern with respect to the deletion of specific information requirements for essential hydrologic functions and agricultural utility is addressed elsewhere in this preamble.

With respect to the deletion of previous Section 822.14(c) which called for monitoring to identify previously unidentified characteristics and to evaluate the importance of all characteristics, the final alluvial valley floor monitoring rules provide the necessary monitoring to assure conformance with the alluvial valley floor protection provisions of Sections 510 and 515 of the Act and the performance standards of Part 822 of the rules. In addition, general hydrologic monitoring required under the hydrologic protection sections of 30 CFR Parts 816 and 817 will provide an additional monitoring program for lands which may be affected by mining operations. Finally, it should be pointed out that if the regulatory authority believes that additional monitoring is necessary to further identify, define, or understand characteristics of designated alluvial valley floors, the regulatory authority may require this additional monitoring under Section 822.13.

OSM has evaluated the commenter's concern that general reference to monitoring frequencies and routine submission of data may be interpreted and enforced by the regulatory authority in an arbitrary manner. OSM has also reviewed the commenter's recommendation for monitoring and reporting frequencies. The frequencies for field monitoring and data reporting with respect to alluvial valley floors should be handled on a case-by-case basis to reflect site-specific conditions. Although the commenter's specific recommendations for quarterly monitoring with annual reporting may be appropriate in some cases, site-specific conditions may dictate other frequencies. The alluvial valley floor monitoring rules, as proposed, provide this necessary flexibility. The possibility of arbitrary enforcement of monitoring requirements will not be increased by these rules. The key factor, under either the previous or new

rules, is the ability and intent of the regulatory authority to enforce the regulatory program. OSM oversight will assist in ensuring proper implementation of the AVF monitoring requirement, as well as the remainder of the regulatory program.

Two commenters objected to OSM's proposed elimination of Section 822.13 of the previous rules. They questioned whether the provisions of Section 515(b)(2) of the Act would be met and pointed out that without previous Section 822.13, the areas would be treated like ordinary lands. One of the commenters believed OSM's reason for eliminating the section was not valid because it is based on other sections of the regulatory program that are also revised and weakened.

As explained earlier, provisions contained in other sections of the permanent program rules require reestablishment of the premining capability to sustain vegetation and levels of agricultural productivity of alluvial valley floors in affected areas.

REFERENCE MATERIALS

The reference materials used to develop these final rules are the same as those listed in the previous rules (*44 FR 14924 and 15087-15094*), including the material listed below.

Schmidt, J., 1980, Alluvial Valley Floor Identification and Study Guidelines.

III. PROCEDURAL MATTERS

National Environmental Policy Act

OSM has analyzed the impacts of these final rules in the "Final Environmental Impact Statement OSM EIS-1: Supplement" (FEIS) according to Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA) (*42 U.S.C. 4332(2)(c)*). This FEIS is available in OSM's Administrative Record in Room 5315, 1100 L Street, NW., Washington, D.C., or by mail request to Mark Boster, Chief, Branch of Environmental Analysis, Room 134, Interior South Building, U.S. Department of the Interior, Washington, D.C. 20240. This preamble serves as the record of decision under NEPA. Although there has been a number of editorial changes and clarifications, these final rules were analyzed as the preferred alternative A in the FEIS.

Executive Order 12291

The Department of the Interior has determined that this document is not a major rule and does not require a regulatory impact analysis under Executive Order 12291.

Regulatory Flexibility Act

These rules have also been examined pursuant to the Regulatory Flexibility Act, *5 U.S.C. 601* et seq., and OSM has certified that these rules do not have significant economic impact on a substantial number of small entities. The rule is expected to ease the regulatory burden on small coal operators by giving the State regulatory authorities the discretion of reducing the amount of information that will have to accompany each permit application.

Federal Paperwork Reduction Act

The information collection requirements in 30 CFR 785.19 and 822.13 were approved by the Office of Management and Budget (OMB) under *44 U.S.C. 3507* and assigned clearance numbers 1029-0040 and 1029-0049, respectively. The information required by Sections 785.19 and 822.13 is being collected to meet the requirements of Sections 510(b)(5) and 515(b)(10)(F) of the Act, which protect alluvial valley floors from the adverse effects of surface coal mining operations. The information required by Section 785.19 will be used to give the regulatory authority a sufficient baseline upon which to assess the impact of the proposed operation during the permanent regulatory program. The recordkeeping requirements in Section 822.13 will measure compliance with performance standards during and after mining operations. The obligation to respond is mandatory.

Agency Approval

Section 516(a) requires that, with regard to rules directed toward the surface effects of underground mining, OSM must obtain written concurrence from the head of the department which administers the Federal Mine Safety and Health Act of 1977, the successor to the Federal Coal Mine Health and Safety Act of 1969. OSM has obtained the written concurrence of the Assistant Secretary for Mine Safety and Health, U.S. Department of Labor.

LIST OF SUBJECTS

30 CFR Part 701

Coal mining, Law enforcement, Surface mining, Underground mining.

30 CFR Part 785

Coal mining, Reporting requirements, Surface mining, Underground mining.

30 CFR Part 822

Coal mining, Environmental protection, Surface mining, and Underground mining.

Accordingly, 30 CFR Parts 701, 785, and 822 are amended as set forth herein.

Dated: June 22, 1983.

J. J. Simmons III, Under Secretary.

PART 701 -- PERMANENT REGULATORY PROGRAM

1. Section 701.5 is amended by revising the definitions of "Agricultural activities," "Essential hydrologic functions," "Materially damage the quantity or quality of water," "Subirrigation," and by removing the definition of "Unconsolidated stream laid deposits holding streams" to read as follows:

SECTION 701.5 - DEFINITIONS.

* * * * *

AGRICULTURAL ACTIVITIES OR FARMING means, with respect to alluvial valley floors, the use of any tract of land for the production of animal or vegetable life, based on regional agricultural practices, where the use is enhanced or facilitated by subirrigation or flood irrigation. These uses include, but are not limited to, the pasturing or grazing of livestock, and the cropping, cultivation, or harvesting of plants whose production is aided by the availability of water from subirrigation or flood irrigation. These uses do not include agricultural activities which have no relationship to the availability of water from subirrigation or flood irrigation practices.

* * * * *

ESSENTIAL HYDROLOGIC FUNCTIONS means the role of an alluvial valley floor in collecting, storing, regulating, and making the natural flow of surface or ground water, or both, usefully available for agricultural activities by reason of the valley floor's topographic position, the landscape, and the physical properties of its underlying materials. A combination of these functions provides a water supply during extended periods of low precipitation.

* * * * *

MATERIALLY DAMAGE THE QUANTITY OR QUALITY OF WATER means, with respect to alluvial valley floors, to degrade or reduce by surface coal mining and reclamation operations the water quantity or quality supplied to the alluvial valley floor to the extent that resulting changes would significantly decrease the capability of the alluvial valley floor to support agricultural activities.

* * * * *

SUBIRRIGATION means, with respect to alluvial valley floors, the supplying of water to plants from underneath or from a semisaturated or saturated subsurface zone where water is available for use by vegetation.

* * * * *

(Pub. L. 95-87, 30 U.S.C. 1201 et seq.)

PART 785 -- REQUIREMENTS FOR PERMITS FOR SPECIAL CATEGORIES OF MINING

2. Section 785.19 is revised to read as follows:

SECTION 785.19 - SURFACE COAL MINING AND RECLAMATION OPERATIONS ON AREAS OR ADJACENT TO AREAS INCLUDING ALLUVIAL VALLEY FLOORS IN THE ARID AND SEMIARID AREAS WEST OF THE 100TH MERIDIAN.

(a) Alluvial valley floor determination.

(1) Permit applicants who propose to conduct surface coal mining and reclamation operations within a valley holding a stream or in a location where the permit area or adjacent area includes any stream, in the arid and semiarid regions of the United States, as an initial step in the permit process, may request the regulatory authority to make an alluvial valley floor determination with respect to that valley floor. The applicant shall demonstrate and the regulatory authority shall determine, based on either available data or field studies submitted by the applicant, or a combination of available data and field studies, the presence or absence of an alluvial valley floor. Studies shall include sufficiently detailed geologic, hydrologic, land use, soils, and vegetation data and analysis to demonstrate the probable existence of an alluvial valley floor in the area. The regulatory authority may require additional data collection and analysis or other supporting documents, maps, and illustrations in order to make the determination.

(2) The regulatory authority shall make a written determination as to the extent of any alluvial valley floors within the area. The regulatory authority shall determine that an alluvial valley floor exists if it finds that --

(i) Unconsolidated streamlaid deposits holding streams are present; and

(ii) There is sufficient water available to support agricultural activities as evidenced by --

(A) The existence of current flood irrigation in the area in question;

(B) The capability of an area to be flood irrigated, based on evaluations of typical regional agricultural practices, historical flood irrigation, streamflow, water quality, soils, and topography; or

(C) Subirrigation of the lands in question derived from the ground-water system of the valley floor.

(3) If the regulatory authority determines in writing that an alluvial valley does not exist pursuant to Paragraph (a)(2) of this section, no further consideration of this section is required.

(b) Applicability of statutory exclusions.

(1) If an alluvial valley floor is identified pursuant to paragraph (a)(2) of this section and the proposed surface coal mining operation may affect this alluvial valley floor or waters that supply the alluvial valley floor, the applicant may request the regulatory authority, as a preliminary step in the permit application process, to separately determine the applicability of the statutory exclusions set forth in paragraph (b)(2) of this section. The regulatory authority may make such a determination based on the available data, may require additional data collection and analysis in order to make the determination, or may require the applicant to submit a complete permit application and not make the determination until after the complete application is evaluated.

(2) An applicant need not submit the information required in paragraphs (d)(2) (ii) and (iii) of this section and a regulatory authority is not required to make the findings of paragraphs (e)(2) (i) and (ii) of this section when the regulatory authority determines that one of the following circumstances, heretofore called statutory exclusions, exist:

- (i) The premining land use is undeveloped rangeland which is not significant to farming;
- (ii) Any farming on the alluvial valley floor that would be affected by the surface coal mining operation is of such small acreage as to be of negligible impact on the farm's agricultural production. Negligible impact of the proposed operation on farming will be based on the relative importance of the affected vegetation and water of the developed grazed or hayed alluvial valley floor area to the farm's production over the life of the mine; or
- (iii) The circumstances set forth in Section 822.12(b) (3) or (4) of this chapter exist.

(3) For the purposes of this section, a farm is one or more land units on which agricultural activities are conducted. A farm is generally considered to be the combination of land units with acreage and boundaries in existence prior to August 3, 1977, or, if established after August 3, 1977, with those boundaries based on enhancement of the farm's agricultural productivity and not related to surface coal mining operations.

(c) Summary denial. If the regulatory authority determines that the statutory exclusions are not applicable and that any of the required findings of paragraph (e)(2) of this section cannot be made, the regulatory authority may, at the request of the applicant:

- (1) Determine that mining is precluded on the proposed permit area and deny the permit without the applicant filing any additional information required by this section; or
- (2) Prohibit surface coal mining and reclamation operations in all or parts of the area to be affected by mining.

(d) Application contents for operations affecting designated alluvial valley floors.

(1) If land within the permit area or adjacent area is identified as an alluvial valley floor and the proposed surface coal mining operation may affect an alluvial valley floor or waters supplied to an alluvial valley floor, the applicant shall submit a complete application for the proposed surface coal mining and reclamation operations to be used by the regulatory authority together with other relevant information as a basis for approval or denial of the permit. If an exclusion of paragraph (b)(2) of this section applies, then the applicant need not submit the information required in paragraphs (d)(2) (ii) and (iii) of this section.

(2) The complete application shall include detailed surveys and baseline data required by the regulatory authority for a determination of --

- (i) The characteristics of the alluvial valley floor which are necessary to preserve the essential hydrologic functions throughout the mining and reclamation process;
- (ii) Whether the operation will avoid during mining and reclamation the interruption, discontinuance, or preclusion of farming on the alluvial valley floor;
- (iii) Whether the operation will cause material damage to the quantity or quality of surface or ground waters supplied to the alluvial valley floor;
- (iv) Whether the reclamation plan is in compliance with requirements of the Act, this chapter, and regulatory program; and
- (v) Whether the proposed monitoring system will provide sufficient information to measure compliance with Part 822 of this chapter during and after mining and reclamation operations.

(e) Findings.

(1) The findings of paragraphs (e)(2) (i) and (ii) of this section are not required with regard to alluvial valley floors to which are applicable any of the exclusions of paragraph (b)(2) of this section.

(2) No permit or permit revision application for surface coal mining and reclamation operations on lands located west of the 100th meridian west longitude shall be approved by the regulatory authority unless the application demonstrates and the regulatory authority finds in writing, on the basis of information set forth in the application, that --

- (i) The proposed operations will not interrupt, discontinue, or preclude farming on an alluvial valley floor;
- (ii) The proposed operations will not materially damage the quantity or quality of water surface and underground water systems that supply alluvial valley floors; and
- (iii) The proposed operations will comply with Part 822 of this chapter and the other applicable requirements of the Act and the regulatory program.

(Pub. L. 95-87, 30 U.S.C. 1201 et seq.)

3. Part 822 is revised to read as follows:

PART 822 -- SPECIAL PERMANENT PROGRAM PERFORMANCE STANDARDS -- OPERATIONS IN ALLUVIAL VALLEY FLOORS

Section	
822.1	Scope.
822.10	Information collection.
822.11	Essential hydrologic functions.
822.12	Protection of agricultural activities.
822.13	Monitoring.

Authority: Pub. L. 95-87, 30 U.S.C. 1201 et seq.

SECTION 822.1 - SCOPE.

This part sets forth additional requirements for surface coal mining and reclamation operations on or which affect alluvial valley floors in the arid and semiarid regions of the country.

SECTION 822.10 - INFORMATION COLLECTION.

The information collection requirements contained in Section 822.13 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1029-0049. The information is being collected to meet the requirements of Sections 510(b)(5) and 515(b)(10)(F) of the Act which provide the information collection requirements and performance standards for alluvial valley floors. This information will be used to enable the regulatory authority to assess the impact of the proposed operation during the permanent regulatory program. The obligation to respond is mandatory.

SECTION 822.11 - ESSENTIAL HYDROLOGIC FUNCTIONS.

(a) The operator of a surface coal mining and reclamation operation shall minimize disturbances to the hydrologic balance by preserving throughout the mining and reclamation process the essential hydrologic functions of an alluvial valley floor not within the permit area.

(b) The operator of a surface coal mining and reclamation operation shall minimize disturbances to the hydrologic balance within the permit area by reestablishing throughout the mining and reclamation process the essential hydrologic functions of alluvial valley floors.

SECTION 822.12 - PROTECTION OF AGRICULTURAL ACTIVITIES.

(a) Prohibitions. Surface coal mining and reclamation operations shall not:

- (1) Interrupt, discontinue, or preclude farming on alluvial valley floors; or
- (2) cause material damage to the quantity or quality of water in surface or underground water systems that supply alluvial valley floors.

(b) Statutory exclusions. The prohibitions of Paragraph (a) of this section shall not apply --

- (1) Where the premining land use of an alluvial valley floor is undeveloped rangeland which is not significant to farming;

(2) Where farming on the alluvial valley floor that would be affected by the surface coal mining operation is of such small acreage as to be of negligible impact on the farm's agricultural production;

(3) To any surface coal mining and reclamation operation that, in the year preceding August 3, 1977 --

(i) Produced coal in commercial quantities and was located within or adjacent to an alluvial valley floor; or

(ii) Obtained specific permit approval by the State regulatory authority to conduct surface coal mining and reclamation operations within an alluvial valley floor; or

(4) To any land that is the subject of an application for renewal or revision of a permit issued pursuant to the Act which is an extension of the original permit, insofar as: (i) The land was previously identified in a reclamation plan submitted under either Part 780 or 784 of this chapter, and (ii) the original permit area was excluded from the protection of Paragraph (a) of this section for a reason set forth in Paragraph (b)(3) of this section.

SECTION 822.13 - MONITORING.

(a) A monitoring system shall be installed, maintained, and operated by the permittee on all alluvial valley floors during surface coal mining and reclamation operations and continued until all bonds are released in accordance with Subchapter J of this chapter. The monitoring system shall provide sufficient information to allow the regulatory authority to determine that --

(1) the essential hydrologic functions of alluvial valley floors are being preserved outside the permit area or reestablished within the permit area throughout the mining and reclamation process in accordance with Section 822.11;

(2) Farming on lands protected under Section 822.12 is not being interrupted, discontinued, or precluded; and

(3) The operation is not causing material damage to the quantity or quality of water in the surface or underground systems that supply alluvial valley floors protected under Section 822.12.

(b) Monitoring shall be conducted at adequate frequencies to indicate long-term trends that could affect compliance with Sections 822.11 and 822.12.

(c) All monitoring data collected and analyses thereof shall routinely be made available to the regulatory authority.

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