OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT

**PROCEDURE DIRECTIVE**

REGULATORY 2016-01

(This procedure directive replaces policy/procedure directive Regulatory 90-1)

SUBJECT: Prime Farmland

EFFECTIVE: March 1, 2016

PURPOSE: To provide specific pre-mining data at the time of application for permits containing prime farmland (PFL) and for notification of the Division of Mineral Resources Management's (Division) soil specialist at the completion of PFL resoiling. To set procedures for obtaining yields and verification of yield on PFL and non-PFL cropland.

Background

Ohio Administrative Code (OAC) rules 1501: 13-4-04 and 1501:13-4-13 require an applicant for a coal mining and reclamation permit to conduct a pre-application investigation of the proposed permit area to determine whether lands within the area may be PFL. In addition, the federal regulation, 30 C.F.R 823.4(a), requires the Natural Resources Conservation Service (NRCS), formerly known as U.S. Soil Conservation Service (SCS), within each state to establish specifications for PFL soil removal, storage, replacement, reconstruction and restoration. 30 C.F.R 823.4(b) requires the Division to use the specifications established by the NRCS. The specifications developed by the NRCS in cooperation with the Division and the Office of Surface Mining are incorporated in this procedure directive. The specifications were developed as part of Section 4 of the NRCS technical guide. The NRCS Conservation Practice Standard Code 544 is available at https://efotg.sc.egov.usda.gov/references/public/OH/Oh_544_Land_Reclamation_Standard.pdf. Questions on these documents should be directed to the county NRCS district conservationist.

I. Permitting Procedures

With the advent of Web Soil Survey, a national clearinghouse of information on all available soil survey data for the United States of America, and the completion of Ohio's soil survey, it has become necessary to update the manner in which the Division and the NRCS cooperate in application investigations to determine the presence and extent of PFL soils located within a proposed permit area. Historically, applicants for a coal
mining and reclamation or exploration permit were required to submit form OH-CPA-65. This form was prepared for the applicant by the local NRCS office with jurisdiction over the county in which the proposed permit is located. Prior to completion of the survey for the area, a field review by NRCS may have been required to map the soils on the proposed permit area. The OH-CPA-65 is currently completed using Web Soil Survey. To eliminate redundancy, the OH-CPA-65 form will be replaced by a Farmland Classification report produced on Web Soil Survey. All applications that propose permitting new surface acreage will be required to have this report. The only exception is if the “grandfather” provisions of OAC 1501:13-4-12 are applicable.

A. Prime Farmland Restoration Plan

The prime farmland restoration plans provide for the conduct of a first order soil survey to minimize discrepancies between on-site conditions and generalized NRCS mapping. Please note that the Division is not requiring first order surveys. However, permittees who do not supply a first order survey will not be allowed to revise PFL soil depths and extent by submitting an Application to Revise a Permit (ARP) subsequent to permit issuance. In instances where it is discovered while mining that an area previously thought to contain PFL soils has been previously disturbed or the soils have been removed, a negative determination can be made through a field review conducted by the Division’s soil specialist, proper documentation and submittal of an ARP. The permittee must stop any additional disturbance once discovered to allow for field review. Areas disturbed prior to the field review will not be eligible for negative determination unless approved by the Division’s soil specialist.

B. Negative Determination of Prime Farmland

The negative determination of prime farmland provides for the conduct of a first order soil survey. (Please note that the NRCS will review and verify all first order surveys.) In addition to conducting a first order soil survey, the following methods, or demonstration to the Division that the application area does not include prime farmland, may be utilized.

1. The applicant may demonstrate that the application area has not historically been used for cropland as defined in OAC 1501:13-1-02. Due to the innumerable situations that could occur, it is not possible for the Division to prescribe what is needed to make the demonstration. Examples of what would be acceptable are:

   a. Signed and notarized affidavits from the landowners describing how the land was used during the ten year period as described in the definition of “historically used for cropland” in OAC 1501:13-1-02;
   b. Records from NRCS or other agencies or organizations that maintain land use records;
   c. Analysis of aerial photographs; or
   d. Previous surface mining affecting the prime farmland in the application area.
Signed and notarized affidavits from adjoining landowners, or a person with knowledge of the land use of the property, describing how the land was used during the ten year period are acceptable only if the owner of the land during that ten year period is deceased or no longer can be found for verification. Written statements from adjoining landowners or a person of knowledge shall be accompanied by an explanation describing why an actual landowner statement cannot be submitted and an explanation of how they are knowledgeable on the use of the property for the ten year period. It is imperative that all negative determination demonstrations be thoroughly documented and verifiable.

2. The application may demonstrate that the slope of the land within the permit area is greater than 8 percent. This may be done by making a topographic map with a ten foot contour interval and a map scale of one inch equals two hundred feet or larger. The map is not to be an enlargement of the U.S.G.S map with interpolated contour lines. The map is to be prepared and certified by a registered professional engineer or registered surveyor.

3. The applicant may submit documentation that other factors exist which preclude the existence of prime farmland soil horizons. The other factors would include any activity which has occurred on the area that destroyed the soil horizons (e.g. previously mined areas, construction areas, etc.) Documentation must identify the areas where these activities have occurred, the year the activities occurred, the permit number if the activity was mining related, and an explanation as to the disposition of the prime farmland soil horizons.

The applicant may use any of the above methods, or a combination of the methods (overlapping may occur), to show the application does not include prime farmland. If a combination of methods is used, the area where each method is used must be clearly identified on the map or overlay.

II. Removal of Soil Horizons on PFL

Section 1513.16(A)(7)(b) of the Ohio Revised Code provides that a permittee, when removing soil from prime farmland areas, may combine the B and C horizons of the natural soil where it can be demonstrated that such a combination of soils is both chemically and texturally equal to or more favorable for plant growth than the B horizon alone.

Pursuant to an SCS evaluation of Ohio soils being mined for coal (July 1984), it was determined that C horizons, when mixed with B horizons, will not have an adverse effect on vegetative production on prime farmland soils. This determination applies only to the subsoil of the upper 48 inches. Mixing of C horizons below 48 inches of soil with B horizon is not permitted unless the aforementioned demonstration is submitted to, and approved by, the Chief of the Division on a site specific basis.
For a combination of B and C horizons in the upper 48 inches of prime farmland soil, no independent demonstration of equal or greater productive capacity need be submitted.

III. Restoration Verification

The attached Operator Notification of Completion of PFL Resoiling is to be used after the effective date of this procedure directive and must be submitted to the Division's soil specialist upon completion of PFL resoiling for each applicable mining year. The form should be submitted in compliance with contemporaneous reclamation requirements and the reclamation schedule approved in the permit application. The soil specialist will then verify PFL soil restoration and approve or identify remedial action. A copy of the notification will then be returned to the permittee. An approved copy of the form signed by the soil specialist must be submitted by the permittee with all Phase II release requests that include PFL.

IV. Prime Farmland and Cropland Yield Verification Procedures

The following are the procedures which will be employed in verifying the yields obtained on reclaimed prime farmland and non-prime cropland. For reclaimed non-prime cropland, a yield is acceptable if it equals or exceeds the average county yield for the comparable crops. For reclaimed prime farmland, a yield is acceptable if it equals or exceeds the target yield specified in NRCS's web soil survey yields for non-irrigated grass legume hay for the prime farmland soil unit in question. The Ohio Cooperative Extension Bulletin #685 will be used as a secondary reference if a conflict occurs or a soil unit doesn't have a published yield. Please note that yield verifications will be taken only if those crops are identified in the approved permit.

The Ohio Department of Agriculture's annual report will be utilized as the source of non-prime cropland yields. Some coal producing counties do not report a grass legume, or mixed hay, yield. The provided yields will be compared to county specific data available and, if necessary, neighboring counties to ensure reasonable goals are in place. Approval of yields will be at the discretion of the Division's soil specialist.

The Division will estimate yields of the restored prime farmland to verify the yields submitted by the permittee.

The permittee must notify the Division soil specialist in writing (e-mail) at least five working days prior to the date of harvest of a reference crop.

If the reference crop is hay (in counties other than Columbiana, Mahoning and Stark), the permittee must notify the Division whether a three-cutting or a two-cutting system will be followed.

If the Division is not notified five (5) working days prior to the first cutting and/or is not informed which cutting system is to be followed, the following schedule will be assumed:
If a three-cutting system is used, the percentage of the total year’s yield for a hay crop should approximate the following for the three cuttings:

1st cutting - 60%
2nd cutting - 25%
3rd cutting - 15%

The percentage of the total year’s yield for a hay crop should approximate the following for two cuttings:

1st cutting - 60%
2nd cutting - 40%

If the yield from the first cutting is verified to approximate at least 60% of the target yield, then it will not be necessary for the Division to verify the second or third cutting for that year.

For a late 1st cutting outside of the typical cutting schedule, 85% of the total yield will be necessary for approval up to the August 30 date. If the yield does not meet the required yield percentage, a third-cutting yield could be taken to ensure that yields are acceptable. If a first cutting is taken after August 30, it will have to meet 100% of the total hay crop yield goal for approval.

The Division will sample the hay crop on the restored prime farmland areas prior to any harvest for the purpose of yield verification. Sample sites will be selected at random and the growth in a 25 ½-inch square area will be harvested near ground level. The samples will be weighed and the average weight for the twelve samples will be calculated. A sub-sample will be retained and oven dried to adjust for moisture content. The average weight of the twelve samples will be multiplied by 10,000 to obtain the equivalent yield per acre. Height measurements will also be made at randomly selected sites to determine the uniformity of growth of the hay crop.

For verification of corn yields in applicable counties, the yield estimate will be based on the percent moisture of corn harvested from randomly chosen row sections, the weight of the corn harvested, the total length of the rows harvested and the distance between the rows. Four 25-foot rows will be randomly chosen and the weight of the corn harvested will be multiplied by a factor determined by the other factors listed above (see table below).
V. Verification by an Independent Third Party

If the permittee has chosen to have yields verified by an independent third party, that party must be approved by the Chief to act as a third party. That person must be an individual experienced in planting, and husbandry of strip mine reclamation or standard agriculture production of hay or other crops, an experienced agronomist or a certified professional agronomist. (A list of approved individuals is available upon request.)

Please note that the Chief must approve experienced individuals and agronomists as independent third parties before such persons can be used by permittees to verify yields. Any person wishing to be approved as an independent third party must submit to the Chief a written request for approval, including a resume of experience and copies of any professional certifications or other qualifications, as well as a description of the procedure(s) that the person will employ in verifying yields.

If a person wishing to be approved as an independent third party does not have a professional certification, that person will be evaluated by the Chief to ensure that the person will use adequate professional standards so that the yield verification can be defended in case of appeal of a bond release. All individuals without professional certifications must retain records of the yields taken, including pictures and other documentation of the work performed. The records must be retained for one year after final bond release and will only be requested if a bond release is subject to an appeal.
VI. **Number of Acceptable Yields Needed for Bond Release**

OAC 1501:13-9-15 provides the number of yields necessary for bond release. The numbers are provided below for reference.

**Prime farmland:**
- All yields must be taken within ten (10) years of soil replacement;
- Three (3) years of yields that equal or exceed the target yield for the specific soil unit are required for a phase II bond release;
- The same three (3) years of yield data should be submitted with a phase III bond release.

**Non-prime cropland:**
- Two (2) years of yields taken in any year except the first year of the maintenance period;
- Yields for hay or other corps must equal or exceed the county average yield;
- Remining areas require one (1) year of yield data taken in any year except the first that is equal to or exceeds the county average.

**Pasture or grazing land:**
- Two (2) years of yields taken in any year except the first year of the maintenance period;
- Yields for hay must equal or exceed the county average yield.

Lanny E. Erdos,  
Chief, ODNR - Division of Mineral Resources Management
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT

OPERATOR'S NOTIFICATION OF COMPLETION OF PRIME FARMLAND (PFL) RESOILING

(An APPROVED copy of this form must be submitted with a Phase II request)

Permittee ______________________________ Permit No. __________________

Address ____________________________________________ Mining Year ____________

City ___________________________ State ______ Zip __________

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<tr>
<th>TRACT</th>
<th>Surface Owner</th>
<th>Sec/Lot</th>
<th>Township</th>
<th>Acres PFL Resoiled</th>
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Total Acres PFL Restored ____________________________

Provide a response to the following questions for the mining year designated above:

1. Has any PFL been relocated? Yes ☐ No ☐

2. If response to 1 is "yes," submit 8 ½ x 11 map showing relocated PFL.

3. Has restored PFL been seeded? Yes ☐ No ☐

4. Have any PFL soils been negatively determined subsequent to issuance of permit? Yes ☐ No ☐

   If the response is "yes," number of acres that have been negatively determined ____________________________

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DNR-744-9055
NOTIFICATION OF RESULTS OF
PFL SOIL RECONSTRUCTION
EVALUATION

Permit Number_________________ Permittee Name______________________________

Mining Year Evaluated________________________________________________________

Release Requested:  SM-7 □ SM-8 □ Phasel1 □

Number of Prime Farmland Acres Permitted this Yearly Segment _______________________

Number of Prime Farmland Acres to be Reclaimed this Yearly Segment ___________________

Number of Cores Taken___________________________________________________________

Number of Samples Taken________________________________________________________

Date of Evaluation______________________________________________________________

PFL Soil Restoration □ is acceptable □ is not acceptable

_________________________ Signature (Soil Scientist) ____________________________ Date