



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

MARYLAND RECLAMATION SUCCESS

Evaluation Year 2002

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OBJECTIVES

The objective of this study was to evaluate the effectiveness of the Maryland Program in ensuring successful reclamation on lands affected by surface coal mining operations.

SUMMARY

The Maryland program generally ensures successful reclamation. Four parameters were reviewed to evaluate reclamation success during this study. They were Land Form/Approximate Original Contour (AOC), Land Capability, Hydrologic Reclamation, and Contemporaneous Reclamation. All ten sites reviewed complied with all criteria under the AOC and Contemporaneous Reclamation parameters. Nine of ten sites complied with all criteria under Land Capability and Hydrologic Reclamation parameters.

All bond release inspections were conducted within the appropriate season. However, an exception letter has altered the acceptable season each year since the policy was implemented in order to coordinate with Land Reclamation Committee (LRC) reviews. Maryland should attempt to coordinate with the LRC for a more consistent approach to establishing acceptable seasons.

Five of six inspections were completed within the thirty-day limit stipulated by regulation. However, average time to perform an inspection has increased to twenty-seven days, up from the previous two years' average of sixteen and twelve days, respectively. Also, time to perform a completeness determination has increased to an average of thirty-two days, up from the previous two years' average of twenty-two and twenty-three days, respectively. While not a significant concern, this area should be monitored to assure trends do not increase to the point where efficiencies are lost or regulatory requirements violated.

BACKGROUND

Maryland's requirements for ensuring reclamation and subsequent release of bond liability are found in the Code of Maryland Regulations (COMAR) 26.20.14 and the Annotated Code of Maryland ' 15-511 and ' 15-513.

Bond is released based on successful completion of reclamation in three phases:

Phase I - When the permittee completes backfilling, regrading, resoiling, seeding, mulching, and drainage control in accordance with the approved permit plan.

Phase II - When revegetation has been successfully established; the lands are not contributing excessive suspended solids to stream flow or runoff outside the permit area; temporary drainage controls have been removed and affected areas graded, seeded and mulched; prime farmland yields restored; permanent impoundment plans implemented; the liability period has elapsed;¹ and the site is approved by the Maryland Land Reclamation Committee (LRC)

¹Two years after last augmented seeding per COMAR 26.20.29.06C.

and Department of the Environment (MDE).

Phase III - When the permittee has successfully completed all operations in accordance with the approved reclamation plan and achieved compliance with the regulatory program, the permit, and the applicable liability period².

A unique aspect of Maryland's bond release program is the Phase I floating bond system. Phase I bond is generally not released until the entire permit site meets phase I standards. This is because phase I bond, which is required to cover only the unreclaimed area (open acres³), can float with the progression of the active mining. Phase I reclamation continues behind the active mining and the bond floats to the active area once phase I reclamation standards are met. However, phase I bond is not released until phase I reclamation is completed on the final active mining area.

Maryland's bond release system, therefore, does not lend itself to equating phase I bond release with successful phase I reclamation. Rather, successful phase I reclamation is documented by the approval of a Backfilling and Planting Report⁴ as described in ' 15-513(a) of the Maryland Code. This report was used by the Office of Surface Mining (OSM) in evaluating successful phase I reclamation.

Phase II and phase III bond releases are independent of phase I release. Bond is, therefore, often released for phases II and III before phase I.

Maryland's bonding system is flowcharted in Exhibit 1.

METHODOLOGY

In order to determine the effectiveness of reclamation in Maryland, OSM evaluated the following four parameters in accordance with OSM Directive REG-8, Appendix II, item II.C.2:

1. Land Form/Approximate Original Contour
2. Land Capability
3. Hydrologic Reclamation
4. Contemporaneous Reclamation

Results of the file review and inspection were documented on OSM's Mine Evaluation Inspection Report. OSM also used the Bond Release Checklist form (exhibit 2) to assist in documenting all three phases of reclamation success. The results are summarized in Exhibit 3.

Six permit sites with impending bond release inspections were selected for evaluation. Within the six permits were ten separate release evaluations: two phase I actions, three phase II actions, and five phase III actions. OSM reviewed the permit file prior to inspection and conducted joint inspections with State inspectors on all sites.

²Five years after last augmented seeding per COMAR 26.20.29.06D.

³Disturbed area that has not been backfilled, regraded, top soiled, seeded and mulched.

In addition to reviewing the file prior to inspection, OSM did a more detailed review of the three most recently issued permanent program permit files to determine contemporaneous reclamation utilizing the backfilling/planting reports, Maryland's manual tracking system, and interviews with Maryland program personnel.

FINDINGS

Inspection Timing

COMAR 26.20.14.09 A. requires that bond release *applications A...be filed only at times or seasons that allow the Bureau to properly evaluate the reclamation operations presented in the application as having been completed. These times and seasons will be identified by the Bureau. @*

MDE Reclamation Advisory Memorandum dated January 6, 2000 (Exhibit 4) states, A...beginning in calendar year 2000 the Bureau will only accept bond release applications from March 15 through September 15.@

Maryland has issued exceptions to the policy each year since its implementation. The latest exception was a memo dated September 3, 2002, which allowed submittals to occur up until October 1, 2002. In each exception letter, the due date has been extended into October to synchronize with the Land Reclamation Committee's schedule for inspections. OSM is working with Maryland on ways to make the policy more consistent.

Four of the six sites reviewed, had applications submitted during the allowable accepted period. The remaining two applications were held over until the following season for evaluation in accordance with the approved policy. By comparison, last year's review indicated that two submissions were made after the due date but inspections were conducted that same season, contrary to approved policy.

COMAR 26.20.14.09 D. requires MDE to inspect and evaluate the reclamation work A...within 30 days after receiving a complete application for bond release, or as soon after that as weather conditions permit.” Maryland's Bond Release Checklist and Log designates the date the application was determined complete by the reviewer. Last year's evaluation found that this item is being completed on an inconsistent basis. This year, there was only one instance of the item not being completed (SM-84-325). In cases where the completion date is not shown on the Bond Release Checklist and Log, the date used for the study is that found in the notice of Bond Release inspection letter. As shown in Table I below (Inspection Timing), five of the six permits were inspected within the 30-day criteria, with an average of twenty-seven days from the date of the completeness determination to the date of inspection. This compares with last year's average of twelve days and the year before of sixteen days. In addition, the table shows that, on average, MDE took thirty-two days to make a completeness determination after receipt of the application for the six permits reviewed. This compares with last year's average of twenty-two days and the year before of twenty-three days.

TABLE I INSPECTION TIMING					
PERMIT #	BOND RELEASE APPLICATION RECEIVED DATE ⁴ (a)	COMPLETENESS DETERMINATION DATE ⁵ (b)	INSPECTION DATE (c)	DAYS FROM APPLICATION RECEIVED TO COMPLETENESS DETERMINATION (d)	DAYS FROM COMPLETENESS DETERMINATION TO INSPECTION (e)
SM-84-325	7/25/02	8/19/02	9/30/02	25	42
SM-84-326	11/6/01	4/24/02	5/16/02	NA ⁶	22
SM-84-328	11/6/01	4/24/02	5/16/02	NA ⁶	22
SM-85-399	9/25/01	10/24/01	11/13/01	29	20
SM-87-410	7/31/02	9/3/02	9/30/02	34	27
SM-87-411	9/17/01	10/25/01	11/13/01	38	18
AVERAGE				32	27

Land Form/Approximate Original Contour (AOC)

All ten evaluations complied with the criteria for this standard. These criteria include elimination of all highwalls and spoil piles, contouring the area to closely resemble the general surface configuration, and blending with the surrounding area and drainage pattern.

Land Capability

Nine of the ten field evaluations complied with the criteria for this standard. These criteria include, as applicable, replacement of topsoil, achievement of vegetative stability, post-mining land use, and establishment of successful vegetation. Post-mining land use for the permits inspected included three of the permits reclaimed to pasture, one reclaimed to forestry, and two reclaimed to a combination of pasture and undeveloped, as defined in COMAR 26.20.02.09B. (8). One of the non-compliance sites, SM-84-326, did not achieve full land capability requirements due to a need for erosion control repairs.

During one of the three phase II and one of the five phase III field reviews, OSM observed that Maryland was using a visual estimating technique for evaluating the success of vegetation. Both were on permit SM-87-411. While this technique has been successful in determining whether or not to release bond on sites with either heavy or sparse ground cover⁷, visual estimating techniques are neither statistically valid, repeatable, nor highly accurate. Both federal regulations under 30 CFR ' 816.116(a)(2) and the Maryland equivalent under the Code of Maryland Regulations (COMAR) 26.20.29.07 require that standards of success be judged using, *A...a 90 percent statistical confidence*

⁴The later of application receipt date or Proof of Publication receipt date from Bond Release Checklist and Log

⁵ Notice of Bond Release Inspection letter date if not shown on Bond Release Checklist and Log.

⁶ Application held over since not received during proper season

⁷As determined by retesting of sample sites using statistical sampling methods

interval.[@] A visual estimating technique cannot be used to meet this requirement.

Hydrologic Reclamation

All except one of the evaluations complied with this standard. The criteria include assurance that surface and ground water quality and quantity, as well as the groundwater recharge capacity, was restored. This assurance is made through the monitoring of ground and surface water quality and quantity⁸ until final phase III bond is either released or the operator can demonstrate monitoring is no longer required in accordance with COMAR 26.20.20. This demonstration is made by a showing that the operation has minimized disturbances of the hydrologic balance both onsite and offsite, water availability and quality are suitable to support approved post-mining land uses, and the water rights of other users have been protected or replaced. The one site not meeting all the criteria, SM-87-411, had coal fines deposited over the surface of a two acre area from adjacent runoff. This area was disapproved by Maryland for bond release.

Contemporaneous Reclamation

All evaluations were found to be in conformance with the criteria. These criteria include backfilling/grading beginning within 60 days of coal removal, proceeding within 1500 feet of coal removal, or three spoil ridges behind the open pit; completion of backfilling/grading within one year; open acres not beyond the bonded limit; planting within the first season following resoiling, etc., per COMAR 26.20.28.01.

In addition to the general information shown in Exhibit 3, file reviews of the three most recent permanent program sites inspected were conducted in greater detail to gather quantitative data on contemporaneous reclamation. The results are shown in Exhibit 6.

Exhibits 7, 8, and 9 track the achievement of contemporaneous reclamation during the following three phases of reclamation:

Phase I (Backfilling/Grading)

The degree to which Phase I backfilling, grading, and planting keep up with disturbance of the permit site is demonstrated as the difference between acres backfilled and planted to acres affected at a given point in time. These Asnapshots[®] reveal, on average, that 78 percent of the affected area has been backfilled and planted at any point in time. Over the past three evaluation years, this figure has remained relatively constant, averaging 79%. It is evident that phase I backfilling, grading, and planting proceed in a timely manner with the progression of mining, as the gap between affected and backfilled/planted narrows progressively with time. This relationship is demonstrated graphically in Exhibit 9 for the three permit sites. On average, 28 acres were open on the three permit sites at any time.

⁸ Monitored quality and quantity parameters are based on the probable hydrologic consequences determination made in the permit application, and analysis of all baseline hydrologic, geologic, and other information in the permit application. As a minimum, all sites must be monitored for specific conductance, total suspended solids, acidity and alkalinity, pH, total iron, manganese, sulfates, depth to water, rates of discharge or use, flow, and sulfates.

Phase II (Establishment of Vegetation)

The timeliness for establishing vegetation and meeting other criteria for phase II reclamation is demonstrated as the difference between when the site becomes eligible for phase II bond release (minimum two years from last augmented seeding) to when the phase II is determined successful. OIO uses the approval date by the Land Reclamation Committee (LRC) after it conducts its inspection as the Asuccessful@ date. This inspection is triggered automatically when the two-year liability period expires or is close to expiration (see Exhibit 7). Even though this date more closely reflects timeliness of phase II success, it is not without problems. First, it is only a preliminary inspection. The purpose of the LRC inspection is to advise the operator whether he is eligible to submit an application for a final bond release. Therefore, results may be overturned by MDE or the public as a result of MDE's official bond release inspection, or a review process. Also, since the inspections are only conducted twice a year, LRC inspections may occur up to six months before or after a site meets the liability period and becomes eligible for inspection. The source of data for this exercise was derived from the Revegetation Bond Release 2002 tables Maryland publishes annually. It included all areas eligible for revegetation bond release from January through September 2002. Ten of eighteen sites (56%) eligible for phase II release were approved and the average time for approval was same month as eligibility. This compares with last year's data that showed that seven of nine sites (78%) were approved and the average time was one month. The higher incidence of failure of phase two approvals may be attributable in part to the drought that has been in effect the last year.

Phase III (Successful Completion of all Reclamation Operations)

The timeliness for successful completion of all operations and meeting all other criteria for phase III reclamation is demonstrated as the difference between when the site becomes eligible for phase III bond release (minimum five years from last augmented seeding) to when phase III is determined successful. Changes were made in the date used as the Asuccessful@ date in the same manner as in phase II discussed above. The source of data for this exercise was derived from the Revegetation Bond Release 2002 tables MDE publishes annually. It included all areas eligible for final bond release from January through September 2002. The data (Exhibit 8) demonstrates that phase III reclamation is proceeding in a timely manner, as fifteen of the nineteen sites (79%) eligible for phase III release were approved. The average time for approval was less than one month after eligibility. This compares with last year's data showing seven of ten sites (70%) approved and the average time within one month of eligibility.

RECOMMENDATIONS

The permit sites reviewed generally reflect successful reclamation under the Maryland program. The recommendation is offered to further improve the process:

1. In accordance with the findings under "Inspection Timing", it is recommended that Maryland consider ways to better coordinate the Land Reclamation Committee inspection schedule with the Maryland policy for submission of bond release applications, to avoid the need for making exceptions to the policy.

EXHIBITS

Exhibit 1 – Maryland Bond Procedures

MARYLAND BOND PROCEDURES Exhibit I

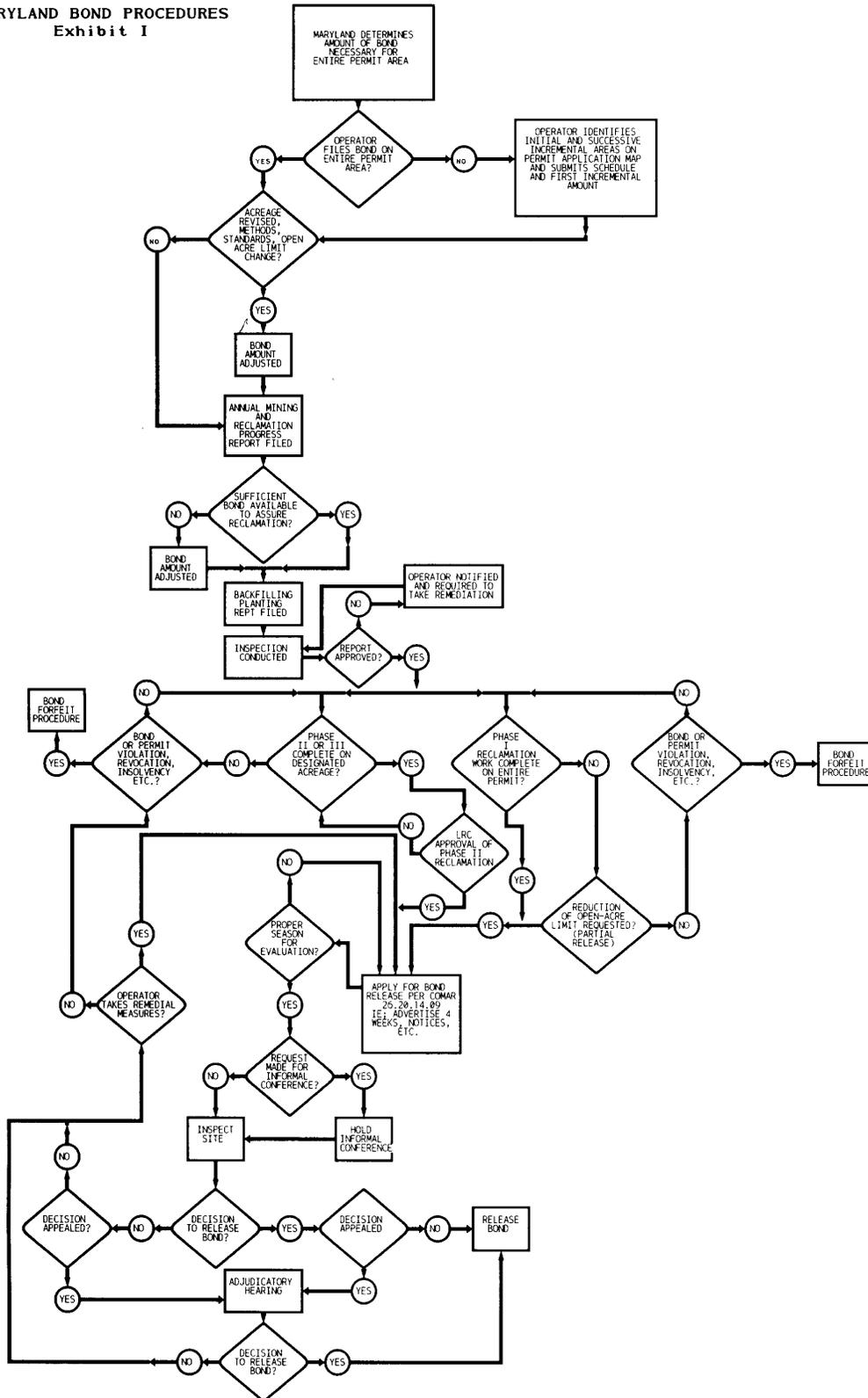


Exhibit 2 - Bond Release Checklist

Maryland Permit Field Review

 (Permit Inspector) (Permittee Name) (Date) (OSM

Phase Release I II III (circle one) Yearly Segment: _____ Acreage

Identify month and year the segment was first identified in an annual report to be reclaimed _____
 (Use end date of the annual segment as identified on the permittee's annual report.)

Identify month and year the permittee submitted the bond release request to DMR _____
 (Use date the permittee signs the bond release request.)

ADMINISTRATIVE			
Type of facility	Surface Mine Underground Mine Preparation Facility Refuse Disposal Bank Removal		
Type of Review	Procedural Review Second Phase Inspection		
Type of Release	Rollover Release		
Number of acres requested for release			
Amount of bond requested for release			
Amount of bond released			
Amount of bond rolled over			
Amount of bond retained			
Were public notice requirements satisfied	Yes	No	NA
Were landowner notice requirements satisfied?	Yes	No	NA
Were local government notification requirements satisfied?	Yes	No	NA
Was proof of publication received by BOM within 30 days after application was received?	Yes	No	NA
Date application determined complete			
Were written objections received within 30 days?	Yes	No	NA
Was a field conference held in response to	Yes	No	NA

the request (If so, address in comments section)			
Was an informal conference requested following a field conference?	Yes	No	NA
Was informal conference held within 30 days?	Yes	No	NA
Was Surface owner notified of right to accompany?	Yes	No	NA
Did surface owner accompany?	Yes	No	NA
Was inspection within 30 days of receipt of complete application?	Yes	No	NA
Was application report received in the proper season (ie; March 15 – September 15)	Yes	No	NA
Date of BOM inspection			
Date of OSM inspection			
Recommendation (If negative, provide reasons in comments section)	Approve	Disapprove	
Date of bond release			
Date copy of final determination sent to local municipality			
Was a copy of final determination sent to each party with written comment or objection?	Yes	No	NA
Was a copy of final determination sent to each party attending informal conference?	Yes	No	NA

Comments _____

Evaluation of Landform / AOC

PHASE I

Criteria for Success	Met Criteria	Explanation or Comments
Highwalls eliminated	Y N	
Landform meets PMLU or AOC achieved	Y N	
Drainage controls functional	Y N	
Backfilled slopes stable	Y N	

Comments

Land Capability

PHASE II

Criteria for Success	Met Criteria	Explanation or Comments
Vegetation established to control erosion?	Y N	
Runoff controlled to prevent suspended solids to streamflow or outside permit area	Y N	
Topsoil depth meets permit conditions? # of probes _____ Avg Depth _____	Y N	If not probed, explain how soil restoration was evaluated?
ARM restored as required by permit?	Y N N/A	# of acres with ARM _____
DMR drilling of PFL area shows depth meets permit conditions?	Y N N/A	
Are target yields for PFL restored?	Y N N/A	

Comments

Land Capability

PHASE III

Criteria for Success	Met Criteria	Explanation or Comments
Trees planting and/or riparian vegetation meet permit requirements?	Y N NA	
All areas stable, repairs adequate?	Y N	
Production yield for target crop met? Target Crop: _____ County Average: _____ Post-mining Yield: _____	Y N	
Permanent structures meet the intended post-mining land use?	Y N NA	
Identify the type, number and estimated size of any permanent structures, including: ponds, roads, buildings, others.		
Vegetative cover meets cover standards? DMR did R-F evaluation If Yes, DMR cover _____% If No, Appropriate DMR Reason OSM did R-F evaluation If Yes, OSM cover _____% If No, Provide Explanation	Y N Y N NA Y N NA Y N NA	
Five-year liability period expired? Any repairs or other activity that should have restarted the five-year period? If yes, explain.	Y N Y N	Date of last seeding _____

What is the approved post-mining land use(s) on this segment?		
Is reclaimed area supporting or capable of supporting this PMLU?	Y N	

Comments

Impacts of Remining

Phase III

<p>Does this permit include area that was previously mined and reaffected by the mining and reclamation operations under this segment? Y N</p> <p>If no, no further responses are necessary.</p> <p>If possible, based on information in the permit application, identify any AML features that existed prior to current mining and reclamation that have been eliminated by mining and reclamation on this segment.</p>	<p>Lineal feet of AML highwall eliminated _____</p> <p>Acreage of unreclaimed spoil reclaimed _____</p> <p>Improvement to water quality Y N</p> <p>If, possible quantify improvement through monitoring results from upstream and downstream and springs and wells; i.e. miles of improved streams, number of wells, springs improved, etc.</p> <p>_____</p> <p>_____</p> <p>Number of underground mine openings eliminated _____</p> <p>Acreage of underground mines day lighted _____</p> <p>Number of dangerous structures removed _____</p> <p>Identify any other AML related problems corrected</p> <p>_____</p> <p>_____</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Comments:

Bond Release Checklist

Permit Field Review

(Permit)

(Permittee Name)

(Date)

**HYDROLOGIC RECLAMATION
(SURFACE WATER SYSTEM)**

(Provide responses for all phase release evaluations)

Criteria for Success	Met Criteria	Explanation or Comments
Based on the pre-mining and post-mining data and your inspection, is surface water quality as good or better than premining quality? (Considering evaluation thresholds provided by OSM.)	Y N	

SURFACE WATER QUALITY REVIEW

Discharge Point (ponds, drainways, upstream, downstream)	Sample Date	Flow rate (gpm/cfs)	pH (s.u.)	Settleable Solids (mg/l)	Total Iron (mg/l)	Manganese (mg/l)	Specific Conductance (µmhos @ 25°C)

Reviewer=s Assessment of Ground Water Restoration

Based on the pre-mining and post-mining data (see next page) and your inspection, is ground

water quality and quantity as good or better than premining quality and quantity? Y N
(Considering evaluation thresholds provided by OSM.) (If no monitoring data is available,
identify how you assessed groundwater restoration and the results.)

Comments:

HYDROLOGIC RECLAMATION

Permit _____ Review Date _____

GROUND WATER QUALITY REVIEW

SAMPLE LOCATION	SAMPLE DATE	pH	TOTAL ACIDITY AS CaCO ₃	TOTAL ALKALINITY AS CaCO ₃	SPECIFIC CONDUCTANCE (MMHOS @ 25°C)	SULFATES	TOTAL IRON	MANGANESE	HARDNESS AS CaCO ₃	TOTAL SUSPENDED SOLIDS	Total Dissolved SOLIDS					
Pre Mining Quality																
During Mining																
During Mining																
Post Mining Quality																

SAMPLE LOCATION	SAMPLE DATE	pH	TOTAL ACIDITY AS CaCO ₃	TOTAL ALKALINITY AS CaCO ₃	SPECIFIC CONDUCTANCE (MMHOS @ 25°C)	SULFATES	TOTAL IRON	MANGANESE	HARDNESS AS CaCO ₃	TOTAL SUSPENDED SOLIDS	TOTAL DISSOLVED SOLIDS					
Pre Mining Quality																
During Mining																
During Mining																
Post Mining Quality																

Permit Information			Acres Reviewed for Bond Release			Reclamation Achieved (Y/N)			
Permit#	Post Use ¹	Est. Acres Presently Disturbed/Unreclaimed (Open Acres)	Phase I	Phase II	Phase III	AOC ²	Land Capability ³	Hydrology ⁴	Contemporaneous ⁵
SM-84-325	2	0	46	29	29	Y	Y	Y	Y
SM-84-326	4	26	0	0	23	Y	N	Y	Y
SM-84-328	2, 5	4	0	24	0	Y	Y	Y	Y
SM-85-399	2	25	20	0	3	Y	Y	Y	Y
SM-87-410	2	0	0	0	34	Y	Y	Y	Y
SM-87-411	2, 5	37	0	13	10	Y	Y	N	Y
TOTAL		92	66	66	99				

Exhibit 3 - Reclamation Achievements

1. 1=commercial/industrial; 2=pasture; 3=wildlife; 4=forestry; 5=undeveloped; 6=recreational; 7=cropland
2. Approximate Original Contour: All highwalls and spoil piles eliminated; reclaimed area closely resembles general surface configuration and blends w/surrounding area and drainage pattern
3. Topsoil replaced, vegetation established, erosion controlled, post use achieved, vegetation successful
Surface and ground water quality/quantity restored, recharge capacity restored.
Meets requirements of COMAR 26.20.28.01 (i.e.; backfill/grade begun < 60 days of coal removal, completed < 1 year; open acres not beyond limit; backfill <1500 ft. of coal removal, planting first season following resoiling) See exhibit III
- 4 Assurance that surface and ground water quality and quantity, as well as the groundwater recharge capacity, was restored.
5. backfilling/grading beginning within 60 days of coal removal, proceeding within 1500 feet of coal removal, or three spoil ridges behind the open pit; completion of backfilling/grading within one year; open acres not beyond the bonded limit; planting within the first season following resoiling, etc., per COMAR 26.20.28.01.

Exhibit 4 - Bond Release Letter



MARYLAND DEPARTMENT OF THE ENVIRONMENT

2500 Broening Highway • Baltimore Maryland 21224
(410) 631-3000 • 1-800-633-6101 • <http://www.mde.state.md.us>

Parris N. Glendening
Governor

Jane T. Nishida
Secretary

**Water Management Administration
Bureau of Mines
160 South Water Street * Frostburg, Maryland 21532**

January 6, 2000

MEMORANDUM --- Reclamation Advisory

TO: All Coal Operators
FROM: Maryland Bureau of Mines
SUBJECT: Submittal of Bond Release Applications

Maryland regulations at COMAR 26.20.14.09A(1) require that applications for release of bond may be filed only at times or seasons that allow the Bureau to properly evaluate the reclamation operations presented in the applications. The regulation also requires the Bureau to identify the times or seasons when applications for bond release will be accepted for review. Section D of this regulation requires the Bureau to inspect and evaluate the reclamation work presented in the applications within 30 days after receiving a complete application or as soon after as weather permits.

In order to comply with the intent of the above regulatory requirements, the Bureau is identifying the times during the year when bond release applications will be accepted. The identification of these times is necessary to ensure that the reclamation phases applied for release in the applications can be inspected and evaluated within the required 30 days after receiving a complete application during times that allow for proper evaluation.

Therefore, beginning in calendar year 2000 the Bureau will only accept bond release applications from March 15 through September 15. Applications received after September 15 and prior to March 15 will be considered at the beginning of the next review period.

Exhibit 5 - Exception letter

**WATER MANAGEMENT ADMINISTRATION
BUREAU OF MINES**
160 South Water Street
Frostburg, Maryland 21532

September 21, 2000

MEMO

TO: Maryland Coal Operators with acres eligible for Phase II and III Revegetation Bond Release in Calendar Year 2000

FROM: Mark Carney

SUBJECT: Revegetation Bond Release – 2000

The enclosed report is the official notification by the Bureau of Mines for Phase II and III bond releases. All acres included in this report were eligible for revegetation bond release during 2000.

This report is self-explanatory. The reason(s) for disapproval are numbered with an attached page describing the number. The inspector will be contacting their assigned coal companies for the necessary remedial action, including a time frame, for all disapproved acres.

Please contact me at 301-689-6764, Extension 208, if you do not know the procedure for release of bond money or if you have any questions.

NOTE: Bond release applications must be submitted to the Bureau by October 17, 2000 to be eligible for bond release this fall.

Exhibit 6 - Reclamation Progress

PERMIT #	DATE INSPECTOR APPROVED BACKFILLING/ PLANTING REPORT	ACRES AFFECTED THIS REPORT	ACRES BACKFILLED & PLANTED THIS REPORT	CUMULATIVE PERCENT RECLAIMED (PHASE I)	CUMULATIVE ACRES REMAINING OPEN
SM-85-399	1/31/1991	27	3	11%	24
	11/19/1990	15	7	24%	32
	1/8/1993	8	1	22%	39
	3/9/1994	0	2	26%	37
	12/20/1994	0	1	28%	36
	9/28/2001	0	9	46%	27
SM-87-410	1/2/1990	23	9	39%	14
	12/22/1990	18	5	34%	27
		5	5	41%	27
	1/24/1995	10	10	52%	27
	11/15/1996	0	11	71%	16
	10/15/1997	0	15	98%	1
SM-87-411	1/17/1990	38	6	16%	32
	1/7/1991	14	3	17%	43
	3/31/1992	8	4	22%	47
	11/10/1993	2	14	44%	35
	1/5/1993	17	16	54%	36
	11/22/1995	0	5	61%	31
	11/16/1996	2	5	65%	28
	11/26/1997	3	3	67%	28
	10/30/1998	4	3	67%	29
	11/10/1999	2	10	77%	21
	11/8/2000	3	4	78%	20
	10/23/2001	3	3	79%	20
	1/11/2002	0	2.5	82%	17.5
TOTALS		202	156.5		
AVERAGE		8.08	6.26	77.5%	27.78

Exhibit 7 - Phase II Revegetation Bond Release

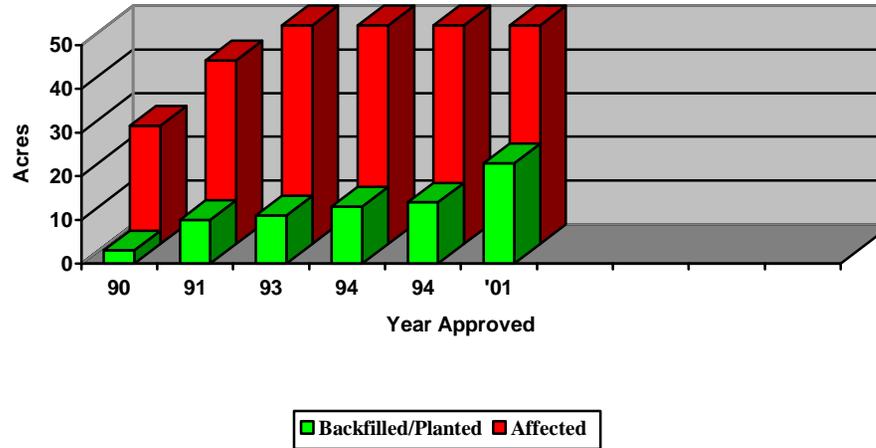
PERMIT NUMBER	ACRES APPROVED	ACRES DISAPPROVED	DATE PLANTING REPORT APPROVED	ELIGIBLE FOR RELEASE	DECISION DATE	DIFFERENCE - ELIGIBLE TO DECISION	REASONS FOR DISAPPROVAL
DM-80-109	3	0	Mar-00	Mar-02	Sep-02	6	
DM-92-110	9	0	Dec-00	Dec-02	Sep-02	-3	
SM-97-429	5	0	Nov-00	Nov-02	Sep-02	-2	
SM-84-372	2	0	Nov-00	Nov-02	Sep-02	-2	
SM-84-365	74	0	Jan-00	Jan-02	Jun-02	5	
SM-91-419	13	0	Jan-00	Jan-02	Jun-02	5	
SM-84-338	34	0	Jul-00	Jul-02	Jun-02	-1	
SM-91-420	4.5	0	Jun-00	Jun-02	Jun-02	0	
SM-95-424	2	0	Jun-00	Jun-02	Jun-02	0	
SM-97-429	30	0	Nov-99	Nov-02	Jun-02	-5	
SM-84-368	0	14	1-Jan	Jan-02	Sep-02	8	Rills
SM-84-367	0	23	Nov-00	Nov-02	Sep-02	-2	Trees
SM-84-365	0	4	1-Jan	Jan-02	Sep-02	8	rills
SM-84-273	0	18	Nov-00	Nov-02	Sep-02	-2	Barren/rills
SM-87-411	0	4	Nov-00	Nov-02	Sep-02	-2	Rills
SM-97-429	0	4	Oct-98	Oct-00	Jun-02	20	Barren/legume
SM-84-40	0	58	Sep-00	Sep-02	Jun-02	-3	Cover/barren
SM-83-385	0	25	Mar-00	Mar-02	Jun-02	3	Barren/rills
TOTALS	176.5	150					
AVERAGE APPROVAL TIME						0	

Exhibit 8 - Phase III Revegetation Bond Release

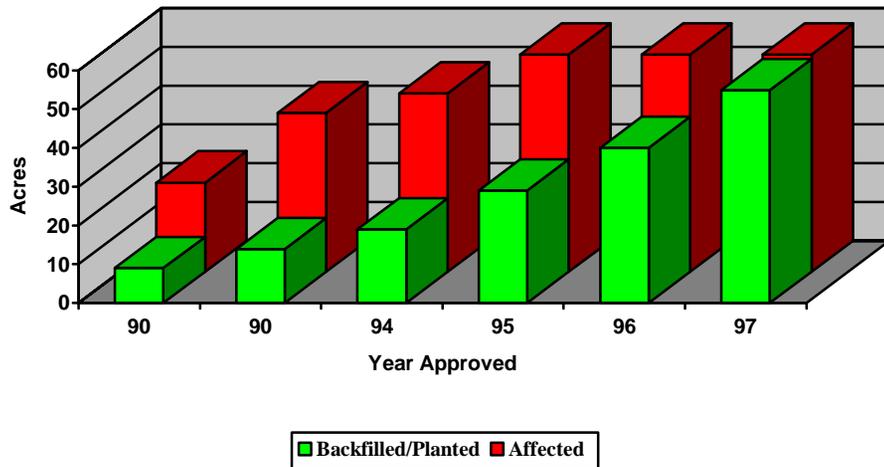
PERMIT NUMBER	ACRES APPROVED	ACRES DISAPPROVED	DATE PLANTING REPORT APPROVED	ELIGIBLE FOR RELEASE	DECISION DATE	DIFFERENCE - ELIGIBLE TO DECISION	REASONS FOR DISAPPROVAL
<i>SM-84-325</i>	25		Sep-97	Aug-02	Jun-02	-3	
<i>SM-84-338</i>	19		Jan-97	Dec-01	Jun-02	5	
<i>SM-84-365</i>	10		Aug-97	Jul-02	Jun-02	-2	
<i>SM-84-365</i>	5		Sep-97	Aug-02	Jun-02	-3	
<i>SM-91-419</i>	2		Sep-97	Aug-02	Jun-02	-3	
<i>SM-85-425</i>	4		Jan-97	Dec-01	Jun-02	5	
<i>SM-84-247</i>	15		Jan-97	Dec-01	Jun-02	5	
<i>SM-84-213</i>	6		Oct-97	Sep-02	Sep-02	-1	
<i>SM-84-315</i>	10		Oct-97	Sep-02	Sep-02	-1	
<i>SM-84-328</i>	2		Nov-97	Oct-02	Sep-02	-2	
<i>SM-87-411</i>	3		Nov-97	Oct-02	Sep-02	-2	
<i>SM-83-393</i>	5		Dec-97	Nov-02	Sep-02	-3	
<i>SM-84-264</i>	3		Jan-98	Dec-02	Sep-02	-4	
<i>SM-95-425</i>	13		Mar-98	Feb-03	Sep-02	-6	
<i>SM-87-410</i>	15		Oct-97	Sep-02	Sep-02	-1	
<i>SM-84-338</i>		10	Jan-98	Dec-02	Sep-02	-4	Cover/Barren
<i>SM-84-207</i>		17	Jan-98	Dec-02	Sep-02	-4	Rills
<i>SM-84-375</i>		5	Oct-97	Sep-02	Sep-02	-1	Cover/Barren
<i>SM-92-421</i>		7	Aug-97	Jul-02	Jun-02	-2	Cover/Barren
TOTALS	137	39					
AVERAGE APPROVAL TIME						-1	

Exhibit 9 - Contemporaneous Reclamation

Permit #SM-85-399



Permit #SM-87-410



Permit #SM-87-411

