

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration • Mining Program

P.O. Box 1417 • Baltimore, Maryland 21203-2057

410-537-3557 • 800-633-6101 x3557 • www.mde.state.md.us

APPLICATION FOR A PERMIT TO SURFACE MINE

This application can be used to obtain an original permit or to modify an existing permit.

Submitted pursuant to

Title 15, Subtitle 8, of the Environment Article

Annotated Code of Maryland

***This application is available as a Microsoft Word document online at
http://www.mde.state.md.us/Permits/WasteManagementPermits/wasteWater_app/index.asp#mining**

GENERAL INFORMATION

Read the instructions thoroughly before completing

1. **The Written Submittal** (Attached herein)
 - a) Application for Permit to Surface Mine
 - b) Mining and Reclamation Plan
 - c) Filing Fees

All documents, maps, and materials submitted should have the name and address of the applicant and the date placed on the front of the material for identification.

All acreage to be mined or used in conjunction with mining must be included in the application or be covered under an existing Permit to Surface Mine.

All questions must be answered. If a question does not apply, indicate this by "N.A." (not applicable). If additional space is needed to answer a question, use a plain sheet of paper and attach to the application.

- 2) **Maps and Drawings** (Instructions attached herein)
- 3) **Right of Entry Agreement** (Separate form)
- 4) **Performance Bond**

Before the permit may be granted and prior to commencing mining, a performance bond payable to Maryland Department of the Environment must be filed with the Administration in the amount of \$1,250 per acre.
- 5) The application should be completed by the person, or his authorized representative, making application to the Department for a mining permit. A surface mine permit may only be issued to a person holding a valid surface mine license. The person or authorized representative of the licensed operator who submits items 1 through 4 accepts responsibility for conducting the operation in accordance with the approved Mining and Reclamation Plan and maps, and of satisfying the conditions of the permit.
- 6) A public hearing may be required. In cases where a public hearing is required applicant will be billed for the cost of advertising the announcement in a local newspaper.
- 7) Filing fees as outlined on page 7 should be paid by check or money order made payable to the Maryland Department of the Environment. Send all payments to the following address: Department of the Environment, P. O. Box 1417, Baltimore, MD 21203-2057. Refunds of fees will not be made if the application is refused or denied.

INSTRUCTIONS FOR COMPLETING PERMIT TO SURFACE MINE APPLICATION

Check the appropriate box if the application is an original or modification,

- Items 1 & 3 Applicant's name and address shall be the same as that provided on the **Application for License to Surface Mine** and should be the same as the current permit.
- Item 2 List the number on the operator's/applicant's current License to Surface Mine.
- Item 4 Provide a business telephone number & business fax number.
- Item 5 Provide workers compensation number
- Item 6 Provide the commonly used name of the operation. For example: #1 pit or Smith Tract. This will help when an applicant is working more than one site.
- Item 7 a. County in which operation is located
 b. Describe the location by giving accurate travel directions from the nearest town. For example 2.8 miles South of Norrisville on Norrisville Road, 1.2 miles East on Harkins Road.
- Item 8 List the name and address of each of the owners of the land for which a permit is requested. If the applicant is the sole landowner, designate by "applicant".
- Item 9 List the name and address for those persons who own the mineral rights associated with the operation. If the applicant holds the mineral rights designate by "applicant".
- Item 10 Provide an email address (If applicable)
- Item 11 Provide the commercial name of all products being mined. For instance; glass sand, brick clay, ceramic clay, etc. Also, give a geologic description of the mineral being mined, if known.
- Item 12 Provide the starting date, or the anticipated starting date of the mining operation. Because the probable closure date is affected by many variables, an estimated date may be given.
- Item 13 Indicate the total acreage of the operation for which application is being made. The total acreage is to include any area affected by mining, which includes pit, haul and access roads, sediment controls, overburden and topsoil stockpiles, etc.

The rest of the application is self-explanatory.

The submitted form must have an original signature, not a photocopy.

INSTRUCTIONS FOR PREPARATION OF THE MAP ACCOMPANYING THE MINING AND RECLAMATION PLAN

Accompanying the mining and reclamation plan shall be an accurately surveyed topographic map on a scale no smaller than 1"=200' with existing and proposed contour interval appropriate for the area and at least two representative cross-sections. The surveyed topographic map and cross-sections shall be prepared, certified, and sealed by a Professional Engineer or Land Surveyor registered in the State of Maryland.

A. The map shall show the following:

- 1) Vicinity Map of the tract of land to be affected
- 2) Property Lines
- 3) Drainage area of flowing streams above and below the affected areas. (Can be in statement form)
- 4) Delineate known Tidal and Non-Tidal wetlands, Critical Areas, and the One Hundred Year Floodplain of Non-Tidal Streams on-site and within 200 feet of the affected area
- 5) Where appropriate, delineate a proposed blasting limit line. This line should represent the area within which all blasting is to occur beyond the surface mining permit area.
- 6) Show the location, names, and addresses of:
 - a) All occupied dwellings, schools, churches, hospitals, and nursing facilities within **1,000 feet** of the blasting limit line
 - b) All disposal wells, petroleum or gas storage facilities, public water wells or water storage facilities, fluid transmission lines, sewer lines, and underground /deep mines within **500 feet** of the blasting limit line.
 - c) All public roads, streams, railroads, utility lines that are on or immediately adjacent (within **200 feet**) to the affected areas.
- 7) Location map showing all buildings or structures within 1,000 feet of the outer perimeter of the affected areas. Include the names and addresses of owners and the use of each building. This map may be at a scale smaller than 1" = 200' but not less than 1" = 400'.
- 8) Name of landowner of affected area
- 9) **Signed** Landowner certification and/or Owner/Operator certification
- 10) Names of adjoining landowners
- 11) Municipality or district and county
- 12) Location of test borings or test pits, outcrop line(s) for each geological formation.

13) Outline and designation of:

- a) Affected area;
- b) Topsoil, subsoil and storage areas;
- c) Stockpiles, processing plants
- d) Tailings and settling ponds
- e) Disposal areas
- f) Reclamation areas
- g) Areas to be mined at a future date
- h) Haul roads
- i) Existing disturbance on-site where appropriate
- j) Blasting limit line

14) North arrow

15) Sediment Control Devices

16) Sediment Control Details (standard drawing),

17) Soil Conservation District approval. (Not necessary for initial review. Must be on final plans submitted for approval).

B. The cross-sections shall show the following

- 1) Location of test borings and sites of test samples,
- 2) Nature and depth of various strata,
- 3) Thickness of mineral seam,
- 4) Analysis of mineral deposit or ore,
- 5) Thickness of topsoil and overburden, and any analysis of material,
- 6) Existing grade, proposed mining depth, and reclamation grades and slopes

C. All maps submitted shall utilize the following uniform color code and map symbols.

- 1) The perimeter of the proposed permit area shall be designated by a **solid black/dark line**
- 2) The area proposed in a permit modification shall have its perimeter designated by a **broken black line or other distinguishing line**. The perimeter of the original permit area shall be designated by a **solid black/dark line**
- 3) Arrows shall be used to show the beginning point, direction, and end point of the mining operation.
- 4) Use the standard symbols and standard drawings for sediment control devices as shown in the "Maryland Standards and Specifications for Soil Erosion and Sediment Control" manual.

D. If proposed mining area is in karst terrain and located in Baltimore, Carroll, Frederick, or Washington counties, a proposed zone of influence and supporting documentation must be shown.

Fee Schedule

Application & Recording Fees – **Source Code 5671 - PCA - 13743**
Special Reclamation Fund Fees- **Source Code 5671 – PCA - 13750**

Check category (ies) on page for which application is made, fill in the blanks, and remit necessary fees.

ORIGINAL APPLICATION **Amount Remitted**

1) New Acreage Fee \$ 18.50 x _____ acres (\$3,000 Maximum)	_____
2) Special Reclamation Fund Fee: \$30 x _____ acres	+ _____
3) Right of Entry Agreement Recording Fee: \$60.50	+ _____
TOTAL= \$ _____	

MODIFICATION APPLICATION- NO ADDITIONAL ACREAGE

1) Modification Fee: \$ 150.00	TOTAL = \$ _____
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MODIFICATION APPLICATION- ADDING NEW ACREAGE

1) Modification Fee: \$ 150.00	_____
2) New Acreage: \$ 18.50 x _____ new acres (\$3,000 Maximum)	+ _____
3) Reclamation Fee: \$ 30.00 x _____ new acres	+ _____
4) New Right of Entry Agreement Recording Fee: \$60.50	+ _____
TOTAL \$ _____	

TOTAL REMITTED= \$ _____

☐ Original Permit ☐ Permit Modification

Permit No. _____-SP-_____

**APPLICATION AND MINING AND RECLAMATION PLAN
FOR SURFACE MINING PERMIT**

I. GENERAL INFORMATION AND FEES

1. Name of applicant:

2. Current License Number: _____-SL-_____

3. Business Mailing Address:

4. Business Telephone Number: _____-_____-_____

Business Fax Number: _____-_____-_____

5. Workers Compensation Insurance Number: _____

6. Name of Operation: (for example #1 pit or Smith Tract)

7. Location of Operation

a. County:

b. Travel Directions:

8. Name and address of surface land owner (s)

9. Name and address of mineral owner(s)

10. Email address: _____

Consultant Email: _____

11. Commercial name of mined products and geological description of the mineral deposit:

12. Starting date of mining operation: _____ Estimated closure date: _____

13. a) Acreage applied for in this application: _____

b) Total acreage currently permitted: _____

Complete item 14 only if applying for a permit modification

14. Reason for requesting modifications

- | | |
|--|--|
| <input type="checkbox"/> Change in planned land use | <input type="checkbox"/> Increased Land Area |
| <input type="checkbox"/> Change in schedule of reclamation | <input type="checkbox"/> Decreased land area |
| <input type="checkbox"/> Change in reclamation practices | <input type="checkbox"/> Other |

Describe Reasons:

II. SITE INFORMATION

15) Present land use (s) of the affected acreage (check all that apply):

- ☐ Agriculture ☐ Pasture ☐ Forest ☐ Crops ☐ Mining
- ☐ Other (describe): _____

16) Existing land use (s) of all adjacent properties including any significant natural or man-made features
(Check all that apply)

- ☐ Agriculture ☐ Pasture ☐ Crops ☐ Mining ☐ Undeveloped Land
- ☐ Forested Acres: _____ ☐ Wetland Acres
- ☐ Other (describe): _____

17) Proposed use(s) of the affected acreage following completion of mining
(Check all that apply)

- ☐ Vegetated Open Space ☐ Agriculture ☐ Forestry
- ☐ Permanent Impoundment with Vegetated Side Slopes

☐ Other: Describe thoroughly:

18) a) What is the existing zoning for the site?

b) Is mineral extraction an accepted land use for this zoning classification?

☐ Yes

☐ No

c) Have all zoning approvals been obtained? ☐ Yes

☐ No

If No please explain:

19) Do the future intended uses given in question 17 comply with the present zoning?

☐ Yes

☐ No

If no Please explain:

20) Is the proposed mining site located in or within 200 feet of:

(a) The Critical Area

☐ Yes

☐ No

(b) Tidal Wetlands

☐ Yes

☐ No

(c) Nontidal wetlands

☐ Yes

☐ No

(d) The 100 year floodplain of nontidal streams

☐ Yes

☐ No

Will the proposed mining operation:

(e) Require the pumping of ground water or surface water?

☐ Yes

☐ No

If yes to any of the above other permits may be required

21) List all permits and approvals required by State and local regulatory agencies with regard to air and water pollution, sediment control and zoning. Also **SUBMIT COPY** of sediment and erosion control plans and permits approved by the local Soil Conservation District and **written confirmation** of appropriate zoning.

Permit or Approval

Permit number Date issued

Expiration
Date

- a. Soil Conservation District
- b. Zoning
- c. Water Appropriation Permit
- d. Wetlands/ Waterway Construction Permit
- e. NPDES Discharge Permit
- f. Other permits

22) Is there/ will there be any processing equipment or plants constructed within the permit area?

☐Yes ☐No

If Yes, explain the type and approximate location:

23) Will a wash plant and/or wash water settling pond(s) be included in the permit area?

☐Yes ☐No

Note: If Yes, pond approval for all wash water ponds must be obtained before this permit is issued

If Yes, provide the following information for each impoundment:

- a) What is the drainage area contributing to each impoundment?
- b) Will the impoundment(s) be dugout or embankment type, or a combination of the two?
- c) What are the elevations of the principle spillway(s) and emergency spillway(s)
Principle Spillway: _____
Emergency Spillway: _____
- d) What will the surface area, minimum and maximum depths of each impoundment be?

Surface Area: _____
Minimum Depth: _____
Maximum Depth: _____
- e) State the proposed water surface elevation, and how this elevation was determined.

- f) Indicate the source of make-up water to the plant:
- g) Indicate the clean out elevation of the pond(s).
- h) Where and how will the fines be disposed of?
- i) Will the pond(s) remain at the completion of mining? If not how will they be reclaimed?

III. Site Preparation

24) Describe procedures for providing access to the mining area. Include length, width, construction materials, maintenance, etc. of entrance roads and haul roads.

- a) Indicate method(s) by which mud and dust will be controlled on haul and access roads:

☐ Water Truck ☐ Spray Bar ☐ Power Broom & Scraper

☐ Other: _____

Note: Mud or dust tracked onto public roads shall only be cleared by broom or scraper. The material removed from the public roads shall be returned to the active pit. No material shall be washed from the public roads unless it is directed to an approved sediment control device.

- b) Indicate the methods for removal and disposal of trees and brush (check all that apply)

☐ Taken to a MDE approved disposal site

☐ Wind-rowed on-site within the permit boundary

☐ Burned, after obtaining proper burning permits.

☐ Other, describe: _____

- c) State the number of acres cleared, grubbed and stripped of topsoil and overburden ahead of mining:

d) State the thickness (inches or feet) of topsoil/subsoil on site:

e) State the amount of topsoil (in cubic yards) to be conserved for reclamation and to be used in construction of visual/acoustical berms:

f) Describe method of removal and storage location of the topsoil/subsoil on site. If there is little or no topsoil onsite, describe the alternative measures that will be used in lieu of topsoil during reclamation to provide a suitable growing medium.

g) State the thickness (inches or feet) of overburden on-site:

State the amount (in cubic yards) to be conserved for reclamation and used in visual/acoustical screening berms:

Briefly describe the material:

Describe method of removal and storage of overburden on-site:

25) Describe how the mining operation will be screened from public view:

a) Will visual screening berms be constructed? ☐Yes ☐NO

If yes, provide the following information

Berm Dimensions:

Top Width: _____ Side Slope: _____ Height: _____

Approximate Location:

Sequence of Construction:

b) Buffer strip(s) - state width, whether there is existing vegetation or if additional vegetation will be planted.

c) Other methods of screening:

26) Describe the methods proposed for protection of adjacent properties, including waters of the State, from runoff, sediment, and other conditions that would be hazardous to fish, plant, or animal life.

27) Describe provisions for public safety and to adjoining property as mining progresses and how the site will be left at the end of each working day.

a) Provisions to prevent slumps, cave-offs, or landslides:

b) Provisions to provide safety around the upper perimeter of all excavations or highwalls (i.e. fencing, warning signs, safety benches, etc.)

c) Provisions to provide safety if site will have impounded water during mining.

IV. Mining Method

28) Indicate the type(s) of mining equipment to be used:

☐ Dredge

☐ Bulldozer

☐ Power Shovel

☐ Conveyor Belt

☐ Hydraulic excavator

☐ Explosives

☐ Self-loading pan

☐ "Off road" trucks

☐ Conventional Trucks

☐ Front-end loader

☐ Dragline

☐ Pipeline

☐ Other (specify): _____

29) Fully describe the mining operation. At a minimum the following must be addressed.

- Site preparation- to include clearing and sediment control installation.

- Mining Sequence- If phased provide sequence for each phase including reclamation.
- Estimated mining depth and proposed mining method- Include number of benches and their dimensions for quarries.
- What are the potential impacts to surrounding water supplies?
- Number of Acres proposed to be open, include mining, stripping, overburden storage, support and acres under active reclamation.
- How and when will reclamation be completed?
- Estimated cost per acre for reclamation in the active mining area (for unconsolidated material sites only).

V. RECLAMATION PLAN

30) a) Describe how the surface gradient will be restored to a surface suitable for the proposed land use after reclamation. Include specifications on the gradient as well as maximum and minimum final slopes.

b) Will final slopes (including highwalls) be constructed during mining or backfilled to proposed grades?

c) If backfilled, describe material:

d) State source(s) of backfill material:

e) If back fill will be brought in from off-site, briefly describe the material, only clean fill may be authorized. (Note: Final grades of a site after reclamation may not exceed approximate pre-mining contours at the site except where post mining land use requires minimal variation and is approved by the Department.)

31) How will highwalls remaining at the end of the mining operations be eliminated?

32) If a highwall can not be eliminated please complete the following:

a) What height and width will final highwalls be?

b) State practices to be used to stabilize remaining highwalls:

c) What provisions will be made to restrict access to highwalls (i.e., fencing, safety bench, etc.)

d) What is the proposed source and elevation and final water elevation?

e) What provisions will be made if mining is not carried out to completion?

33) Will there be any metal or lumber, debris, old equipment, etc. left after completion of mining?

☐ Yes

☐ NO

a) If yes, specify the intended use or method disposal.

b) How will boulders and large rocks be disposed of after mining?

c) Will any permanent buildings be left following completion of the operation? If yes, list and give intended use for such buildings.

34) Manner and type of revegetation or other surface treatment of the affected areas. **Must specify both cool and hot weather seed mixes. Refer to the “Maryland Standards & Specifications for Soil and Erosion Control”**

a) Hot Weather Mix

1. Grasses (specify species)	Pounds/Acre
_____	_____
_____	_____
2. Legumes (specify species)	Pounds/Acre
_____	_____
_____	_____
3. Nurse Crop (fast growing annual grass or grain)	Pounds/Acre
_____	_____
_____	_____

b) Cool Weather Mix

1. Grasses (specify species)	Pounds/Acre
_____	_____
_____	_____
2. Legumes (specify species)	Pounds/Acre
_____	_____
_____	_____
3. Nurse Crop (fast growing annual grass or grain)	Pounds/Acre
_____	_____
_____	_____

c) Trees/vegetative fencing. Provide location and planting schedule.

Species	Spacing	Acreage of Area Planted
_____	_____	_____

d) Amount of lime, fertilizer, and mulch to be applied. _____

e) Will sludge be applied? ☐ Yes ☐ No

If yes, have all appropriate approvals been obtained? _____

35) Describe the method of reclaiming settling ponds, wash ponds, sediment basins, and sediment traps.
NOTE: Sediment Control Structures (basins, traps, etc.) can be removed [by the operator] upon approval from the Maryland Department of the Environment.

36) Will any stream channels or stream banks be disturbed by the mining operation?
☐ Yes ☐ No

If yes please provide Wetlands & Waterways Construction permit number:

37) Will permanent impoundments (ponds, lakes, sediment basins, etc.) be included in the final land form? ☐Yes ☐No

NOTE: IF yes, pond approval must be obtained prior to bond release

If Yes, provide the following information for each impoundment.

- a) What is the drainage contributing to each impoundment?
- b) Will the impoundment(s) be dugout type or dam, or a combination of the two?
- c) What are the elevations of the principle spillway(s) and emergency spillway(s)?
- d) What will the surface area, minimum and maximum depths of each impoundment be?
- e) State the proposed water surface elevation, and how this elevation was determined.
- f) Indicate the major contributing source of water for each impoundment described above:
☐Groundwater ☐Surface Water
- g) How will contamination of water in the permanent impoundment be prevented?
- h) How long will it take the quarry or impoundment to fill with water to the proposed elevation?

38) For operations in karst terrain located in Baltimore, Carroll, Frederick or Washington Counties, provide an analysis of the expected impact to water supplies and properties in the area.

39) Complete Table 1. - For each item listed, fill in the number of acres and the expected starting date of construction for that item and date when that item is expected to be removed or reclaimed.

TABLE I SCHEDULE FOR COMPLETION OF MINING AND RECLAMATION					
Identification of How Lands Are To Be Affected	Number of Acres Within the Permitted Area	Expected Mining Dates Month/ Year		Expected Reclamation Date Month/ Year	
		Construction Date	Removal Date	Date to Begin	Date to Complete
Active Pit					
Haul Roads					
Topsoil Stockpile Areas					
Sediment Control Structures					
Office – Shop					
Plant Site					
Equipment Storage					
Waterways					

Overburden Stockpile Areas					
Refuse – Debris Storage					
Other (Specify)					
Total Acres (Must equal size of permit)					

VI. BLASTING PROCEDURE:

(Section IV is only to be completed for sites that require the use of explosives)

40) Describe the basic elements of the production blasting procedure to be utilized at this site.

a) Blast hole diameter:

b) Bench Height:

c) Stemming Height:

d) Burden:

e) Spacing:

f) Stemming Type:

41) State the average number of holes and rows in a typical blast and the average amount of explosive used per delay.

42) How often will blasting occur for:

Production:

Toe Shots:

Strip Shots:

How are oversize boulders handled?

Note: A written log must be maintained by the driller and presented to the blaster in charge prior to loading any holes.

43) Describe how the blasts will be monitored for air blast and ground vibration.

44) Will there be any blasting conducted within:

a) 1,000 feet of (check all that apply)

☐ Church

☐ Occupied dwelling

☐ Hospital

☐ School

☐ Nursing facility

☐ N/A

b) 100 feet of (check all that apply)

☐ Public Road

☐ Property Line

☐ N/A

c) 500 feet of (check all that apply)

☐ Disposal well

☐ Petroleum or gas storage facility

☐ Public water well or
Water storage facility

☐ Fluid transmission lines

☐ Sewer Line

☐ Underground/deep mine

☐ N/A

I hereby certify that all information contained in the Application and Mining and Reclamation Plan is true and correct to the best of my knowledge and that any willful misrepresentation of facts will be a violation of Title 15, Subtitle 808 of the Environment Article, Annotated Code of Maryland, as amended and may be cause for penalty provided in the aforesaid section.

By submission of this application I hereby accept the responsibility of conducting the operation in accordance with the approved Mining and Reclamation Plan and maps, the conditions of the permit, and any applicable law and regulations.

Typewritten Name and Title

Original Signature

Date