#### A. Description:

The approval herein granted is limited to the beneficial use of dewatered freshwater dredged material, hereinafter referred to as "dredged material" as a soil additive or soil substitute for mine reclamation projects.

#### **B.** Determination of Applicability Requirements:

A person or municipality that proposes to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a "Determination of Applicability" ("DOA") from the appropriate Department Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed (i) General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application), (ii) Form B (Professional Certification), (iii) Form 20 (Application for a Municipal or Residual Waste General Permit), (iv) Form 27R (Acceptance of General Permit Conditions), and (vi) a DOA application fee in the amount identified in Section A (General Information) of the Form 20 must be submitted to the appropriate Department Regional Office. A check shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by the Department.

#### **C. Operating Conditions:**

- 1. Prior to the first beneficial use of dredged material, and every 10,000 cubic yards thereafter of dredged material from the same source, the dredged material may be beneficially used provided the chemical analysis for "Total" and "Leachable" levels of dredged material do not exceed the concentration limit, for any constituent, listed in Tables 1 through 5 below.
  - a. After the chemical analysis of dredged material, from a source, has been conducted at this frequency for five sampling events and the results are consistent and meet the concentration limit specified in Tables 1 through 5 in Condition C.1, the frequency of sampling may be reduced by the permittee provided that:
    - i. The permittee submits a written request for a reduction in sampling frequency to the Department, and
    - ii. The Department approves the request, in writing.

Parameter	Total Level (mg/kg)	Leachate Level (mg/L)*
рН	5.5 to 9.5 (std unit)	-
Antimony	88	0.15
Arsenic	29	0.25
Barium	15,000	50.0
Beryllium	440	0.1
Cadmium	47	0.125
Chromium – Total		2.5
Hexavalent	50	
Trivalent	1200	
Chloride		250
Cobalt	4400	17.5
Copper	1500	25
Cyanide, Free	4400	0.2
Lead	500	0.375
Mercury	66	0.05
Nickel	420	2.5
Selenium	1100	1.0
Silver	1100	2.5
Sulfate		500
Thallium	15	0.0125
Zinc	2800	50

#### <u>Table 1</u> Inorganic Compounds

Parameter	Total Level (mg/kg)	Leachate Level (mg/L)*
Benzene	41	0.005
Carbon Tetrachloride	21	0.005
Chlorobenzene	490	0.1
Chloroform	6	0.1
1,2-Dichloroethane	12	0.005
1,1-Dichloroethene	200	0.027
Tetrachloroethene	240	0.005
Trichloroethene	190	0.005
Vinyl Chloride	12	0.002

Table 2Volatile Organic Compounds

<u>Table 3</u> Polychlorinated Biphenyls (PCBs)

Parameter	Total Level (mg/kg)	Leachate Level (mg/L)*
Total PCBs	2.0	0.005

Parameter	Total Level (mg/kg)	Leachate Level (mg/L)*
Aldrin	220	0.0035
alpha-BHC	2.8	5.56 x 10 <sup>-6</sup>
beta-BHC	1.3	0.00037
delta-BHC	77	0.022
gamma-BHC (Lindane)	14	0.0002
Chlordane	28	0.002
4,4-DDD	36	<b>1.46</b> x 10 <sup>-4</sup>
4,4-DDE	18	1.03 x 10 <sup>-4</sup>
4,4-DDT	7.1	1.03 x 10 <sup>-4</sup>
Dieldrin	1.1	4.1 x 10 <sup>-5</sup>
Endosulfan I	5.3	0.22
Endosulfan II	5.4	0.21
Ensulfan sulfate	1.5	0.12
Endrin	13	0.002
Heptachlor	4	0.0004
Heptachlor epoxide	2	0.0002
Methoxychlor	15	0.0004
Toxaphene	16	0.002
2,4-D	200	0.07
2,4,5-TP (Silvex)	1200	0.05

# Table 4Pesticides and Herbicides

Parameter	Total Level (mg/kg)	Leachate Level (mg/L)*
Acenaphthene	94	2.1
Acenaphthylene	360	2.2
Anthracene	7.3	0.066
Benzidine	0.078	$1.52 \times 10^{-7}$
Benzo (a) anthracene	20	0.0009
Benzo (a) pyrene	2.5	0.0002
Benzo (b) fluoranthene	3.7	0.0009
Benzo (b,h,i) perylene	3.9	0.00026
Benzo (k) fluoranthene	13	0.00055
Bis (2-ethylhexyl)phthalate	130	0.006
Butylbenzylphthalate	460	2.7
4-Chloroaniline	880	0.14
Bis (2-chloroethyl) ether	0.96	3.18 x 10 <sup>-5</sup>
Bis (2-chloroisopropyl) ether	32	0.3
2-Chloronaphthalene	500	2.8
2-Chlorophenol	330	0.04
Chrysene	5.1	0.0019
Di-n-butylphthalate	3200	3.5
Di-n-octylphthalate	130	0.006
Dibenz (a,h) anthracene	2.5	0.00009
Dibenzofuran	95	
1,2 Dichlorobenzene	260	0.6
1,4 Dichlorobenzene	210	0.075
3,3 Dichlorobenzidine	40	7.78 x 10 <sup>-5</sup>
2,4-Dichlorophenol	660	0.005
Diethylphthalate	440	5.0
2,4-Dimethylphenol	440	0.73
2,4-Dinitrophenol	22	0.019
2,4-Dinitrotoluene	58	0.0021
Fluoranthene	65	0.26
Fluorene	76	1.4
Hexachlorobenzene	0.15	0.001
Hexachlorocyclopentadiene	66	0.05
Hexachloroethane	220	0.001
Indeno (1,2,3-cd) pyrene	25	0.0009

#### <u>Table 5</u> Semi-Volatile Organic Compounds

Parameter	Total Level (mg/kg)	Leachate Level (mg/L) <sup>*</sup>
Isophorone	1900	0.1
2-Methylnaphthalene	2000	0.73
N-Nitrosos-di-n-propylamine	2.6	5.0 x 10 <sup>-6</sup>
N-Nitrosodiphenylamine	100	0.00714
Naphthalene	140	0.1
Nitrobenzene	110	0.018
4-Nitrophenol	1800	0.06
Pentachlorophenol	150	0.001
Phenanthrene	210	1.1
Phenol	9300	4
Pyrene	46	0.13
1,2,4-Trichlorobenzene	340	0.07
2,4,6-Trichlorophenol	66	0.00318
2,4,5-Trichlorophenol	12,000	3.5

#### <u>Table 5</u> Semi-Volatile Organic Compounds

Leachability evaluations shall be conducted on a representative sample conducted using the Toxicity Characteristic Leaching Procedure (EPA Method 1311) or the Synthetic Precipitation Leaching Procedure (EPA Method 1312). The maximum leachable concentration may also be calculated using the 20:1 rule (see EPA Method 1311) in lieu of performing TCLP or SPLP analysis. If the maximum leachable concentration is greater than the General Permit leachate criterion for a specific constituent(s), then TCLP or SPLP analysis shall be performed to determine actual leachate levels for those constituent(s).

The determination of compliance with Tables 1 through 5 may be based on the 90 percent upper confidence level for each constituent or the 80 percent confidence interval for pH using the Test Methods for Evaluating Solid Waste (EPA SW-846) as guidance for the statistical treatment of data.

- 2. The dredged material approved under this general permit is <u>not</u> authorized for the following activities:
  - a. The creation or restoration of a wetland, aquatic or island habitat unless an approval, a permit or other applicable requirement, if appropriate, under Section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. §1341 (a)) and/or the Dam Safety

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and Encroachments Act (32 P.S. §§693.1 – 693.27) is obtained or met.

- b. For residential use, sold, given away or otherwise distributed. After the chemical analyses of dredged material, from the same source, have been conducted for 15 to 20 sampling events and have met the concentration limits specified in Condition C.1 of the general permit, the Department may authorize dredged material to be sold, given away or distributed for beneficial use applications in residential areas if a written request for the beneficial use in residential areas is submitted by the permittee. A written approval from the Department must be obtained prior to commencing the beneficial use applications in residential areas.
- 3. The dredged material that does not meet the requirements as specified in Condition C.1 of this general permit shall be managed properly at a permitted disposal facility or may be beneficially used at locations outside the Commonwealth provided the dredged material is authorized for beneficial use by the State approving authority.
- 4. In compliance with the requirements specified in Condition C.1 of this general permit, the dredged material shall be monitored as follows:
  - a. The permittee shall collect representative samples of the dredged material and analyze for the total (mg/kg) and leachable (mg/L) levels for each constituent listed in Tables 1 through 5 of Condition C.1 of this general permit.

To obtain a representative sample of the dredge material, the samples must be taken from the correct locations and represent the entire amount of dredged material. In the batch process, more than one sample is usually necessary to accurately represent a particular batch of the dredged material or a storage pile of dredged material.

The key is to obtain a representative sample. In general, the more samples taken, the greater the chance that the sampling results will be representative of the dredged material and because the pollutant limits pertain to the quality of the dredged material that will be beneficially used, samples must be collected after the final stage of the dredged material generation process and prior to storage. Should knowledge of the dredged material, visual observations, or analytical results indicate variability in the quality of the dredged material, more frequent testing shall be conducted.

b. For each new source of dredged material other than from the sources described in the application intended for beneficial use, the permittee shall submit an analysis of representative samples of the dredged material to the Department Regional Office (see attached list), by certified mail for all parameters listed in Tables 1 through 5 of

Condition C.1 no less than 15 working days prior to acceptance and beneficial use of the dredged material. The permittee may beneficially use the dredged material in accordance with the conditions of this permit after the aforementioned fifteen-day period unless otherwise instructed by the Department.

- c. The chemical analysis required in this Condition shall be performed by a laboratory accreditated or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act, 27 Pa. C.S.A. § § 4101-4113.
- 5. All activities conducted under the authorization granted in this general permit shall be conducted in accordance with the permittee's application. Except to the extent the permit states otherwise, the permittee shall utilize the dredged material as described in the permit application.
- 6. Persons processing, storing and/or using the dredged material for beneficial use purposes must comply with the following requirements:

#### **USE RESTRICTIONS:**

- a. The dredged material being used as an ingredient in roadway construction material shall not be used as a valley fill material, to fill open pits from coal mining; or to level an area or bring an area to grade where roadway construction activity is not completed promptly after the placement of the solid waste. The dredged material is not to be used in any construction activity within 300 feet of a private or public watersource.
- b. The dredged material may be used as stream bank stabilization or scour protection, as long as the dredged material is contained within or held in place by geosynthetic fabric, provided that an approval, a permit or any other applicable requirement, if appropriate, under Section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. §1341 (a)) and/or the Dam Safety and Encroachments Act (32 P.S. §§693.1 693.27) is obtained or met.
- c. The dredged material shall not be used in the creation or restoration of a wetland, aquatic or island habitat unless an approval, a permit or other applicable requirement, if appropriate, under Section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. §1341 (a)) and/or the Dam Safety and Encroachments Act (32 P.S. §§693.1 693.27) is obtained or met.
- d. Runoff from the dredged material storage area(s) shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.

- e. Upon completion of beneficial use activities or by the expiration date of this permit, unless extended by the Department, the permittee shall remove any remaining stored dredged material and manage the dredged material in accordance with the Solid Waste Management Act, the environmental protection acts and the regulations promulgated thereunder.
- f. Dredged material shall be stored as follows:
  - i. The dredged material must not be accumulated before being beneficially used unless the operator shows that the dredged material is potentially reusable and has a feasible means of being beneficially used; and
  - ii. During two consecutive construction seasons (commencing on April 1), the amount of dredged material that is beneficially used equals at least 75% by weight or volume of the dredged material accumulated at the beginning of the period.
- g. The dredged material approved under this general permit is <u>not</u> authorized for the creation or restoration of a wetland, aquatic or island habitat unless an approval, a permit or other applicable requirement, if appropriate, under Section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. §1341 (a)) and/or the Dam Safety and Encroachments Act (32 P.S. §§693.1 693.27) is obtained or met.
- 7. In Condition C.6 (Use Restrictions) of this general permit apply to all persons that propose to beneficially use the dredged material. The Conditions C.4 and C.5 also apply to: (1) any permittee who obtains a Determination of Applicability to conduct activities authorized by this permit, and (2) all subsequent end-users of the dredged material.
- 8. The processing, storage and transportation of dredged material shall be in a manner which does not create a nuisance or is harmful to the public health, safety or the environment and shall comply with the requirements of 25 Pa Code, Chapter 299 (relating to storage and transportation of residual waste).
- 9. Equipment used for the processing, storage and transportation of the dredged material shall be maintained in good operating condition. Weekly inspections of each storage area and its surrounding environments are to be conducted to determine stability, and for evidence of failure.

- 10. Any emissions, including dust from the dredge material or any of its components before placement, shall be managed in accordance with the Air Pollution Control Act and the regulations promulgated thereunder, including Chapter 123 (relating to standards for contaminants) and §§ 123.1, 123.2, and 123.31 (relating to prohibition of certain fugitive emissions; fugitive particulate matter; and limitations).
- 11. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulations, providing that said local law, ordinance, or regulations is not preempted by the Solid Waste Management Act, 35 P.S. §6018.101 <u>et seq</u>. and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1989, 53 P.S. §4000.101 <u>et seq</u>.
- 12. As a condition of this general permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credential and without delay, to have access and to inspect all areas or permittee controlled adjacent areas where solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of waste, soils, water, or gases; take photographs; to perform measurements, surveys, and other tests; inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained. (See §§608 and 610 (7) of the Solid Waste Management Act, 35 P.S. §§6018.608 and 6018.610 (7).) This condition in no way limits any other powers granted to the Department under the Solid Waste Management Act.
- 13. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department may:
  - a. Modify, suspend, revoke and reissue the authorization granted in this permit if the permittee cannot comply with the conditions of this general permit or if the authorized activities cannot be adequately regulated under the conditions of this general permit.
  - b. Require an individual permit be obtained if it deems necessary to prevent harm or the threat of harm to the public health, and the environment.
- 14. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if activities were covered by an individual permit. The Department may require an individual permit if the permittee is not in compliance with the conditions of this general permit or is

conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the people or the environment of this Commonwealth.

- 15. Any independent contractors or agents retained by the permittee in the completion of processing or production activities authorized under this permit, shall be subject to a compliance history review by the Department prior to performance of any activities, as specified by the Solid Waste Management Act.
- 16. Failure of measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules, and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
- 17. Except for the waste approved for blending in Section A (Description) of this general permit, no hazardous waste, municipal waste, special handling waste, and other residual wastes may be mixed and/or stored or beneficially used with the dredged material unless stated in writing by the Department.
- 18. Runoff from the dredged material storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.
- 19. This permit does not authorize and shall not be construed as an approval to discharge any industrial wastes, wastewater, leachate or runoff from areas where solid waste management activities are conducted to the waters of the Commonwealth.
- 20. The dredged material may not be beneficially used at a mine reclamation site unless the reclamation activity is permitted or otherwise authorized by the Department's Bureau of Mining Programs or Abandoned Mine Reclamation
- 21. The dredged material shall not be used as a valley fill or other fill material, to fill open pits from coal mining; or to level an area or bring an area to grade where the construction activity is not completed promptly after the placement of the dredged material.
- 22. Upon cessation of operations or by the expiration date of this general permit or unless extended by the Department in writing, the permittee shall remove any remaining dredged material and any other residual wastes or other materials which contain or have been contaminated by the dredged material and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act, the environmental protection acts and the regulations promulgated thereunder.

23. If the site for which this general permit applies has, or is undergoing remediation pursuant to the Department's Land Recycling Program, the permittee is responsible to ensure that remedial actions on the property will not be adversely impacted by the construction authorized under this general permit. Remedial actions may have included the use of institutional and/or engineering controls to prevent exposure to or mitigation of contaminants which remain in soil and/or groundwater at the site. Any earth disturbance or development activities at the site must ensure that such engineering and institutional controls remain intact and effective.

#### **D. Record Keeping:**

- 1. The permittee shall maintain records to demonstrate that dredged material from each source accepted for beneficial use meets the concentration limits listed in Tables 1 through 5 of Condition C.1 of this general permit.
- 2. The permittee shall maintain records of rejected, unacceptable and unauthorized wastes that are disposed from the facility. The records shall include the name and address of the disposal location, date of disposal, volume or weight of the waste that is disposed.
- 3. The records required in this condition shall be retained at the facility for a minimum of 5 years and made available to the Department upon request.

#### **E. Reporting Requirements:**

- Persons operating under the provision of this general permit shall submit to the appropriate Department Regional Office (see attached list), an annual report on the beneficial use activities conducted under this permit by March 1 for the preceding calendar year. This report shall include the information required in Section E.2 (Reporting Requirements) Condition 2. and to include: a summary of the weight or volume of the dredged material used for beneficial purposes during the last year, changes in location of beneficial use, and a "total" analysis (mg/kg) and "leachability" analysis (mg/L) of the dredged material for all parameters listed in Tables 1 through 5 of Condition C.1 of this general permit. This analysis data must be from representative sample(s) of the dredged material analyzed within the past twelve (12) months.
- 2. The permittee shall immediately notify the Department, in writing, of any changes in: the name, address, owners, operators and/or responsible officials of the company; changes in land ownership or the right to beneficially use dredged material on the land occupied; the physical or chemical characteristics of the dredged material; the processes which generate

the dredged material; and the change in status of any permit issued by the Department or federal government under the environmental protection acts.

- 3. Any person operating under the provisions of this general permit must notify the Department, in writing, if the processing facility is relocated or if new location(s) are to be included under this general permit. At least thirty (30) days prior to a permittee operating at a new location, two (2) copies of the following information shall submit to the appropriate Department Regional Office (see attached list) for review and approval.
  - a. Name and street address of the applicant.
  - b. Name and street address of facility where the dredged material will be processed and the dredged material will be produced.
  - c. A chemical and physical analysis and description of the dredged material which fully characterizes its composition and properties; the dredging process; and a plan for screening, managing and rejecting incoming dredged material. The chemical analysis shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act.
  - d. Name and location of each generator of the dredged material.
  - e. An evaluation plan for sampling, testing and monitoring new sources of dredged material which includes procedures for managing rejected dredged material received at the facility.
  - f. Proof that copies of the application have been submitted to each municipality, county, county planning agency and county health department, if one exists, in which beneficial use activities are or will be located.
  - g. Proof that the applicant has legal right to enter the land and operate the facilities approved under this permit.
  - h. An irrevocable written consent from the landowner giving the Department permission to enter upon land where the applicant will be conducting waste management activities.
  - i. Information that identifies the applicant (i.e., individual corporation, partnership, government agency, association, etc.), including the names and addresses of every officer that has a beneficial interest in or otherwise controls the operation of the company.

- j. A list of all previous permits or licenses issued by the Department or federal government under the environmental protection acts; the date issued, status and compliance history concerning environmental protection acts.
- k. A copy of the facility's Preparedness, Prevention and Contingency Plan (PPC) which is consistent with the Department's most recent guidelines for the development and implementation of PPC plans.
- 1. Proof that independent contractors retained by the permittee to perform any activities authorized under this permit are in compliance with the Department's regulations as required in Condition C.15.
- m. Total amount of the dredged material to be stored.
- n. A map clearly showing the location of the processing facility to be operated
- o. By the applicant under this general permit, including the following:
  - i. Boundaries and names of present owner(s) of record of land (surface and sub-surface), including easements, rights-of-way, and other property interests for the proposed permit area and adjacent properties.
  - ii. Boundaries of land within the proposed permit area; description of title, deed, or usage restrictions.
  - iii. Public and private water supplies within <sup>1</sup>/<sub>2</sub> mile radius of facility.
  - iv. Location of access roads (include slopes, grades, dimensions) and gates in relation to public and private roads, wells, and property lines.
  - v. Location of the processing and storage areas.
  - vi. Rights-of-way, within 300 feet of the facility, for high-tension power lines, pipelines, railroads, public and private roads, buildings (school, dwelling, etc.) currently in use.
  - vii. 100-year flood plain.
  - viii. All utilities installed at the facility (electrical, gas, water, sewer, telephone, etc.)

#### F. Renewal:

A person that plans to continue the operations authorized under this general permit, after the expiration date indicated on the approval for coverage page, shall file a complete application for permit renewal at least 180 days before the expiration date of this general permit unless permission has been granted by the Department for submission at a later date. The renewal application shall be made using the "Form 20 (Application For a Municipal or Residual Waste General Permit)". The renewal shall be sent to the attention of the Department's Bureau of Waste Management, Rachel Carson State Office Building, 400 Market Street, P.O. Box 69170, Harrisburg, PA 17106-9170.

In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully effective and enforceable pending the issuance or denial of the renewal for permit coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the general permit