



The purpose of this DRAFT DOCUMENT is to continue the exploration of concepts with stakeholders for future program development. The concepts and the conceptual draft rule language are not complete, have not been thoroughly reviewed by Ohio EPA, and are subject to change. The discussion is not intended to be a description of any existing regulations or represent any final position of Ohio EPA.

**Conceptual Draft: Beneficial Use Byproduct Program
March 2014**

Conceptual Draft: Beneficial Use General Permit Information

Organization of BUB authorizations

The Ohio Environmental Protection Agency's (Ohio EPA) current concepts for beneficial use authorizations for land application involves exploring the following four categories: Co-product, by-products not subject to or excluded from regulation under this program, beneficial use by-product (BUB) general permit, and beneficial use by-product (BUB) individual permit. Following is a brief description of each category.

Co-product

This concept is based upon a company documenting that a secondary process material intended for placement on the ground meet certain characteristics of a product. The Agency would then recognize that material as a "co-product". In essence, recognize the identified use of that company's material on the ground as a product and not subject to beneficial use program requirements or need for authorization. The company's documentation may be reviewed and challenged by Ohio EPA. To facilitate stakeholder discussion, Ohio EPA has developed a concept paper further discussing this "co-product" concept.

By-products not subject to or excluded from regulation under this program

There are currently two concepts being explored. The first concept is that the beneficial use program would list other existing regulatory programs that already handle or authorize the beneficial use, placement of materials on the ground, into water, or burning. The beneficial use program would not be applicable to materials subject to these existing regulatory programs. The intent of the beneficial use program is to not duplicate or add requirements where unnecessary.

The second concept is that the beneficial use program would not be applicable to any by-product material that is used as an ingredient and encapsulated into identified products commonly placed on the ground, into waters, or burned as fuel. These identified products, which are often used or placed on the ground or into water, chemically encapsulate or bind the ingredient and are known to face significant product quality control and established industry use specifications. This use of by-products as an ingredient in these highly quality controlled products would be excluded or not subject to the beneficial use program.

Beneficial use by-product (BUB) general permit

As a concept, the use of a BUB general permit in the beneficial use program provides significant advantages. A primary feature of the general permit is the option for multiple eligible companies to gain authorization under known standards established in a general permit without each company having to submit an individual permit for Agency review. A

general permit would address who is eligible, what beneficial use by-products are authorized for specified beneficial uses, and establish permit requirements tailored to those eligible entities, by-products, and beneficial uses.

A key for Ohio EPA's development of any general permit will be a clear understanding of the characteristics of the beneficial use by-product and specific beneficial uses to be authorized under the general permit. Those entities interested in a general permit approach will be instrumental in assisting Ohio EPA in understanding how the beneficial use by-product is produced, its consistency and homogeneity and types of beneficial use. Ohio EPA must evaluate the potential impacts of the by-product's use may have to waters of the state, the environment, and public health and safety. The more data available industry-wide allows for a better understanding of the material's characteristics and development of appropriate general permit standards and conditions.

Ohio EPA has developed the attached two examples of BUB general permits. These examples illustrate an approach that would authorize through a general permit the broad distribution of eligible beneficial use by-products for specified beneficial uses. These examples are only intended to be illustrations of the concept and to facilitate discussion of the concept. These examples have not been discussed with representatives of the respective industries or the general public. Ohio EPA did choose these materials and uses because of the availability of material characterization data, the low levels of parameters of concern and homogenous nature, and available information on the material for use land application.

These two examples of BUB general permits do not reflect the range of potential general permits. While these are geared for highly homogeneous by-products at low concentrations for broad beneficial use distribution, there may be other general permits tailored differently involving higher concentrations and limited distribution and locations. While a BUB individual permit can address such a situation, there could be the potential of material being generally appropriate for capping waste disposal facilities or revitalizing industrial properties. Ohio EPA views the actual development of a general permit necessitating a strong commitment by effected stakeholders to provide necessary information and input.

Beneficial use by-product (BUB) individual permit

As a concept, the use of a BUB individual permit serves the same function and replacement for the following existing mechanisms: Integrated Alternative Waste Management Program (IAWMP) and Land Application Management Plan (LAMP). If a material is not addressed in any of the other three categories, has limited characterization data or is heterogeneous, or has limited data on its application and use, Ohio EPA will require an individual BUB permit. This type of permit will be very similar to the current Land Application Management Plan or Integrated Alternative Waste Management Program approval process administered under the Division of Materials and Waste Management (DMWM) in coordination with the Division of Surface Water (DSW).

It should be noted that any material (product, co-product, or beneficial use by-product) may still be subject to open dumping enforcement if disposed. If mismanaged, any material (product, co-product, or beneficial use by-product) may be subject to enforcement under Ohio Revised Chapter 6111 protections of waters of the state.

The example BUB General Permits Overview

Like other regulatory programs, Ohio EPA would develop BUB general permits to be issued by the Director. A general permit is not developed in response to an application or issued to any specified entity. A general permit establishes standards and conditions by which eligible entities may choose to become authorized rather than submitting an application for a BUB individual permit.

The attached two examples of BUB general permits are intended to provide stakeholders with some idea of the Agency's concept of how BUB general permits might appear.

- **BUB general permit cover letter.** A short description of the by-product and by-product beneficial use authorized under the general permit.
- **Format and sections of the BUB general permit.**
 - **I. Description.** A very short statement summarizing the by-product and beneficial use authorized under the general permit.
 - **II. Eligibility.** A description of what entities, by-products, and types of beneficial uses are eligible for coverage under the general permit. The eligibility will be tailored to the specific by-product, beneficial uses, and the type of permit conditions.
 - **III. Definitions.**
 - **IV. Conditions.** The requirements established in the BUB general permit specific to the by-products and beneficial uses.
 - The mechanism and criteria for entities to obtain authorization under the general permit. Specifics on the submittal of a Notice of Intent (NOI), demonstration of eligibility, and process (expiration and renewal of the general permit).

(Note: Fees are mentioned in the conditions and cover letter. The Agency's general permits do have a fee associated with processing a general permit NOI (storm water NOI fee is \$200). While the Agency has mentioned the concept of permit fees with stakeholders, fees have been included here as a placeholder. Fees have not yet been a focus of discussion.)

 - By-product specific characterization sampling and analysis.
 - Any specific limitations or restrictions on by-product or beneficial uses.
 - Any specific best management practices.
 - Specific recordkeeping and reporting requirements specific to the by-product and uses.
 - **V. Access to Site.**
 - **VI. Denial, Suspension, or Revocation of Permit Coverage.**
 - **VI. Compliance with Law by End-User.**

Questions?

Call DMWM's John Schierberl at 614.644.2955

Conceptual Draft

Effective Date: March xx, 2014

Expiration Date: March xx, 2019

The purpose of this DRAFT DOCUMENT is to illustrate what a beneficial use by-product (BUB) general permit could look like as part of the exploration of concepts with stakeholders for future program development. This illustration of a BUB general permit is not complete, has not been thoroughly reviewed by Ohio EPA, and is subject to change. This draft document is not intended to be a description of any existing regulations or represent any final position of Ohio EPA.

OHIO ENVIRONMENTAL PROTECTION AGENCY

GENERAL PERMIT AUTHORIZATION TO BENEFICIALLY USE SPENT FOUNDRY SAND GENERATED FROM IRON (GRAY AND DUCTILE), STEEL AND ALUMINUM FOUNDRIES USING SILICA SAND AND CHEMICAL OR CLAY BINDERS

AUTHORIZED BENEFICIAL USES UNDER THIS PERMIT INCLUDE:

- **USE AS A COMPONENT FOR STRUCTURAL FILL**
- **USE AS PIPE BEDDING FOR NON-POTABLE PIPES**
- **USE AS A TOPSOIL AMENDMENT NOT TO EXCEED 30 PERCENT**

In accordance with Chapter 3745-599 of the Ohio Administrative Code (OAC), beneficial use of spent foundry sand, as defined in Part III of this permit, is authorized by the Ohio Environmental Protection Agency (Ohio EPA), to be used as identified in the applicant's Notice of Intent (NOI) on file with Ohio EPA and in accordance with the conditions specified in this general permit. All other beneficial uses must be separately approved by Ohio EPA. Only spent foundry sand as identified in this general permit is eligible for beneficial use under this general permit.

Spent foundry sand is an industrial byproduct generated by the metal-casting industry. Spent foundry sand generated by iron (gray and ductile), steel, and aluminum foundries using silica sand with chemical or clay binders can be beneficially used for structural fill, non-potable pipe bedding, and blending with topsoil.

Granting of permit coverage is conditioned upon payment of applicable fees and submittal of the Notice of Intent (NOI) application form. Permit coverage does not become effective until the Permittee receives written notification from the Director that coverage is granted.

Issuance of this permit does not relieve the Permittee of the duty of complying with all applicable federal, state, and local laws, ordinances and regulations.

This permit and the authorization to beneficially use spent foundry sand generated by iron (gray and ductile), steel, and aluminum foundries using silica sand and chemical or clay binders shall expire at midnight on the expiration date shown above. In order to receive authorization to beneficially use spent foundry sand beyond the above date of expiration, the Permittee shall submit such information and forms as are required by Ohio EPA. Pursuant to the authority of the Director under Chapter 3745-599 of the OAC, this general permit is granted subject to compliance with all conditions contained within this general permit.

Craig W. Butler
Director

I. Description

This general permit authorizes the beneficial use of spent foundry sand generated by iron (gray and ductile), steel, and aluminum foundries using silica sand and chemical or clay binders. This type of spent foundry sand may be used in Ohio as:

- a component for structural fill,
- non-potable pipe bedding, or
- a topsoil amendment, not to exceed 30 percent.

II. Eligibility

Persons that propose to operate under the terms and conditions of this general permit shall only use spent foundry sand generated by iron (gray and ductile), steel, and aluminum foundries using silica sand with chemical or clay binders. Spent foundry sand shall not be beneficially used under this general permit if the constituent concentrations of spent foundry sand exceed the standards listed in Table I.

This general permit does not apply to historical piles of spent foundry sand. In this case, a historical pile is one that was created more than 2 years ago. [Note – it is our intent with this eligibility requirement that this general permit is for recently generated spent foundry sand generated by iron (gray and ductile), steel, and aluminum foundries using silica sand with chemical or clay binders. Historic piles of spent foundry sand could have mixed with unfired foundry sand and / or other types of foundry sand not included in this general permit.]

III. Definitions

“Applicant” means the person applying for coverage under the general permit and intending to use, manage, or distribute spent foundry sand.

“Beneficial use” means the legitimate use of a beneficial use byproduct as an ingredient or product or in a manner that contributes to a manufacturing process or product that does not constitute disposal or cause pollution of any waters of the state. A beneficial use may include but is not limited to use as a replacement of a raw material, soil additive, fertilizer, structural fill, or a fuel.

“Beneficial use byproduct” means a solid waste, industrial waste, or other waste specifically identified for properties necessary or preferred for beneficial use.

“Clay binder” is bentonite which is a carbonaceous additive used by foundries to improve the surface finish of metal items cast in sand molds.

“Chemical binders” most commonly include phenolic-urethanes, epoxy, furfuryl alcohol, sodium silicate. Binders cause the sand mold to hold its shape during the introduction of molten metal into the mold and are usually used in core-making where high mold strengths are necessary to withstand the heat of molten metal.

“Director” means the director of Ohio EPA or an authorized representative.

“End user” means a person who owns the property on which a beneficial use byproduct is beneficially used.

“Notice of Intent (NOI)” means the form used to request coverage under a beneficial use general permit.

“Permittee” means any person who has been granted coverage under this general permit to beneficially use spent foundry sand in accordance with the conditions specified in this general permit.

“Pipe bedding” is an aggregate material placed under and around pipes to provide equal support along the length of pipe installed underground in a trench.

“Soil Amendment” means any material added to a soil to improve the soil’s physical properties (e.g. water retention, permeability, water infiltration, drainage, aeration and structure).

“Spent foundry sand” is used silica sand and binders generated by the metal-casting industry, which uses silica sand molds in the production of metal products, and that can no longer be used to cast molds.

“Structural fill” is a screened material used to create a strong, stable base meeting engineering specifications for use as engineered fill, mechanically stabilized earthen (MSE) walls, low strength mortar backfill, and granular fill. This does not include valley fills or filling of open pits from coal or other industrial mineral mining.

“Topsoil” means the A and E horizon layers, or instances in which the area has been disturbed by agricultural processes, the soil ordinarily moved in tillage, or its equivalent in uncultivated soil.

IV. Conditions

- 1) To obtain coverage under this general permit, an applicant shall submit one copy of a complete and accurate NOI signed by the applicant and fees pursuant to OAC rule 3745-599-210 to the Ohio EPA Central Office at the following address:

Ohio Environmental Protection Agency
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049
- 2) The NOI shall be on forms approved by the Director and shall include the information required by the NOI form, its instruction sheet, and the regulations. An NOI which is incomplete or deficient may be returned to the applicant.
 - a. Applicants that propose to operate under the terms and conditions of this general permit must submit the NOI at least 60 days before commencing beneficial use under this general permit.
 - b. After receiving a complete NOI, any additional information requested by the Director and the general permit fee as specified in the beneficial use rules, Ohio EPA will review the information and determine the eligibility of the applicant to operate under the terms and conditions of this beneficial use permit.
 - c. Coverage under this permit shall not be effective until the Director notifies the applicant that the beneficial use is authorized under the general permit.

- 3) The spent foundry sand shall not be a hazardous waste as defined in Ohio Administrative Code 3745-51-03.
- 4) Concentrations of any constituents in the spent foundry sand, before beneficial use, cannot exceed the limits for the specified constituents listed in Table I.

Table I

Constituents	Totals Analysis (mg/kg)	TCLP Analysis (mg/L)
Aluminum (Al)	77000	4
Antimony (Sb)	31	0.12
Barium (Ba)	15000	40
Cadmium (Cd)	70	0.1
Chromium, total (Cr)	120000	2
Copper (Cu)	3100	26
Iron (Fe)	55000	6
Lead (Pb)	400	0.3
Selenium (Se)	390	0.2
Zinc (Zn)	23000	100

- 5) Sampling Characterization: Spent foundry sand beneficially used as a component for structural fill, non-potable pipe bedding, or as a soil amendment shall have been sampled and analyzed in accordance with the following:
 - a. Take four grab samples from 20 yards of spent foundry sand as it is generated. These four grab samples shall be analyzed for total metals and TCLP for the constituents specified in Table 1. Determine if the results of the four samples meet a 95% upper confidence limit (UCL) and do not exceed the limits specified in Table 1. All samples shall be analyzed using the toxicity characteristic leaching procedure, test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods U.S.EPA publication SW 846.
 - b. For existing piles of spent foundry sand, the pile of spent foundry sand shall be characterized in accordance with procedures and methods as specified in the most recent edition of U.S. EPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA SW-846). [It is recommended that 12-15 grab samples be taken from at least three equally divided depths of the pile of spent foundry sand (i.e. 3 dimensional sampling grid) and analyzed for compliance with the constituents as specified in Table 1 of this general permit. Determine if the results of the 12-15 samples meet a 95% UCL and do not exceed the limits for total metals and TCLP, as specified in Table 1. Or, 30-40 grab samples may be taken, combining every 5 grab samples into a single composite sample to be analyzed. (Statistical analysis may not be appropriate with composite sampling. The Max test as provided in the US EPA soil screening guidance may be useful in analyzing the composite samples.

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration-table/chemicals/SSG_nonrad_technical.pdf]

- c. If any changes are made in the types of sand binder systems, binder chemicals, types of metals or metal alloys being cast, the Permittee shall notify Ohio EPA in writing immediately and the spent foundry sand shall be reanalyzed prior to the beneficial use of the spent foundry sand.
- 6) Sample the spent foundry sand annually for the constituents listed in Table 1. Take four grab samples from 20 yards of spent foundry sand as it is generated. These four grab samples shall be analyzed in accordance with Condition IV.2) for total metals and TCLP for the constituents specified in Table 1. Determine if the results of the four samples meet a 95% UCL and do not exceed the limits specified in Table 1. If the annual sampling of spent foundry sand does not meet the constituent limits for total metals and TCLP as required in Table 1 of this general permit, the Permittee must notify Ohio EPA in writing within 10 days. In this event, the Permittee may apply for an individual permit in accordance with rule 3745-599-300 of the OAC.
 - 7) Storage, screening, blending of spent foundry sand with topsoil, and beneficial use of the spent foundry sand shall be conducted in such a manner that it will not create a nuisance or adversely affect public health, safety or the environment. Should a nuisance condition develop, or a determination be made by Ohio EPA that the beneficial use, storage or blending of spent foundry sand with top soil is a threat to human health or the environment, the approval to beneficially use this material may be revoked upon written notification from the Director. Immediately upon the effective date of any written notification from the Director of revocation, beneficial use of spent foundry sand at the site shall cease. Remediation of the site may be required.
 - 8) The Permittee shall provide a copy of the sampling and analysis of the spent foundry sand for the constituents listed in Table I upon request of the Director.
 - 9) The contents of any products created under this general permit shall be made available to all end users, upon request.
 - 10) The Permittee shall not cause pollution or cause to be placed any spent foundry sand that has been or is intended to be beneficially used in a location where it causes pollution to waters of the state. Any discharge to waters of the state shall be in accordance with an effective national pollutant discharge elimination system (NPDES) permit. Any unauthorized discharges to waters of the state must be reported to Ohio EPA (call 1-800-282-9378) within 2 hours of discovery.
 - 11) If the Permittee discovers that the beneficial use byproduct is being misused, mismanaged, or is adversely affecting public health, safety, or the environment, the Permittee shall cease distribution or use of the beneficial use byproduct and notify the Director in writing within twenty-four hours.
 - 12) The Permittee shall furnish to the Director, within 10 days of written request, any information which the Director may request to determine whether cause exists for modifying, revoking, reissuing, or terminating coverage under the general permit, or to determine compliance with this general permit.
 - 13) The Director may require any applicant or any person authorized by this permit to apply for and obtain an individual permit in accordance with Section 3745-599-300 of the OAC. The Director will send written notification that an individual permit is required. This notice may include a brief statement of the reasons for this decision, an application form,

a statement setting a deadline for the applicant to file the application, and a statement that on the effective date of the individual beneficial use permit, coverage under this permit, if in effect, shall terminate. If a person authorized by this permit fails to submit in a timely manner an individual beneficial use permit application as required by the Director, then the applicability of this general permit to the Permittee is automatically terminated at the end of the day specified for application submittal. Any beneficial use past this date is illegal and subject to enforcement, unless the proper individual beneficial use permit is obtained.

- 14) In order to receive authorization to beneficially use spent foundry sand beyond the expiration date of this general permit (i.e. renew existing general permit coverage), the Permittee shall notify the Director of the intent to be covered by the new general permit by submitting a new NOI at least 180 days before the expiration of this general permit unless permission has been granted by the Director for submission at a later date.
- 15) When the Permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI to the Director, he or she shall promptly submit such facts or correct information.
- 16) The Permittee shall retain the following information at the Permittee's place of business for a minimum of five years and shall make it available to the Director upon request:
 - a. Records of the annual volume of spent foundry sand that is designated for beneficial use and the volume and type of beneficial use of spent foundry sand actually beneficially used;
 - b. Records of the location(s) where the spent foundry sand is stored or screened;
 - c. The sampling plan detailing where samples of spent foundry sand were collected, how those samples were collected, dates of annual samples that were collected, and a list of constituents that were used to characterize the samples;
 - d. All laboratory reports of the constituents in Table I.
- 17) By April 1 of each year the Permittee shall submit an annual report. The annual report shall be sent to the following address:

Ohio EPA DMWM
PO Box 1049
Columbus, OH 43216-1049

The annual report shall include the following for the previous calendar year:

- a. Types of beneficial uses involving the spent foundry sand
- b. Amount of dry tons of spent foundry sand generated
- c. Amount of dry tons of spent foundry sand used for each type of beneficial use

V. Access to Site

The Permittee shall allow the Director or an authorized representative of Ohio EPA to:

- 1) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit.
- 2) Have access to and copy any records that must be kept under the conditions of this permit.

- 3) Collect samples, take photographs, perform measurements, surveys and other tests, and inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

VI. Denial, Suspension, or Revocation of Permit Coverage

The Director may deny, suspend or revoke coverage under this general permit when the NOI or other required documentation is not in compliance with Section 3734-599-210 of the OAC or for any of the reasons listed in Section 3745-599-220(E) of the OAC.

VII. Compliance with Law by End-User

Nothing herein shall be construed to release any party, including but not limited to the owner(s) of property upon which the spent foundry sand is placed, from the obligation to comply with all applicable laws governing the placement or use of the spent foundry sand on the property. This general permit does not authorize placement or use of the spent foundry sand on the property in a manner or at a location that is inconsistent with the beneficial use requirements detailed in this general permit. This general permit does not authorize placement or use of the spent foundry sand on the property in a manner or at a location that would cause a nuisance, adversely affect public health or safety or the environment, cause air pollution, or cause pollution to waters of the State beyond the de minimus potential impacts contemplated in this general permit. This general permit is not, and shall not be construed to be, a storm water permit, individual permit issued under ORC 6111.04, or other permit or authorization that allows for air pollution, illegal disposal of solid or hazardous waste, or pollution of waters of the State beyond the de minimus potential impacts contemplated in this general permit.

The purpose of this DRAFT DOCUMENT is to illustrate what a beneficial use by-product (BUB) general permit could look like as part of the exploration of concepts with stakeholders for future program development. This illustration of a BUB general permit is not complete, has not been thoroughly reviewed by Ohio EPA, and is subject to change. This draft document is not intended to be a description of any existing regulations or represent any final position of Ohio EPA.

Effective Date: February xx, 2014

Expiration Date: February xx, 2019

OHIO ENVIRONMENTAL PROTECTION AGENCY

GENERAL PERMIT AUTHORIZATION TO BENEFICIALLY USE ALUM SLUDGE FROM DRINKING WATER TREATMENT FACILITIES IN A TOPSOIL BLEND

In accordance with Chapter 3745-599 of the Ohio Administrative Code (OAC), topsoil blending of drinking water treatment alum sludge (alum sludge) is authorized by the Ohio Environmental Protection Agency (Ohio EPA) to be beneficially used as identified in the applicant's Notice of Intent (NOI) on file with Ohio EPA and in accordance with the conditions specified in this general permit. All other beneficial uses must be separately approved by Ohio EPA and only alum sludge topsoil blending as identified in this general permit is eligible for beneficial use.

Alum is used by many municipalities to improve water quality at drinking water treatment facilities, especially for removal of impurities. Due to the soil-like properties of the byproduct, alum sludge, this material can be beneficially used in a topsoil blend.

Granting of general permit coverage is conditioned upon payment of applicable fees and submittal of the Notice of Intent application form. Permit coverage does not become effective until the Permittee receives written notification from the Director that coverage is granted.

Issuance of this permit does not relieve the Permittee of the duty of complying with all applicable federal, state, and local laws, ordinances and regulations.

This permit and the authorization to beneficially use alum sludge shall expire at midnight on the expiration date shown above. In order to receive authorization to beneficially use alum sludge beyond the above date of expiration, the Permittee shall submit such information and forms as are required by Ohio EPA. Pursuant to the authority of the Director under Ohio Revised Code (ORC) Chapters 6111 and 3734 and Chapter 3745-599 of the OAC, this general permit is granted subject to compliance with all conditions contained within this general permit.

Craig W. Butler
Director

I. Description

This general permit authorizes the beneficial use of water treatment alum sludge (alum sludge) in Ohio in a topsoil blend containing up to 30% alum sludge.

II. Eligibility

Persons that propose to operate under the terms and conditions of this general permit shall only use alum sludge generated at drinking water treatment facilities for beneficial use up to a 30% component of a topsoil blend. Alum sludge shall not be beneficially used under this general permit if the constituent concentrations of alum sludge exceed the standards listed in Table I.

This general permit does not apply to historical piles of alum sludge. In this case, a historical pile is one that was created more than 2 years ago.

III. Definitions

“Applicant” means the person applying for coverage under the general permit and intending to use, manage, or distribute alum sludge in a topsoil blend.

“Beneficial use” means the legitimate use of a beneficial use byproduct as an ingredient or product or in a manner that contributes to a manufacturing process or product that does not constitute disposal or cause pollution of any waters of the state. A beneficial use may include but is not limited to use as a replacement of a raw material, soil additive, fertilizer, structural fill, or a fuel.

“Beneficial use byproduct” (BUB) means a solid waste, industrial waste, or other waste specifically identified for properties necessary or preferred for beneficial use.

“Director” means the director of Ohio EPA or an authorized representative.

“End user” means a person who owns the property on which a beneficial use byproduct is beneficially used.

“Notice of Intent” (NOI) means the form used to request coverage under a beneficial use general permit.

“Permittee” means any person who has been granted coverage under this general permit to beneficially use alum sludge in a topsoil blend.

“Topsoil” means the A and E horizon layers, or instances in which the area has been disturbed by agricultural processes, the soil ordinarily moved in tillage, or its equivalent in uncultivated soil.

“Water treatment alum sludge” means a byproduct resulting from the addition of alum to a raw water supply for flocculation, filtration and coagulation.

IV. Conditions

- 1) To obtain coverage under this general permit, an applicant shall submit one copy of a complete and accurate NOI signed by the applicant and fees pursuant to OAC rule 3745-599-210 to the Ohio EPA Central Office at the following address:

Ohio Environmental Protection Agency
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049
- 2) The NOI shall be on forms approved by the Director and shall include the information required by the NOI form, its instruction sheet, and the regulations. An NOI which is incomplete or deficient may be returned to the applicant.
 - a. Applicants that propose to operate under the terms and conditions of this general permit must submit the NOI at least 60 days before commencing beneficial use under this general permit.
 - b. After receiving a complete NOI, any additional information requested by the Director and the general permit fee as specified in the beneficial use rules, Ohio EPA will review the information and determine the eligibility of the applicant to operate under the terms and conditions of this beneficial use permit.
 - c. Coverage under this permit shall not be effective until the Director notifies the applicant that the beneficial use is authorized under the general permit.
- 3) The alum sludge shall not be a hazardous waste as defined in Ohio Administrative Code 3745-51-03.
- 4) Concentrations of any constituents in the alum sludge, before topsoil blending, cannot exceed the limits for the specified constituents listed in Table I.

Table I

Constituents	Totals Analysis (mg/kg)*
Aluminum (Al)	77000
Arsenic (As)	41
Barium (Ba)	15000
Cadmium (Cd)	39
Chromium III	120000
Copper (Cu)	1500
Lead (Pb)	300
Mercury (Hg)	17
Nickel (Ni)	420
Selenium (Se)	100
Zinc (Zn)	2800

* - dry weight basis

- 5) The Permittee shall provide an analysis of the constituents of the alum sludge in Table I upon request of the Director.
- 6) The alum sludge shall be blended with topsoil and alum sludge shall comprise no more than 30 percent of the soil blend.
- 7) Alum sludge shall be dewatered at the generating drinking water treatment facility before blended with topsoil.
- 8) The Permittee shall use the following Best Management Practices or an effective national pollutant discharge elimination system (NPDES) permit at the generating drinking water treatment facility. Field storage, or stockpiling, may occur at this site for no more than 365 days. Stockpiles shall be located at least:
 - a. 200 feet from neighbor-occupied buildings
 - b. 300 feet from wells and ponds used for drinking water or watering livestock
 - c. 100 feet from waters of the state (except groundwater)
 - d. At a location where runoff may not enter adjacent properties and be contained with the use of berms and silt fences
- 9) Management and topsoil blending of alum sludge shall be conducted in such a manner that it will not cause a nuisance and shall not adversely affect public health, safety or the environment. Coverage under this general permit to beneficially use this beneficial use byproduct may be revoked if a nuisance condition or a threat to human health, safety or the environment exists. Immediately upon the effective date of any written notification from the Director of revocation, topsoil blending at the site shall cease. Remediation of the site may be required.
- 10) The Permittee shall not cause pollution or cause to be placed any alum sludge that has been or is intended to be used in a topsoil blend in a location where it causes pollution to waters of the state. Any discharge must be in accordance with an effective NPDES permit. Any unauthorized discharges to waters of the state shall be reported to Ohio EPA (call 1-800-282-9378) within 2 hours of discovery.
- 11) If the Permittee discovers that the beneficial use byproduct is being misused, mismanaged, or is adversely affecting public health, safety, or the environment, the Permittee shall cease distribution or use of the beneficial use byproduct and notify the Director in writing within twenty-four hours.
- 12) The Permittee shall furnish to the Director, within 10 days of written request, any information which the Director may request to determine whether cause exists for modifying, revoking, reissuing, or terminating coverage under the general permit, or to determine compliance with this general permit.
- 13) The Permittee shall notify Ohio EPA if there is a change or anticipated change to the generating process or if the raw materials used in the generating process of the alum sludge change.
- 14) The Director may require any applicant or any person authorized by this permit to apply for and obtain an individual permit in accordance with Section 3745-599-300 of the OAC. The Director will send written notification that an individual permit is required. This notice may include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the applicant to file the application, and a statement

that on the effective date of the individual beneficial use permit, coverage under this permit, if in effect, shall terminate. If a person authorized by this permit fails to submit in a timely manner an individual beneficial use permit application as required by the Director, then the applicability of this general permit to the Permittee is automatically terminated at the end of the day specified for application submittal. Any beneficial use past this date is illegal and subject to enforcement, unless the proper individual beneficial use permit is obtained.

- 15) In order to receive authorization to beneficially use alum sludge in a topsoil blend beyond the expiration date of this general permit (i.e. renew existing general permit coverage), the Permittee shall notify the Director of the intent to be covered by the new general permit by submitting a new NOI at least 180 days before the expiration of this general permit unless permission has been granted by the Director for submission at a later date.
- 16) When the Permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI to the Director, he or she shall promptly submit such facts or correct information.
- 17) The Permittee shall retain the following information at the Permittee's place of business for a minimum of five years and shall make it available to the Director upon request:
 - a. Names, addresses and telephone numbers of the generators of the alum sludge;
 - b. A description of the process, including raw materials, that generates the alum sludge;
 - c. Names, addresses and telephone numbers of all entities taking possession of the alum sludge for topsoil blending and the amount of alum sludge provided to each entity;
 - d. Available laboratory analysis of the constituents in Table I.
- 18) By April 1 of each year the Permittee shall submit an annual report. The annual report shall be sent to the following address:

Ohio EPA DMWM
PO Box 1049
Columbus, OH 43216-1049

The annual report shall include the following for the previous calendar year:
 - a. Amount of dry tons of alum sludge generated
 - b. Amount of dry tons of alum sludge used for beneficial use

V. Access to Site

The Permittee shall allow the Director or an authorized representative of Ohio EPA to:

- 1) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit.
- 2) Have access to and copy any records that must be kept under the conditions of this permit.

- 3) Collect samples, take photographs, perform measurements, surveys and other tests, and inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

VI. Denial, Suspension, or Revocation of Permit Coverage

The Director may deny, suspend or revoke coverage under this general permit when the NOI or other required documentation is not in compliance with Section 3734-599-210 of the OAC or for any of the reasons listed in Section 3745-599-220(E) of the OAC.

VII. Compliance with Law by End User

Nothing herein shall be construed to release any party, including but not limited to the owner(s) of property upon which the alum sludge topsoil blend is placed, from the obligation to comply with all applicable laws governing the placement or use of the alum sludge topsoil blend on the property. This general permit does not authorize placement or use of the alum sludge topsoil blend on the property in a manner or at a location that is inconsistent with the beneficial use requirements detailed in this general permit. This general permit does not authorize placement or use of the alum sludge topsoil blend on the property in a manner or at a location that would cause a nuisance, adversely affect public health or safety or the environment, cause air pollution, or cause pollution to waters of the State beyond the de minimus potential impacts contemplated in this general permit. This general permit is not, and shall not be construed to be, a storm water permit, individual permit issued under ORC 6111.04, or other permit or authorization that allows for air pollution, illegal disposal of solid or hazardous waste, or pollution of waters of the State beyond the de minimus potential impacts contemplated in this general permit.