ENTERED DIRECTOR'S JOURNAL

Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

May 8, 2020

Jason Ziss
Kurtz Bros., Inc.
6415 Granger Road
Independence, Ohio 44131

Re: Kurtz Bros., Inc.
Permit – Short Term
Approval
Beneficial Use
Cuyahoga County
BENU020977

Re: Kurtz Bros., Inc.
Exemption
Approval
Beneficial Use
Cuyahoga County
BENU020977

Subject: Kurtz Bros., Inc.
Amended Land Application Management Plan Permit and Incorporated Exemption
Dredged Material from Cleveland Harbor

Effective Date: May 8, 2020

Expiration Date: March 31, 2022

Dear Mr. Ziss:

The Ohio Environmental Protection Agency (Ohio EPA) has reviewed your request to amend the August 23, 2017 land application management plan permit issued to Kurtz Bros., Inc. (KBI). Due to the Federal Aviation Administration's temporary closure of the Confined Disposal Facility No. 12 (CDF12) sediment processing facility next to Burke Lakefront Airport in Cleveland, Ohio, KBI is requesting to dewater and process dredged material from the Cleveland Harbor at Arcelor Mittal Steel's west bank river dock. The Director of Ohio EPA has determined that amending this land application management plan permit and exemption is unlikely to adversely affect public health or safety or the environment. This amended land application management plan permit and exemption (LAMP permit), pursuant to Chapters 3734 and 6111 of the Ohio Revised Code (ORC), is for the proposed beneficial use of dredged

material mined from CDF12, dredged material added to CDF12 that is generated by the United States Army Corps of Engineers (USACE), and dredged material mechanically dredged from Cleveland Harbor that is received and dewatered at Arcelor Mittal Steel's west bank river dock and then transported to a KBI facility for sampling prior to beneficial use. KBI intends to use the dredged material for unrestricted beneficial uses (*e.g.*, residential, industrial, and commercial applications). The beneficial uses may include, but are not limited to, use as structural fill, backfill, engineered fill, road base, earthen mounds, pipe bedding, and as an ingredient in soil blends.

Through dredging, the USACE removes sediment, in its natural or recently deposited condition, from the bottom of the federal navigation channel in Cleveland and along the Cuyahoga River. The sediment is the product of erosion that has disaggregated soil into sand, silt, clay, and organic matter. Through Section 123 of the Rivers and Harbors Act of 1970, the USACE has used confined disposal facilities (CDFs) to manage over 90 million cubic yards of dredged material from Great Lakes harbors and channels. Once the dredged material is collected, it will either be transported to the Cuyahoga County Port Authority CDF12 on Marginal Road northeast of Burke Lakefront Airport in Cleveland, Ohio or deposited at Arcelor Mittal Steel's west bank river dock near Steelyard Drive in Cleveland, Ohio. Dewatering in the Sediment Recycling Center on CDF12 separates the coarse-grained materials and the finer silt particles of the dredged material. The coarse-grained material settles out for immediate beneficial use and the silt particles remain suspended and travel to the silt ponds for subsequent settling and future beneficial use.

To the extent that the dredged material may be considered a solid waste and would require KBI to obtain a permit and license under ORC Chapter 3734 and the rules promulgated thereunder, the Director has determined that granting an exemption from the applicable solid waste provisions of ORC Chapter 3734 to use dredged materials in the quantities and under the circumstances specifically authorized in the LAMP permit is unlikely to adversely affect public health or safety or the environment. Therefore, pursuant to ORC Section 3734.02(G), KBI is hereby exempted from the applicable solid waste provisions of ORC Chapter 3734 and the rules adopted thereunder when that dredged material is managed as authorized in this LAMP permit subject to compliance with all conditions below.

Pursuant to the authority under ORC Chapters 3734 and 6111, this LAMP permit for KBI is approved subject to compliance with all conditions below.

CONDITIONS

1. This LAMP permit authorizes KBI to beneficially use eligible dredged material managed in accordance with this LAMP permit. KBI intends to beneficially use the dredged material for unrestricted beneficial uses (*e.g.*, residential, industrial, and commercial applications). The beneficial uses may include but are not limited to, use as structural fill, backfill, engineered fill, road base, earthen mounds, pipe bedding, and as an ingredient in soil blends. Only dredged material that is not a hazardous waste as defined by ORC Chapter 3734.01, OAC Rule 3745-50-10(A), and OAC Rule 3745-51-03; is managed by the USACE, a terminal of the Cleveland Harbor, or the

Port of Cleveland; and is dewatered either on CDF12, including dredged material mined from CDF12, or at Arcelor Mittal Steel's west bank river dock is eligible for beneficial use under this LAMP permit. All other dredged material must be separately approved for beneficial use by Ohio EPA. For purposes of paragraphs 2 through 25 "dredged material" means only those dredged materials eligible for beneficial use under this LAMP permit.

2. The dredged material shall be beneficially used in strict accordance with the conditions of this LAMP permit. Approval of this LAMP permit does not constitute an assurance that use of dredged material in accordance with the approved LAMP permit will be in compliance with all Ohio laws and regulations.

3. KBI shall not deny the Director, or her authorized representative(s), entry onto the premises of KBI, CDF12, Arcelor Mittal Steel's west bank river dock, and the Sediment Recycling Center at any reasonable time for the purpose of conducting inspections, collecting samples of dredged material or blended dredged material, conducting tests, or examining records or reports pertaining to the blending, use, or storage of dredged material or blended dredged material.

4. KBI is responsible for identifying and obtaining any additional authorizations necessary to beneficially use dredged material or blended dredged material as described in this LAMP permit. Except for the applicable solid waste provisions of ORC Chapter 3734 and rules adopted thereunder exempted by this LAMP permit, issuance of this LAMP permit to KBI neither relieves KBI of the duty to comply with nor authorizes KBI to conduct activities in violation of any applicable federal, state, or local laws, ordinances, or regulations. All activities shall be accomplished in compliance with all applicable state and federal laws and regulations pertaining to environmental protection, including but not limited to the control of air pollution, leachate, and storm water run-on and run-off and protection of ground water and surface water. This LAMP permit does not authorize KBI to blend dredged material with materials other than:

   a. Aluminum based drinking water treatment residuals (alum residuals), which consist of a dewatered byproduct resulting from the treatment of a source water supply for drinking water by the addition of aluminum sulfate or poly-aluminum chloride for coagulation. The blended dredged material shall not contain more than three percent alum residuals.

   b. Compost product;

   c. Sand or soil that neither contains nor is commingled with solid waste, construction and demolition debris, sludge, slag, unfinished compost, or contaminated soil, and that is nonputrescible, cohesive, and relatively uniform in texture, resulting in a blended dredged material.

   Any blending of dredged materials with materials other than those listed may require a separate authorization.

Table 1: Constituent Limits

Constituents[1]	Totals Analysis (mg/kg)
Aluminum	77000
Arsenic	41
Barium	15000
Cadmium	39
Chromium[2]	100
Cobalt	23
Copper	1500
Iron	55000
Lead	300
Manganese	1800
Mercury (Method 7471A)	10
Nickel	420
Selenium	100
Silver	390
Zinc	2800
Arochlor 1242	0.23
Arochlor 1248	0.23
Arochlor 1254	0.24
Arochlor 1260	0.24

5. For each 10,000 cubic yards of dredged material dewatered at Arcelor Mittal Steel's west bank river dock, transported to a KBI facility, and designated for beneficial use, at least one grab sample of dredged material shall be collected and adequately characterized prior to beneficial use. All grab samples shall be analyzed in accordance with Conditions 6.c-f, 7, 8, 9, 10, 11, 12, and 13.

6. Prior to beneficial use, after each time new dredged material is added to CDF12, the Sediment Recycling Center on CDF12, and after each time dredged material is mined from CDF12, KBI shall adequately characterize the dredged material. KBI shall characterize all dredged material as follows:

[1] Al, Arochlor, Ba, Co, Fe, Hg, Mn: US EPA Regional Screening Levels, Residential Soil; Cd, Cu, Pb, Ni, Se, Zn: US EPA 40 CFR Part 503 Pollutant Concentrations (Table 3 of 503.13).

[2] US EPA 40 CFR 261.24 (100 = 5 mg/L x 20). If the totals analysis for chromium exceeds 100 mg/kg in the dredged material, the TCLP analysis must be below 2 mg/L.

a. For every 10,000 cubic yards of dredged material mined from CDF12, at least fifteen grab samples shall be collected from at least three equally divided depths of the pile. Those 15 grab samples shall be combined into five composite samples. All five composite samples shall be analyzed in accordance with Conditions 6.c-f, 7, 8, 9, 10, 11, 12, and 13.

b. For each 10,000 cubic yards of dredged material removed from the Sediment Recycling Center that is designated for beneficial use, at least one grab sample of dredged material shall be collected. All grab samples shall be analyzed in accordance with Conditions 6.c-f, 7, 8, 9, 10, 11, 12, and 13.

c. Except as provided in Condition 6.f and 11, dredged material that has been sampled shall not be commingled with any other material until sampling analysis for the constituents in Table 1 and Table 2 demonstrates that the dredged material, either prior to or after blending as provided in Conditions 5.f and 10, satisfies the criteria in Conditions 6.d, f, 7 8, 9, 10, 11, 12, and 13.

d. Each sample shall be analyzed for total metals and for Arochlors, as described in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*[3], for the constituents listed in Table 1.

e. The reported detection limit for the sample analysis shall be less than the limit specified for each constituent in Table 1.

f. Dredged material that contains constituents at levels that exceed any of the constituent concentration limits specified in Table 1 of this LAMP permit may be blended with alum residuals (no more than three percent), finished compost, sand, or soil that neither contains nor is commingled with solid waste, construction and demolition debris, sludge, slag, unfinished compost, or contaminated soil, and that is nonputrescible, cohesive, and relatively uniform in texture, resulting in a blended dredged material. The blended dredged material shall be representatively sampled using methods and procedures as defined in U.S. EPA SW-846 and analyzed for the constituents in Table 1.

7. KBI shall not make available or distribute for beneficial use any dredged material or any blended dredged material that contains constituents at levels that exceed any of the constituent concentration limits specified in Table 1 of this LAMP permit.

8. KBI may beneficially use dredged material or blended dredged material that contains constituents at levels that exceed the constituent concentration limits specified in Table 1 of this LAMP permit only as follows:

[3] EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)," as amended through July 2016.

i. The dredged material or blended dredge material contains constituents listed in Table 1 at concentration levels that do not exceed U.S. EPA Regional Screening Levels for Industrial Soil;[4] and

ii. The beneficial use occurs at a commercial or industrial location.

9. KBI shall analyze each sample for the polycyclic aromatic hydrocarbons (PAHs) listed in Table 2 and use EPA method 8270 with Gas Chromatography/Mass Spectrometry operated in the Selected Ion Monitoring (SIMS) mode to lower the detection limits for quantifying the PAHs.

Table 2[5]

Example for Calculating BaP Equivalent Concentrations

PAHs	Toxicity Equivalency Factor (TEF)	Sample Concentration mg/kg	BaP Equivalent mg/kg
Benz[a]anthracene	0.1	0.410	0.041
Benzo[b]fluoranthene	0.1	0.840	0.084
Benzo[k]fluoranthene	0.01	0.270	0.003
Benzo[a]pyrene	1.0	0.440	0.440
Chrysene	0.001	0.620	0.001
Dibenz(a,h)anthracene	1.0	0.068	0.068
Indeno[1,2,3,-c,d]pyrene	0.1	0.220	0.022
Total BaP equivalents ≤ 1 mg/kg			**0.658**

10. KBI shall use the toxicity equivalency factor methodology developed by USEPA to convert each PAH sample concentration for the PAHs listed in Table 2 to a benzo(a)pyrene (BaP) equivalent number concentration. KBI shall calculate the BaP equivalent for each sample as follows:

a. Multiply each PAH sample result concentration by the TEF for its corresponding PAH to create the BaP equivalent. Refer to Table 2 for the PAH corresponding TEF.

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[4] US EPA Regional Screening Levels (RSLs) – Generic Tables

[5] US EPA Regional Screening Levels Table User's Guide for Toxicity Equivalence Factors of Carcinogenic Polycyclic Aromatic Hydrocarbons

b. Sum all of the calculated BaP equivalents for each sample to demonstrate that the sum of all BaP equivalent concentrations per sample does not exceed 1 mg/kg.

11. Dredged material in which the calculated total BaP equivalent exceeds 1 mg/kg, may be blended with alum residuals (no more than three percent), compost product, sand, or soil that neither contains nor is commingled with solid waste, construction and demolition debris, sludge, slag, unfinished compost, or contaminated soil, and that is nonputrescible, cohesive, and relatively uniform in texture, resulting in a blended dredged material. KBI shall representatively sample the blended dredged material using methods and procedures as defined in U.S. EPA SW-846 and shall analyze the dredged material for PAHs and the BaP equivalent in accordance with Condition 10.

12. KBI shall not make available or distribute for beneficial use any dredged material or any blended dredged material that exceeds a calculated total BaP equivalent of 1 mg/kg.

13. Once an adequate number of sample results exist to perform a statistical analysis demonstrating that the 95% Upper Confidence Limit (UCL) of the mean for the analyzed constituents is less than the constituent limits specified in Table 1 and the 95% UCL of the mean of the calculated total BaP equivalent concentration per sample is less than 1mg/kg, then the dredged material or blended dredged material shall be considered adequately characterized for use pursuant to this LAMP permit. KBI shall repeat this statistical analysis to adequately characterize any dredged material added to the Sediment Recycling Center on CDF12 and every 10,000 cubic yards of dredged material from Arcelor Mittal Steel's west bank river dock.

14. KBI may store dewatered dredged material at Arcelor Mittal Steel's west bank river dock before being transported to a KBI for sampling prior to beneficial use, for up to 180 days.

15. The following records shall be maintained by KBI for a minimum of 5 years after the use of dredged material and blended dredged material, pursuant to this LAMP permit, and shall be made available to Ohio EPA upon request:

a. Records of the annual volume of dredged material and blended dredged material that is beneficially used;

b. Records of the recipient(s) and the location(s) where KBI has stored, blended, or placed dredged material or blended dredged material on the land, and the volume provided by KBI to each recipient;

c. All laboratory reports of all sampling results and analyses of the dredged material and blended dredged material.

16. By January 31 of each year, KBI shall submit an annual report describing the dredged material or blended dredged material characterization and the beneficial use activities involving the dredged material or blended dredged material for the previous calendar year. At a minimum, the annual report shall include the volume of dredged material or blended dredged material used for each beneficial use.

17. In the annual report, KBI shall include the following annual certification statement. The certification statement shall be printed out, signed in accordance with Condition number 18, and submitted with each annual report required by Condition number 16:

    "I certify, under penalty of law, that the information contained in this annual report that will be used to determine compliance with the requirements contained in Chapters 3734 and 6111 of the ORC, and all rules thereunder, for the period beginning (insert date of last certification statement) and ending (insert current certification statement date) was prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

18. For the first certification statement, insert the initial effective date of this LAMP permit as the beginning date for the certified period of time. The certification statement shall be signed by one of the following persons: In the case of a corporation, by a principal executive officer of at least the level of vice president or the principal executive officer's duly authorized representative, if such representative is responsible for the overall operation of the facility. In the case of a partnership, a general partner. In the case of a sole proprietorship, the proprietor. The signature shall constitute personal affirmation that all statements or assertions of fact in the records are true and complete and comply fully with applicable state requirements and shall subject the signatory to liability under ORC Section 2921.13.

19. The annual report shall be sent to the following address:

    Ohio EPA - DMWM
    Beneficial Use Unit
    P.O. Box 1049
    Columbus, OH 43216-1049

20. KBI shall use Best Management Practices when storing, blending, and beneficially using dredged material and blended dredged material, except as provided in Conditions 20.e and 20.f. The Best Management Practices shall include, at a minimum, the following:

    a. Storage, blending, and beneficial use of any dredged material or blended dredged material that occurs at locations other than CDF12 or Arcelor Mittal Steel's west bank river dock shall be at least 300 feet from wells and surface waters used for drinking water or watering livestock;

b. Storage, blending, and beneficial use of any dredged material or blended dredged material that occurs at locations other than CDF12 or Arcelor Mittal Steel's west bank river dock shall be at least 33 feet from other surface waters of the state as defined in ORC Section 6111.01(H);

c. Unless otherwise provided in a permit issued under ORC Chapter 6111, KBI shall create surface water diversions to catch any solids in runoff and to divert runoff away from waters of the state at each site where dredged materials are stored or blended, including blended dredged material stored at CDF12 and at Arcelor Mittal Steel's west bank river dock;

d. Beneficial use locations of any dredged material or blended dredged material used for the purpose of fill shall not be within a sensitive groundwater area, including:

   i. Karst terrain;

   ii. A sand and gravel pit;

   iii. A limestone or sandstone quarry;

   iv. A drinking water source protection area with less than ten feet of low permeability clayey glacial till between the bottom of the fill material and the ground water;

   v. An aquifer designated on an Ohio Department of Natural Resources Ground Water Resources map for the county in which the beneficial use activity will take place as capable of yielding one hundred gallons-per minute or more, which has less than ten feet of separation between the bottom of the fill material and the ground water.

For the purposes of this LAMP permit, fill means placing dredged material or blended dredged material on the ground such that the material fills a depression or hole in the ground, creates mounds, or otherwise artificially changes the grade or elevation of the property.

e. Conditions 20.a, b, and d do not apply to dredged material or blended dredged material beneficially used as soils in bioretention practices if the dredged material or blended dredged material does not exceed the constituent limits specified in Table 1 and for which the calculated total BaP equivalent does not exceed 1 mg/kg. For the purpose of this LAMP permit, "bioretention practices" means methods employed to treat runoff and improve water quality for small drainage areas. Bioretention practices include the use of storm water basins that utilize a soil media, and vegetation. These practices are applicable in

areas such as roadways, commercial areas, parking areas, cul-de-sacs, or parking lot islands.

f. Conditions 20.a, b, and d do not apply to blended dredged material that is blended with alum residuals (no more than three percent), compost product, sand, or soil that neither contains nor is commingled with solid waste, construction and demolition debris, sludge, slag, unfinished compost, or contaminated soil, and that is nonputrescible, cohesive, and relatively uniform in texture, if the resulting blend satisfies all of the following:

i. Contains less than fifty percent dredged material;

ii. Does not exceed the constituent limits specified in Table 1, as determined by analysis conducted in accordance with Conditions 5, 6, and 13;

iii. The total BaP equivalent, calculated in accordance with Conditions 9, 10, and 13, does not exceed 1 mg/kg.

Nothing in this paragraph or LAMP permit exempts compliance with OAC 3745-39-04.

g. KBI shall take measures to control fugitive dust and other air emissions that may result from activities authorized through this LAMP permit.

21. KBI shall store, transport, blend, and beneficially use dredged material and blended dredged material only in a manner that neither creates a nuisance nor adversely affects public health or safety or the environment. Should a nuisance condition develop, or a determination be made by Ohio EPA that storage, blending, or beneficial use of dredged material or blended dredged material is a threat to public health or safety or the environment, then this LAMP permit may be revoked upon written notification from the Director. Immediately upon the effective date of any such revocation, KBI shall cease distribution and beneficial use of the dredged material or blended dredged material.

22. KBI shall not cause pollution or place or cause to be placed any dredged material or blended dredged material where it causes pollution to any waters of the state, except in accordance with an effective national pollutant discharge elimination system (NPDES) permit. Any unauthorized discharge to waters of the state shall be reported to Ohio EPA within twenty-four hours of discovery.

23. KBI shall provide written notice to the Director within seven days of discovering noncompliance with this LAMP permit.

24. The Director may add, delete, or change any conditions of this LAMP permit to protect human health or safety or the environment.

25. This LAMP permit and the authorization to beneficially use the dredged material shall expire at midnight on the expiration date shown above. In order to receive authorization to beneficially use dredged material beyond the above date of expiration, KBI shall submit such information and forms as are required by Ohio EPA not later than 180 days prior to the above date of expiration.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to ORC Section 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, Ohio 43215

If you have questions, please call (614) 644-2621 and ask to speak with a member of the Division of Materials and Waste Management's Beneficial Use Unit.

Sincerely,

Laurie A. Stevenson
Director

LAS/MF

cc: Cleveland-Cuyahoga County Port Authority