UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 31 2013

REPLY TO THE ATTENTION OF:

LU-9J

Mr. Jan Utrecht, M.S.
Director, Environmental Health and Safety
University of Cincinnati
P.O. Box 210218
Cincinnati, Ohio 45221-0218

RE: PCB Soil Remediation Plan, Morgens Hall, University of Cincinnati

Dear Mr. Utrecht:

The U.S. Environmental Protection Agency has reviewed your January 2, 2013 Polychlorinated Biphenyls (PCB) Remediation Plan for the remediation of PCB contaminated soil at the above referenced property.

The document describes the characterization data collected and details the proposed soil remediation plan for PCB Remediation Waste soils impacted from building materials at the North Residential Area, Morgens Hall, on the University of Cincinnati campus in Cincinnati, Ohio. Your work plan states that you will excavate and dispose of PCB impacted soils off-site and confirm remaining soils are at or below the cleanup level of 1 ppm for high occupancy use under 40 C.F.R. § 761.61(a)(4)(i)(A).

The EPA has determined that your work plan meets the self-implementing cleanup and disposal requirements of 40 CFR 761.61(a) for PCB remediation waste. The Work Plan is hereby approved subject to the following conditions:

1. As stated in 40 CFR 761.61(a), you must conduct the cleanup in accordance with all applicable requirements of 40 CFR 761.61(a)(1) through (9). A copy of these requirements is enclosed for your convenience. To assist you in completing the cleanup successfully, an "X" in the margin identifies specific requirements for which your notice is deficient in describing how you plan to comply. Specific comments about any deficient areas are noted in bold italics following the regulatory citation.

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2. You must prepare a Cleanup Completion Report that documents how you conducted the cleanup in accordance with the applicable regulatory requirements, including those marked with an "X" in the enclosure. This report is due within six months after the date of this letter.

3. If your cleanup activity includes the use of a fence or a cap that must be maintained in perpetuity, or if any portion of the site is cleaned up to the levels appropriate for low occupancy areas, then you must notify us thirty days prior to any change in ownership of the property. Such notice must include the name, address and telephone number of the new owner, and the name of the new owner's contact person for this matter. You must also submit a letter, signed by the potential purchaser, stating whether it intends to maintain the fence or cap, and whether it plans to maintain the low occupancy land use, or whether it intends to remove and dispose of additional PCB-contaminated soils off-site instead.

This letter does not relieve the site owner, University of Cincinnati, from compliance with any other federal, state or local regulation and does not preclude EPA from initiating any enforcement action, including an action seeking civil penalties for any violation of federal regulations. All applicable requirements of TSCA and its regulations will continue to apply to the site after any transfer in ownership.

In addition, if you wish to make any changes to your notification (including changes in the project schedule), then you must submit your proposal to Peter Ramanauskas, of my staff, in writing no less than 14 calendar days prior to the proposed implementation of the change. If you have any questions, please contact him at ramanauskas.peter@epa.gov or (312) 886-7890.

Sincerely,

Jose G. Cisneros, Chief
Remediation and Reuse Branch

Enclosure

cc: Paul Pardi, Manager DMWM, Ohio EPA
Tim Ingram, Health Commissioner, Hamilton County Department of Public Health
Bradley Miller, Acting Director, Hamilton County Department of Environmental Services

ENCLOSURE

Regulatory Requirements of 40 CFR §761.61(a)

Please note that an "X" in the margin [ ] indicates that the notification and certification of your intention to conduct a self-implementing cleanup does not adequately explain how you intend to comply with the regulatory requirement.

[ ] (1) ***Applicability***

(i) The self-implementing procedures may not be used to clean up:

(A) Surface or ground waters.

(B) Sediments in marine and freshwater ecosystems.

(C) Sewers or sewage treatment systems.

(D) Any private or public drinking water sources or distribution systems.

(E) Grazing lands.

(F) Vegetable gardens.

[ ] (ii) The self-implementing cleanup provisions shall not be binding upon cleanups conducted under other authorities, including but not limited to, actions conducted under section 104 or section 106 of CERCLA, or section 3004(u) and (v) or section 3008(h) of RCRA.

[ ] (2) ***Site characterization***. Any person conducting self-implementing cleanup of PCB remediation waste must characterize the site adequately to be able to provide the information required by paragraph (a)(3) of this section. Subpart N of this part provides a method for collecting new site characterization data or for assessing the sufficiency of existing site characterization data.

[ ] (3) ***Notification and certification***.

[ ] (i) At least 30 days prior to the date that the cleanup of a site begins, the person in charge of the cleanup or the owner of the property where the PCB remediation waste is located shall notify, in writing, the EPA Regional Administrator, the Director of the State or Tribal environmental protection agency, and the Director of the county or local environmental protection agency where the cleanup will be conducted. The notice shall include:

[ ] (A) The nature of the contamination, including kinds of materials contaminated.

[ ] (B) A summary of the procedures used to sample contaminated and adjacent areas and a table or cleanup site map showing PCB concentrations measured in all pre-cleanup characterization samples. The summary must include sample collection and analysis dates. The EPA Regional Administrator may require more detailed information including, but not limited to, additional characterization sampling or all sample identification numbers from all previous characterization activities at the cleanup site.

[ ] (C) The location and extent of the identified contaminated area, including topographic maps with sample collection sites cross referenced to the sample identification numbers in the data summary from paragraph (a)(3)(i)(B) of this section.

[ ] (D) A cleanup plan for the site, including schedule, disposal technology, and approach. This plan should contain options and contingencies to be used if unanticipated higher concentrations or wider distributions of PCB remediation waste are found or other obstacles force changes in the cleanup approach.

[ ] (E) A written certification, signed by the owner of the property where the cleanup site is located and the party conducting the cleanup, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection. Persons using alternate methods for chemical extraction and chemical analysis for site characterization must include in the certificate a statement that such a method will be used and that a comparison study which meets or exceeds the requirements of subpart Q of this part, and for which records are on file, has been completed prior to verification sampling

[ ] (ii) Within 30 calendar days of receiving the notification, the EPA Regional Administrator will respond in writing approving of the self-implementing cleanup, disapproving of the self-implementing cleanup, or requiring additional information. If the EPA Regional Administrator does not respond within 30 calendar days of receiving the notice, the person submitting the notification may assume that it is complete and acceptable and proceed with the cleanup according to the information the person provided to the EPA Regional Administrator. Once cleanup is underway, the person conducting the cleanup must provide any proposed changes from the notification to the EPA Regional Administrator in writing no less than 14 calendar days prior to the proposed implementation of the change. The EPA Regional Administrator will determine in his or her discretion whether to accept the change, and will respond to the change notification verbally within 7 calendar days and in writing within 14 calendar days of receiving it. If the EPA Regional Administrator does not respond verbally within 7 calendar days and in writing within 14 calendar days of receiving the change notice, the person who submitted it may deem it complete and acceptable and proceed with the cleanup according to the information in the change notice provided to the EPA Regional Administrator.

[ ] (iii) Any person conducting a cleanup activity may obtain a waiver of the 30-day notification requirement, if they receive a separate waiver, in writing, from each of the agencies they are required to notify under this section. The person must retain the original written waiver as required in paragraph (a)(9) of this section.

[ ] (4) ***Cleanup levels***. For purposes of cleaning, decontaminating, or removing PCB remediation waste under this section, there are four general waste categories: bulk PCB remediation waste, non-porous surfaces, porous surfaces, and liquids. Cleanup levels are based on the kind of material and the potential exposure to PCBs left after cleanup is completed.

[ ] (i) *Bulk PCB remediation waste*. Bulk PCB remediation waste includes, but is not limited to, the following non-liquid PCB remediation waste: soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge.

[ ] (A) *High occupancy areas*. The cleanup level for bulk PCB remediation waste in high occupancy areas is ≤1 ppm without further conditions. High occupancy areas where bulk PCB remediation waste remains at concentrations >1 ppm and ≤10 ppm shall be covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

[ ] (B) *Low occupancy areas*.

[ ] (1) The cleanup level for bulk PCB remediation waste in low occupancy areas is ≤25 ppm unless otherwise specified in this paragraph.

[ ] (2) Bulk PCB remediation wastes may remain at a cleanup site at concentrations >25 ppm and ≤50 ppm if the site is secured by a fence and marked with a sign including the M_L mark.

[ ] (3) Bulk PCB remediation wastes may remain at a cleanup site at concentrations >25 ppm and ≤100 ppm if the site is covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

[ ] (ii) *Non-porous surfaces*. In high occupancy areas, the surface PCB cleanup standard is ≤ 10 $\mu g/100\ cm^2$ of surface area. In low occupancy areas, the surface cleanup standard is <100 $\mu g/100\ cm^2$ of surface area. Select sampling locations in accordance with subpart P of this part or a sampling plan approved under paragraph (c) of this section.

[ ] (iii) *Porous surfaces.* In both high and low occupancy areas, any person disposing of porous surfaces must do so based on the levels in paragraph (a)(4)(i) of this section. Porous surfaces may be cleaned up for use in accordance with §761.79(b)(4) or §761.30(p).

[ ] (iv) *Liquids*. In both high and low occupancy areas, cleanup levels are the concentrations specified in §761.79(b)(1) and (b)(2).

[ ] (v) *Change in the land use for a cleanup site*. Where there is an actual or proposed change in use of an area cleaned up to the levels of a low occupancy area, and the exposure of people or animal life in or at that area could reasonably be expected to increase, resulting in a change in status from a low occupancy area to a high occupancy area, the owner of the area shall clean up the area in accordance with the high occupancy area cleanup levels in paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

[ ] (vi) The EPA Regional Administrator, as part of his or her response to a notification submitted in accordance with §761.61(a)(3) of this part, may require cleanup of the site, or portions of it, to more stringent cleanup levels than are otherwise required in this section, based on the proximity to areas such as residential dwellings, hospitals, schools, nursing

homes, playgrounds, parks, day care centers, endangered species habitats, estuaries, wetlands, national parks, national wildlife refuges, commercial fisheries, and sport fisheries.

[ ] (5) ***Site cleanup.*** In addition to the options set out in this paragraph, PCB disposal technologies approved under §§761.60 and 761.70 are acceptable for on-site self-implementing PCB remediation waste disposal within the confines of the operating conditions of the respective approvals.

[ ] (i) *Bulk PCB remediation waste.* Any person cleaning up bulk PCB remediation waste shall do so to the levels in paragraph (a)(4)(i) of this section.

[ ] (A) Any person cleaning up bulk PCB remediation waste on-site using a soil washing process may do so without EPA approval, subject to all of the following:

(1) A non-chlorinated solvent is used.
(2) The process occurs at ambient temperature.
(3) The process is not exothermic.
(4) The process uses no external heat.
(5) The process has secondary containment to prevent any solvent from being released to the underlying or surrounding soils or surface waters.
(6) Solvent disposal, recovery, and/or reuse is in accordance with relevant provisions of approvals issued according to paragraphs (b)(1) or (c) of this section or applicable paragraphs of §761.79.

[ ] (B) Bulk PCB remediation waste may be sent off-site for decontamination or disposal in accordance with this paragraph, provided the waste is either dewatered on-site or transported off-site in containers meeting the requirements of the DOT Hazardous Materials Regulations (HMR) at 49 CFR parts 171 through 180.

[ ] (1) Removed water shall be disposed of according to paragraph (b)(1) of this section.

[ ] (2) Any person disposing off-site of dewatered bulk PCB remediation waste shall do so as follows:

(i) Unless sampled and analyzed for disposal according to the procedures set out in §§761.283, 761.286, and 761.292, the bulk PCB remediation waste shall be assumed to contain ≥50 ppm PCBs.
(ii) Bulk PCB remediation wastes with a PCB concentration of <50 ppm shall be disposed of in accordance with paragraph (a)(5)(v)(A) of this section.
(iii) Bulk PCB remediation wastes with a PCB concentration ≥50 ppm shall be disposed of in a hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA, or a PCB disposal facility approved under this part.
(iv) The generator must provide written notice, including the quantity to be shipped and highest concentration of PCBs (using extraction EPA Method 3500B/3540C or Method 3500B/3550B followed by chemical analysis using EPA Method 8082 in SW-846 or methods validated under subpart Q of this part) at least 15 days before the first shipment of bulk PCB remediation waste from each

cleanup site by the generator, to each off-site facility where the waste is destined for an area not subject to a TSCA PCB Disposal Approval.

[ ] (3) Any person may decontaminate bulk PCB remediation waste in accordance with §761.79 and return the waste to the cleanup site for disposal as long as the cleanup standards of paragraph (a)(4) of this section are met.

[ ] (ii) Non-porous surfaces. PCB remediation waste non-porous surfaces shall be cleaned on-site or off-site for disposal on-site, disposal off-site, or use, as follows:

[ ] (A) For on-site disposal, non-porous surfaces shall be cleaned on-site or off-site to the levels in paragraph (a)(4)(ii) of this section using:
(1) Procedures approved under §761.79.
(2) Technologies approved under §761.60(e).
(3) Procedures or technologies approved under paragraph (c) of this section.

[ ] (B) For off-site disposal, non-porous surfaces:
(1) Having surface concentrations <100 μg/100 cm^2 shall be disposed of in accordance with paragraph (a)(5)(i)(B)(2)(ii) of this section. Metal surfaces may be thermally decontaminated in accordance with §761.79(c)(6)(i).
(2) Having surface concentrations ≥100 μg/100 cm^2 shall be disposed of in accordance with paragraph (a)(5)(i)(B)(2)(iii) of this section. Metal surfaces may be thermally decontaminated in accordance with §761.79(c)(6)(ii).

[ ] (C) For use, non-porous surfaces shall be decontaminated on-site or off-site to the standards specified in §761.79(b)(3) or in accordance with §761.79(c).

[ ] (iii) *Porous surfaces.* Porous surfaces shall be disposed on-site or off-site as bulk PCB remediation waste according to paragraph (a)(5)(i) of this section or decontaminated for use according to §761.79(b)(4), as applicable.

[ ] (iv) *Liquids*. Any person disposing of liquid PCB remediation waste shall either:
(A) Decontaminate the waste to the levels specified in §761.79(b)(1) or (b)(2).
(B) Dispose of the waste in accordance with paragraph (b) of this section or an approval issued under paragraph (c) of this section.

[ ] (v) *Cleanup wastes*. Any person generating the following wastes during and from the cleanup of PCB remediation waste shall dispose of or reuse them using one of the following methods:

[ ] (A) Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from cleanup activities shall be either decontaminated in accordance with §761.79(b) or (c), or disposed of in one of the following facilities, without regard to the requirements of subparts J and K of this part:
(1) A facility permitted, licensed, or registered by a State to manage municipal solid waste subject to part 258 of this chapter.

(2) A facility permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste subject to §§257.5 through 257.30 of this chapter, as applicable.
(3) A hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA.
(4) A PCB disposal facility approved under this part.

[ ] (B) Cleaning solvents, abrasives, and equipment may be reused after decontamination in accordance with §761.79.

[ ] (6) ***Cleanup verification*** —

[ ] (i) *Sampling and analysis*. Any person collecting and analyzing samples to verify the cleanup and on-site disposal of bulk PCB remediation wastes and porous surfaces must do so in accordance with subpart O of this part. Any person collecting and analyzing samples from non-porous surfaces must do so in accordance with subpart P of this part. Any person collecting and analyzing samples from liquids must do so in accordance with §761.269. Any person conducting interim sampling during PCB remediation waste cleanup to determine when to sample to verify that cleanup is complete, may use PCB field screening tests.

[ ] (ii) *Verification.*
(A) Where sample analysis results in a measurement of PCBs less than or equal to the levels specified in paragraph (a)(4) of this section, self-implementing cleanup is complete.
(B) Where sample analysis results in a measurement of PCBs greater than the levels specified in paragraph (a)(4) of this section, self-implementing cleanup of the sampled PCB remediation waste is not complete. The owner or operator of the site must either dispose of the sampled PCB remediation waste, or reclean the waste represented by the sample and reinitiate sampling and analysis in accordance with paragraph (a)(6)(i) of this section.

[ ] (7) ***Cap requirements.*** A cap means, when referring to on-site cleanup and disposal of PCB remediation waste, a uniform placement of concrete, asphalt, or similar material of minimum thickness spread over the area where remediation waste was removed or left in place in order to prevent or minimize human exposure, infiltration of water, and erosion. Any person designing and constructing a cap must do so in accordance with §264.310(a) of this chapter, and ensure that it complies with the permeability, sieve, liquid limit, and plasticity index parameters in §761.75(b)(1)(ii) through (b)(1)(v). A cap of compacted soil shall have a minimum thickness of 25 cm (10 inches). A concrete or asphalt cap shall have a minimum thickness of 15 cm (6 inches). A cap must be of sufficient strength to maintain its effectiveness and integrity during the use of the cap surface which is exposed to the environment. A cap shall not be contaminated at a level ≥1 ppm PCB per AroclorTM(or equivalent) or per congener. Repairs shall begin within 72 hours of discovery for any breaches which would impair the integrity of the cap.

[ ] (8) ***Deed restrictions for caps, fences and low occupancy areas***. When a cleanup activity conducted under this section includes the use of a fence or a cap, the owner of the site must maintain the fence or cap, in perpetuity. In addition, whenever a cap, or the procedures and

requirements for a low occupancy area, is used, the owner of the site must meet the following conditions:

[ ] (i) Within 60 days of completion of a cleanup activity under this section, the owner of the property shall:

[ ] (A) Record, in accordance with State law, a notation on the deed to the property, or on some other instrument which is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property:

(1) That the land has been used for PCB remediation waste disposal and is restricted to use as a low occupancy area as defined in §761.3.

(2) Of the existence of the fence or cap and the requirement to maintain the fence or cap.

(3) The applicable cleanup levels left at the site, inside the fence, and/or under the cap.

[ ] (B) Submit a certification, signed by the owner, that he/she has recorded the notation specified in paragraph (a)(8)(i)(A) of this section to the EPA Regional Administrator.

[ ] (ii) The owner of a site being cleaned up under this section may remove a fence or cap after conducting additional cleanup activities and achieving cleanup levels, specified in paragraph (a)(4) of this section, which do not require a cap or fence. The owner may remove the notice on the deed no earlier than 30 days after achieving the cleanup levels specified in this section which do not require a fence or cap.

[ ] (9) ***Recordkeeping***. For paragraphs (a)(3), (a)(4), and (a)(5) of this section, recordkeeping is required in accordance with §761.125(c)(5).