



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 18 2017

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

NOW THE
OFFICE OF LAND AND
EMERGENCY MANAGEMENT

Christopher Corrado
Manager, Environmental Downstate NY
National Grid
175 East Old Country Road
Hicksville, New York 11801

Dear Mr. Corrado:

The Office of Resource Conservation and Recovery (ORCR) of the U.S. Environmental Protection Agency (EPA) grants renewed approval to National Grid USA (doing business as National Grid) to decontaminate natural gas pipeline and other non-porous metal surfaces contaminated with polychlorinated biphenyls (PCBs) using soaking tanks filled with Enviro Clean (which is a performance-based organic decontamination solvent), subject to the terms and conditions specified in the enclosed approval. EPA also grants approval to National Grid to reuse Enviro Clean, subject to the terms and conditions specified in the enclosed approval. The enclosed approval is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA) and the federal PCB Regulations, 40 CFR 761.79(h). The enclosed approval is applicable to operations at the Everett facility in EPA Region 1 and the Greenpoint facility in EPA Region 2. The enclosed approval is effective upon EPA's signature and, unless specified otherwise in Condition 16, expires five years from the aforementioned signature date.

National Grid conducted decontamination demonstrations in 2005 and 2013 to confirm performance of its decontamination method. EPA representatives observed the demonstrations and collected wipe samples before and after the decontamination. Results of the analysis from the demonstrations, which are summarized in Appendix III of the enclosed approval, indicate that National Grid's soaking method using Enviro Clean has the ability to reduce PCBs at a surface concentration of $\leq 5000 \mu\text{g}/100 \text{ cm}^2$ to levels $\leq 10 \mu\text{g}/100 \text{ cm}^2$. This level of decontamination was used as a measure of success for the demonstration, as it is the level identified for non-porous surfaces in § 761.79(b)(3)(i)(A) for unrestricted use. In addition to the aforementioned demonstrations, in 2000, National Grid conducted a validation study for the decontamination solvent, Enviro Clean, in accordance with 40 CFR part 761 subpart T – "Comparison Study for Validating a New Performance-Based Decontamination Solvent Under § 761.79 (d)(4)." This approval is based upon EPA's conclusion that National Grid's decontamination method and National Grid's reuse of Enviro Clean, when conducted in accordance with the applicable PCB regulations and in accordance with the terms and conditions of the approval, do not pose an unreasonable risk of injury to health or the environment.

A violation of any condition of the enclosed approval or any applicable federal regulations may subject National Grid to enforcement action and may be grounds for modification, revocation, or suspension of the approval. Modification, revocation, or suspension of the approval may also result from future EPA

rulemaking(s) with respect to PCBs, or from new information gathered by National Grid and/or EPA for example during a demonstration test or during subsequent operations at the National Grid facilities covered by this approval.

Please contact Jennifer McLeod at (703) 308-8459 if you have any questions regarding the enclosed approval.

Sincerely,



Barnes Johnson, Director
Office of Resource Conservation and Recovery

Enclosure

cc: EPA Regional PCB Coordinators

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF)
) APPROVAL TO DECONTAMINATE
NATIONAL GRID)
) NATURAL GAS PIPELINES AND OTHER
175 EAST OLD COUNTRY ROAD)
) NON-POROUS METAL SURFACES FROM
HICKSVILLE, NY 11801)
) POLYCHLORINATED BIPHENYLS (PCBs)
)

AUTHORITY

This approval is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA) and the federal Polychlorinated Biphenyls (PCB) Regulation, 40 CFR 761.79(h).

Failure to comply with the approval conditions specified herein shall constitute a violation of §§ 761.79(h) and 761.50(a) and may also be a violation of other provisions of the PCB regulations in 40 CFR part 761. A violation of the regulations is a prohibited act under Section 15 of TSCA.

SUMMARY AND FINDINGS

Background information, process descriptions, and demonstration test result summaries are included in Appendices I through III.

EPA finds that National Grid's process performs as well as the decontamination procedures in § 761.79(c) for natural gas pipeline and other non-porous metal surfaces with PCBs at concentrations $\leq 5000 \mu\text{g}/\text{cm}^2$. Furthermore, EPA finds that National Grid's process and National Grid's reuse of Enviro Clean, when conducted in accordance with the applicable PCB regulations and in accordance with the terms and conditions of the approval, will not pose an unreasonable risk to health or the environment.

EFFECTIVE DATE

This approval is effective upon signature by the Director of the Office of Resource Conservation and Recovery (ORCR) and shall expire five (5) years from the date of signature unless otherwise specified in Condition 16.

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DEFINITIONS AND ACRONYMS

Definitions found in 40 CFR 761.3 apply unless otherwise noted below.

"Analytical data" means: (a) a formal report from a chemical analysis laboratory; or (b) appropriate chemical instrument print outs from a chemical instrument that have appropriate controls, standards, and written instrumental operating parameters and conditions. Technical judgment or experience is not considered analytical data.

"Application" means all data and materials upon which EPA based its decision to approve National Grid's process, e.g., information submitted to EPA by National Grid to define, represent, or describe National Grid's decontamination method, decontamination solvent, or sampling methods. This includes the request for approval required by § 761.79(h) and such data and materials submitted in relation to both the demonstrations and operating approval applications. These data and materials are encompassed in National Grid's application "Application for Renewal – Alternative Decontamination Activities to Remove PCBs from Metallic Pipe or Piping," dated April 2017.

"Approval" means the content of this document, the conditions within, and the application.

"Calendar year" or "year" means any 365 consecutive days except in the occurrence of a leap year, which contains 366 days. The calendar year does not necessarily begin on January 1st.

"CFR" means the Code of Federal Regulations.

"Day" means a calendar day, unless otherwise specified.

"Decontaminate" or "Decontamination" means any removal of PCBs from natural gas pipeline and other non-porous metal surfaces.

"Director of ORCR" means the Director of the Office of Resource Conservation and Recovery (ORCR), Office of Land and Emergency Management (OLEM), U.S. EPA, Washington, DC. Phone Number: 703-308-8895. Mailing address: USEPA Headquarters, 1200 Pennsylvania Avenue, N. W., OLEM/ORCR, Mail Code: 5303P, Washington, DC 20460.

"Emergency Incident" means an incident that results or may result in injury to health or the environment, for example from fire, spill, or explosion.

“Enviro Clean” means Enviro Jet Technologies’ (Enviro Jet’s) brand of decontamination solvent, which is a minimum 10% by volume solution of terpene hydrocarbons in water, which must contain < 2 ppm PCBs to be used for decontamination.

“Facility” or “Site” means all contiguous land and structures (such as a single manufacturing plant) of the two locations at which National Grid conducts decontamination work.

“Facility location” means the two locations at which National Grid operates. The addresses are: 17 Rover Street, Everett, MA, 02149; and 287 Maspeth Ave, Brooklyn, NY, 11211.

“HQ” means EPA Headquarters.

“Lost-time injury” means an injury related to National Grid’s operations, which results in an employee not performing his/her normal assignments during the workday and/or any successive workday following the day of injury.

“MODEF” means mineral oil dielectric fluid.

“National Grid’s process” means National Grid’s soaking method of decontaminating natural gas pipeline and other non-porous metal surfaces contaminated with PCBs, using the Enviro Clean solution, under the operating conditions specified in Condition 2(a) of this approval.

“Natural Gas Pipeline” means natural gas piping and components constructed from non-porous metallic materials.

"Operations" means all actions comprising the performance of National Grid’s process (including set-up and take-down of soaking tanks and the actual decontamination), the filtering and reuse of Enviro Clean, and the off-site disposal of PCB-contaminated materials generated during National Grid’s process or the filtering and reuse of Enviro Clean or natural gas pipeline that does not meet the decontamination standard ($\leq 10 \mu\text{g}/100 \text{ cm}^2$).

"ORCR" means the Office of Resource Conservation and Recovery, located at EPA HQ.

"PCB" means polychlorinated biphenyls as defined in § 761.3.

“PCB Regulations” are the regulations at 40 CFR part 761.

“PODF” means performance-based organic decontamination fluid as defined in § 761.3.

“Regional EPA Administrator” means the Regional Administrator in the Region in which National Grid’s facility is located.

“Regional PCB Coordinator” means the contact listed on the following website for the EPA Region in which the facility is located:
https://www.epa.gov/pcbs/epa-regional-polychlorinated-biphenyl-pcb-programs#pcb_coordinator

“Spill” has the same meaning as "Spill" as defined in EPA's PCB Spill Cleanup Policy in § 761.123.

CONDITIONS OF APPROVAL

Per 40 CFR 761.79(h), this approval waives otherwise applicable requirements of § 761.79(c). This alternative decontamination approval may reference additional requirements of part 761 but National Grid should not rely solely on this approval for all requirements related to PCBs or the disposal of PCB waste. In the event that the information contained in the Application or other supporting documents differs from the conditions specified in this document, the conditions of this document shall govern.

1. Scope of Approval

- a) This approval authorizes National Grid to decontaminate non-porous metal surfaces by using tanks to soak the materials for a minimum of 2 hours, as an alternate to soaking for at least 15 hours, which is required under § 761.79(c)(3)(iii).
- b) This approval authorizes National Grid to use Enviro Clean (a 10% terpene hydrocarbon mixture) when performing their soaking process, instead of an approved PODF (such as 100% terpene hydrocarbons), which is required under § 761.79(c)(iv).
- c) This approval authorizes National Grid to filter and reuse Enviro Clean after each use, as an alternate to disposing of the solvent, which is required under § 761.79(c)(3)(vi). This approval authorizes National Grid to reuse Enviro Clean only if the resulting concentration of Enviro Clean following filtering is < 2 ppm PCBs, which is the concentration required in § 761.79(c)(3)(iii), and the < 2 ppm concentration is not the result of dilution.
- d) National Grid shall comply with the provisions of 40 CFR 761.79, except as otherwise indicated in this approval.
- e) This approval does not permit National Grid to modify any additional requirements under § 761.79 in any other respect.

2. Operating Conditions

Operation of National Grid's process to decontaminate natural gas pipeline and other non-porous metal surfaces contaminated with PCBs shall be subject to the conditions of this approval and shall be consistent with the information included in National Grid's application dated April 2017.

- a) National Grid may decontaminate natural gas pipeline and other non-porous metal surfaces under the following scenarios:
 - 1) When soaking natural gas pipeline or other non-porous metal surfaces:
 - A. National Grid shall conduct the soaking process with Enviro Clean, in accordance with the operating parameters indicated in their application (e.g. temperature when soaking must be between 39 and 97 degrees Fahrenheit).

- B. Before operations, National Grid shall conduct a visual inspection of the soaking tanks and record findings. If the inspection reveals that the soaking tank is damaged, the decontamination shall not move forward until the tank is either adequately repaired or replaced.
 - C. National Grid shall completely submerge the pipe in their soaking tanks filled with Enviro Clean.
 - D. National Grid is authorized to soak natural gas pipeline and other non-porous metal surfaces with PCB surface concentrations $\leq 5000 \mu\text{g}/100 \text{ cm}^2$ for no less than two hours, without doing confirmatory wipe sampling per § 761.123.
- 2) When reusing Enviro Clean:
- A. National Grid may only use Enviro Clean at concentrations < 2 ppm PCBs for decontamination purposes. National Grid may also filter and reuse used Enviro Clean, so long as its filtered concentration is < 2 ppm PCBs and that concentration is not the result of dilution.

3. Generated Waste Disposal and Handling Requirements

- a) National Grid shall sample and analyze any Enviro Clean used by National Grid's soaking tanks after each use. National Grid shall either reuse the Enviro Clean in accordance with Condition 2(a)(2) of this approval (i.e., if it is < 2 ppm and that concentration is not the result of dilution), or dispose of the solvent in accordance with § 761.79(g).
- b) National Grid shall dispose of any waste generated during National Grid's process or operations, including the filter, non-liquid cleaning materials, and any personal protective equipment waste, and any natural gas pipeline or other non-porous metal surface that does not meet the decontamination standard ($\leq 10 \mu\text{g}/100 \text{ cm}^2$), in accordance with § 761.79(g) or other relevant disposal requirements in 40 CFR part 761, subpart D, as appropriate.
- c) National Grid shall comply with the labeling and marking requirements for PCB Containers under §§ 761.40 and 761.45 for the soaking tanks.

4. Monitoring, Recordkeeping, and Reporting Requirements

- a) National Grid shall monitor, record, and maintain records which include the following operating parameters and information:
 - 1) Approximate length and size (or if unavailable, weight) of natural gas pipeline and other non-porous metal surfaces decontaminated by National Grid's Process;
 - 2) The estimated quantity and PCB concentration of decontamination solvent used;

- 3) Any parameters measured during the procedure, including but not limited to: soaking time, temperature, and tank fill level;
 - 4) A copy of the analytical report (including the associated gas chromatogram) to determine the final concentration of decontamination solvent or wastewater not sent for disposal;
 - 5) Identification of facilities used to dispose of the PCB wastes listed in Condition 3, and method of disposal;
 - 6) Date, time, and duration of decontamination;
 - 7) Name and business address of the National Grid operator and supervisor at the Greenpoint, NY, location and the Everett, MA, location;
 - 8) Documentation that National Grid has obtained any necessary approvals and permits from federal, state and local agencies; and
 - 9) Any reports required by Conditions 5 and 6.
- b) National Grid shall develop, compile, and maintain the records in Condition 4(a) in a paper log or electronically, as follows:
- 1) National Grid shall compile the records within three (3) days after the operations conclude at each facility and keep these documents at the facility, or another secure location, from the three-day point until at least ten (10) years after the date of operations;
 - 2) If records are electronic, National Grid shall create a backup of all records in a manner that would prevent them from being destroyed if the original records were destroyed; and
 - 3) National Grid shall make the original records or, for electronic files, backup records, if the originals have been destroyed, available for inspection by authorized representatives of EPA upon request.
- c) If either National Grid initiates and completes closure while this approval is in force or if the approval expires, National Grid shall electronically submit the records in Condition 4(a) to the Director of ORCR within 90 calendar days of certifying closure or the expiration, whichever comes first.
- d) National Grid shall maintain annual records on the disposition of all PCBs in compliance with 40 CFR 761.180(a).

5. PCB Spills

In the event National Grid believes, or has reason to believe, that a spill (as defined in EPA's PCB Spill Cleanup Policy in 40 CFR 761.123) of PCBs has, or may have, occurred from any

activities or devices related to National Grid's operations, National Grid shall notify the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 8 by phone immediately after initial response actions have been taken to ensure the protection of health and the environment. National Grid shall control and clean up any spills of PCBs or other fluids as provided in the Spill Prevention, Control and Countermeasure Plan provided in the application.

In addition, National Grid shall submit a written report to the appropriate Regional PCB Coordinator and the Director of ORCR no later than 15 business days after the spill occurred that describes the: a) spill; b) known or suspected cause(s) of the spill; c) operations that were being conducted prior to, and during, the spill; d) cleanup actions conducted; and e) changes in operations that National Grid will implement to prevent such spills from occurring in the future.

National Grid shall not resume operations until the cause of the spill has been determined and corrected to the satisfaction of EPA, and a written or emailed approval is received from the ORCR HQ contact identified in Condition 8.

National Grid shall also report PCB spills in accordance with applicable federal, state, and local requirements.

6. Health and Safety

- a) National Grid shall maintain its operations in a way that minimizes the possibility of a fire, explosion or any unauthorized release of PCBs to air, soil or surface water which may pose an unreasonable risk of injury to health or the environment.
- b) National Grid shall take all necessary precautionary measures to ensure its operations are in compliance with applicable health and safety standards, as required by this approval and other applicable federal, state and local laws, regulations and ordinances. National Grid shall report by phone to the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 8 by the end of the business day immediately following an incident that resulted in any lost-time injury occurring as a result of National Grid's equipment or operations. National Grid shall submit a written report describing the incident to the Director of ORCR within five (5) business days following the incident.

c) Site-Specific Safety Plan

Before decontaminating any natural gas pipeline or other non-porous metal surface, National Grid shall develop and maintain at each facility performing operations a site-specific safety plan for the activities covered by this approval. At a minimum, National Grid shall include the following site-specific information in the safety plan:

- 1) Scope of work (description of the decontamination methods used, amount of PCB contaminated natural gas pipeline and other non-porous metal surfaces that might be found at the facility at any given time or in directly associated storage containers, and any hazardous materials to be used, including decontamination solvents);

- 2) Project personnel, including roles, responsibilities and qualifications, name of on-site safety coordinator, and name(s) of any on-site cardiopulmonary resuscitation (CPR)/First-Aid certified person(s);
- 3) Emergency contact information, including local authorities (e.g., local fire and police departments) and nearest medical building that would accept patients contaminated with chemicals;
- 4) Hazard identification and control/mitigation measures;
- 5) Names of all chemicals used at the facility by National Grid along with approximate quantities and the corresponding material safety data sheets (SDS);
- 6) Emergency action plan(s) specifying the following:
 - A. Contact information – project and property management, and the persons responsible for handling emergencies (with 24-hour a day contact in the event of an emergency), including both phone numbers and email addresses;
 - B. Evacuation plan(s);
 - C. Response procedures for reasonable emergency scenarios;
 - D. First aid location(s);
 - E. Eye-wash station location(s);
 - F. Fire extinguisher location(s);
 - G. Location of SDS;
 - H. Smoking/non-smoking areas.

National Grid shall submit a copy of any site-specific safety plan to the ORCR HQ contact identified in Condition 8 or the applicable EPA Regional office upon request.

d) Emergency Coordinator

National Grid or its contractors shall, during operations, have at least one designated employee at the operating site premises with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the site-specific safety plan, operations and activities at the site, the location and characteristics of waste handled, and the facility layout, including the hazards associated with the site at which National Grid operates.

e) Emergency Procedures

- 1) Whenever there is an imminent or actual release of PCBs to air, soil, or surface water, or an incident that results or may result in injury to health or the environment (“emergency incident”), for example from fire, spill, or explosion, the emergency coordinator shall immediately:
 - A. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel;
 - B. Notify appropriate federal, state and/or local emergency response entities (e.g., fire departments) if their help is needed; and
 - C. Use the Emergency Action Plan described in Condition 6(c)(6) as a resource to expedite the emergency coordinator’s response.
- 2) Whenever there is an emergency incident, the emergency coordinator shall as soon as practical identify the character, exact source, amount, and real extent of any released materials. The emergency coordinator shall also assess possible hazards to health or the environment that may result from the emergency incident. This assessment shall consider both direct and indirect effects of the emergency incident (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any PCB surface water run-off from water or chemical agents used to control fire and heat-induced explosions).
- 3) If the emergency coordinator determines that there has been an emergency incident which may pose an unreasonable risk of injury to health or the environment outside the site or facility, he/she must report the findings as follows:
 - A. If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities; and
 - B. The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 1-800-424-8802). The notification must include:
 - i. Name and telephone number of reporter;
 - ii. Name and address of facility;
 - iii. Time and type of emergency incident (e.g., release, fire);
 - iv. Name and quantity of material(s) involved, to the extent known;
 - v. The extent of injuries, if any; and
 - vi. The possible hazards to health, or the environment, outside the facility.

- 4) During an emergency incident, the emergency coordinator shall take all reasonable measures necessary to ensure that emergency incidents do not recur or spread to other PCB waste at the operating site. These measures must include, where applicable and when possible, safely shutting down the operations, collecting and containing released waste, removing or isolating containers and equipment, and other measures that can be implemented to protect health and the environment.
 - 5) During an emergency incident, the emergency coordinator shall assess if any facility operations/processes need to be suspended or if any immediate measures should be taken to minimize the risk of injury (e.g., from the release of toxics or the spread of fire) that could occur due to the nature of facility operations and chemicals/products stored at the facility.
 - 6) Immediately after an emergency incident has been contained, National Grid shall provide for treating, storing, and/or disposing of recovered waste, contaminated soil or surface water, or any other material that results from the emergency incident at the facility.
 - 7) National Grid shall notify the Regional PCB Coordinator and the ORCR HQ contact identified in Condition 8 of the emergency incident by phone immediately after initial response actions have been taken to ensure the protection of health and the environment.
 - 8) National Grid shall submit a written report to the appropriate EPA Regional PCB Coordinator and the Director of ORCR identified in Condition 8 no later than 15 business days after the emergency incident occurred that describes the: a) incident; b) cause(s) of the incident, c) operations that were being conducted prior to, and during, the emergency incident; d) cleanup actions conducted; and e) changes in operations that National Grid implemented or will implement to prevent such emergency incidents from occurring in the future.
 - 9) National Grid shall not feed any PCB material into the soaking tank until the cause of the emergency incident has been determined and corrected to the satisfaction of EPA. National Grid shall not resume operations until written or emailed approval is received from the ORCR HQ contact identified in Condition 8.
 - 10) National Grid shall also report PCB emergency incidents in accordance with applicable federal, state, and local requirements.
- f) Fire Extinguishers

National Grid shall maintain and clearly label fire extinguishers and other firefighting equipment that are capable of suppressing fires that may be associated with materials used or treated by National Grid's process. Labeling shall be based on the compatibility of the extinguisher with the fire hazard. Fire extinguishers and other firefighting equipment shall be available within 25 feet of all work activities and operations. Multiple types of fire extinguishers and firefighting equipment may be necessary to address

different fire hazards posed by National Grid's operations and the wastes that it treats. All fire extinguishers shall have the following:

- 1) Annual inspection tag;
- 2) A gauge indicating fully charged;
- 3) Pin with security seal; and
- 4) Instructions on how to use.

g) Soaking Tank Placement

The soaking tanks shall be located at an adequate safety distance so that operations will not pose unreasonable risk to health or the environment. For example, the tanks shall be located a minimum of 20 feet away from any storage area for flammable or combustible materials (e.g., flammable liquid storage tanks or drums), and shall not be located next to a sensitive ecosystem if the tanks are operated outdoors.

7. Security

National Grid shall ensure its equipment is secure (e.g., with a fence, alarm system, signage) such that only those individuals authorized to conduct operations and approved visitors can access the area of National Grid's equipment, regardless of whether or not operations are occurring.

8. Notifications and Reports

Notifications or reports required to be mailed to the Director of ORCR shall be mailed to: Director of ORCR, 1200 Pennsylvania Avenue N.W., Mailcode: 5303P, Washington, D.C. 20460. For electronic submission to the Director of ORCR or ORCR HQ contact, National Grid shall email the information to ORCRPCBs@epa.gov. Whenever practical, email is preferable to phone and mail communication, except where specified otherwise in this approval.

Phone numbers for EPA Regional PCB Coordinators can be found on the following website: <https://www.epa.gov/pcbs/epa-regional-polychlorinated-biphenyl-pcb-programs>. The ORCR HQ contact is Jennifer McLeod, 703-308-8459 or ORCRPCBs@epa.gov.

9. Agency Approvals/Permits:

National Grid's operations may not commence until National Grid has obtained all required approvals/permits from federal, state, and local agencies. National Grid is responsible for obtaining such approvals/permits. Once National Grid has verified that it has been issued all required approvals/permits, National Grid shall document that verification in their operating records which are described in Condition 4.

10. Personnel Training

- a) National Grid shall ensure that the personnel directly involved with the operations covered by this approval are familiar with the requirements of this approval. In this regard, National Grid shall keep copies of the following documents at both of its facilities all times:
- 1) This operating approval;
 - 2) National Grid's operating approval application;
 - 3) National Grid's most recent site-specific safety plan(s);
 - 4) The Spill Prevention, Control and Countermeasure Plan; and
 - 5) National Grid's sampling and analytical procedures.

National Grid shall also submit a copy of the sampling and analytical procedures to the laboratory conducting the analyses, and resubmit every time the procedures are updated.

- b) Personnel shall be formally trained every 12 months. Training materials shall be kept on site in a location accessible to all personnel during working hours. At a minimum, National Grid shall train personnel on the following:
- 1) Types of natural gas pipeline and other non-porous metal surfaces National Grid manages, National Grid's decontamination methods, and the upper PCB surface concentration limits for the natural gas pipeline and other non-porous metal surfaces which may be decontaminated;
 - 2) The recordkeeping, notification, and reporting requirements identified in Condition 4 required by this approval, and the location of records and retention times;
 - 3) The safety, operating, and maintenance procedures;
 - 4) The procedures for using, inspecting, repairing, and replacing National Grid's emergency and monitoring equipment; and
 - 5) The Spill Prevention, Control and Countermeasure Plan.

11. Waste and Equipment Transport

National Grid shall comply with any applicable U.S. Department of Transportation (US DOT) requirements in 49 CFR parts 171-177, the labeling and marking requirements in 40 CFR part 761 subpart C for PCB Containers, and requirements applicable to the distribution in commerce of PCBs in 40 CFR part 761 when transporting PCB-contaminated materials (e.g., decontamination solvent, personal protective equipment) off-site.

- a) Before transporting soaking tanks off-site, National Grid shall decontaminate the soaking tanks by:
 - 1) Flushing the internal surfaces of the containers three times with a solvent containing < 50 ppm PCBs. Each rinse shall use a volume of the flushing solvent equal to approximately 10 percent of the PCB Container capacity.
- b) National Grid shall decontaminate movable equipment contaminated by PCBs, tools, and sampling equipment by:
 - 1) Swabbing surfaces that have contacted PCBs with a solvent;
 - 2) A double wash/rinse as defined in 40 CFR part 761 subpart S; or
 - 3) Another applicable decontamination procedure listed under § 761.79.

12. Closure Cost Estimate and Plan, Financial Assurance, and Permanent Closure

- a) Closure Cost Estimate and Plan
 - 1) Prior to issuance of this approval, National Grid submitted to ORCR a written closure plan and closure cost estimate that identified the steps and quantified the estimated costs for the activities National Grid shall conduct to permanently close their operations. The provisions of 40 CFR 761.65(e)(4)-(8) and (f)(2)-(4) shall apply, except as otherwise provided in this approval.
 - 2) EPA may require National Grid to adjust the closure plan or closure cost estimate to ensure no unreasonable risk of injury to health or environment.
- b) Financial Assurance
 - 1) National Grid shall obtain and submit financial assurance for closure to the Director of ORCR at least 60 days prior to commencing operations. Within 60 days of receiving the financial assurance, the Director of ORCR will respond in writing approving or disapproving of the financial assurance. If the Director of ORCR does not respond within 60 days of receiving the financial assurance, National Grid may assume that it is complete and acceptable and proceed with their operations. National Grid shall apply the financial assurance requirements in § 761.65(g) for commercial storage facilities and comply with such requirements. National Grid shall not operate without the necessary financial assurance. 40 CFR 761.65(g) references the financial assurance mechanisms specified in 40 CFR part 264 subpart H of the Resource Conservation and Recovery Act regulations. National Grid may choose any of the financial assurance mechanisms or combination of mechanisms provided for in § 761.65(g). EPA may require variations in the wording of the instruments from that found at § 264.151. National Grid must maintain financial assurance until closure activities have been completed.

- 2) National Grid shall provide evidence of the increased value of the financial assurance mechanism whenever necessary (e.g., annual inflation adjustment, change in closure cost estimate triggered by modification of closure plan) as required in § 264.143, which is incorporated by reference in § 761.65(g).
 - 3) National Grid shall obtain financial assurance for the compensation of third parties for bodily injury and property damage caused by sudden and nonsudden accidental occurrences from, or related to, National Grid's operations and submit to the Director of ORCR at least 60 days prior to commencing operations. Within 60 days of receiving the financial assurance, the Director of ORCR will respond in writing approving or disapproving of the financial assurance. If the Director of ORCR does not respond within 60 days of receiving the financial assurance, National Grid may assume that it is complete and acceptable and proceed with their operations. National Grid shall comply with the RCRA regulations that address third-party financial assurance liability requirements (i.e., § 264.147).
- c) If National Grid wishes to change the closure plan, closure cost estimate, or financial assurance mechanisms due to factors other than inflation, National Grid shall submit an adjusted plan, cost estimate, or financial assurance mechanism (as applicable) to the ORCR HQ contact. EPA will review the change(s) and may require National Grid to revise the adjusted closure plan, closure cost estimate, or financial assurance mechanism prior to approving it.
- d) Permanent Closure
- 1) Failure to submit a renewal application as described in Condition 16 will be treated as evidence of National Grid's intent to close. If National Grid does not submit a renewal application before the time specified in Condition 16, National Grid shall initiate closure procedures within 60 days of the last decontamination of PCB-contaminated natural gas pipeline and/or other non-porous metal surfaces or upon expiration of this approval, whichever occurs first.
 - 2) In the event that National Grid expects to cease operation permanently or for the remaining duration of the approval, National Grid shall initiate closure procedures within 60 days of the last decontamination of PCB-contaminated natural gas pipeline and/or other non-porous metal surfaces or upon expiration of this approval, whichever occurs first.
 - 3) National Grid shall notify the Director of ORCR, in writing, at least 60 days prior to the date on which final closure is expected to begin (see § 761.65(e)(6)(i)).
 - 4) Within 60 days of completion of closure, National Grid shall submit by registered mail, a certification to the Director of ORCR that the operations have been closed in accordance with the closure plan (see § 761.65(e)(8)).
 - 5) During the closure period, National Grid shall dispose of all contaminated equipment in accordance with the disposal requirements of 40 CFR part 761 subpart D or decontaminate the equipment in accordance with § 761.79.

- 6) National Grid shall submit records to the Director of ORCR within 90 days of concluding closure as required in Condition 4(c).

13. Ownership Transfer

- a) If National Grid intends to transfer ownership and the transferee wants to operate under the same or similar terms as this approval, National Grid shall notify the Director of ORCR, in writing, at least 90 days before transferring ownership. National Grid shall also submit to the Director of ORCR, at least 90 days before such transfer, a notarized affidavit signed by the transferee that states the transferee is seeking approval to decontaminate natural gas pipeline and other non-porous metal surfaces. Failure of National Grid to provide EPA with this required written documentation of the transfer within the specified time frame would be a violation of this approval and the approval would immediately terminate upon the transfer of ownership.
- b) After receiving notification, EPA may:
 - 1) Issue an amended operating approval substituting the transferee's company name for National Grid's name;
 - 2) Require the transferee to conduct a demonstration test and/or apply for a new PCB approval by submitting either a complete application or a partial application for approval (e.g., that focuses on information that demonstrates the transferee has the ability to comply with the terms and conditions of this approval, such as a summary of company personnel qualifications and previous trainings that are relevant to complying with the terms and conditions of this approval, or a summary of previous compliance history, if applicable); or
 - 3) A combination thereof.
- c) So that there will be no lapse in financial assurance for the transferred facility, the transferee shall establish financial assurance for closure meeting the requirements of Condition 12 and submit it to EPA before the approval is amended to transfer ownership or a new approval is issued. The transferee must select one of the financial assurance mechanisms listed in the PCB Regulations at 40 CFR 761.65(g). EPA may require variations in the wording of the instruments from that found at § 264.151. The financial assurance mechanism must be effective as of the date of final approval of the transfer (i.e., the date the amended approval or a new approval is signed by the Director of ORCR).
- d) The transferee shall not operate unless EPA either has amended this approval to allow for such operation or has issued a new approval to the transferee.

14. Management of Operations

National Grid's operations shall be managed and overseen by either a qualified National Grid employee or its contractors at all times.

15. Approval Expiration Date

This approval shall become effective upon signature of the Director of ORCR and expire five (5) years from the date the approval becomes effective except as otherwise specified in Condition 16.

16. Approval Continuation, Modification, and Renewal

- a) If National Grid intends to continue to operate beyond the expiration date of this approval or modify this approval, National Grid shall submit a complete approval renewal application and a complete demonstration test plan (if required) to EPA at least 180 days prior to the expiration date of this approval.
 - 1) A complete approval renewal application and complete demonstration test plan are considered to be, at a minimum, information that was submitted in previously approved operating approval requests and demonstration test plans, with appropriate modifications or updates based on proposed revisions to the original approval, which may include design and operation changes, updated safety protocols, and revised operating and testing procedures. For example, if National Grid is seeking approval to decontaminate another type of pipeline material, the approval application and demonstration test plan shall reflect those changes. Revisions may also include analytical procedure descriptions, and the results/data used to determine compliance with the decontamination levels specified in 40 CFR 761.79(b).
 - 2) National Grid is encouraged to contact the ORCR HQ contact identified in Condition 8 in advance of 180 days prior to the expiration date of this approval if National Grid intends to renew this approval in order to ascertain whether EPA would require National Grid to conduct a new demonstration test. This is especially important if National Grid wants to make changes to its operating parameters (e.g., decontaminating a different type of pipeline material). Under those circumstances, National Grid will not be allowed to operate under revised operating conditions until EPA issues National Grid a fully renewed, and revised operating approval.
 - 3) If a demonstration test is required, National Grid must either perform a demonstration test or commence closure by the date two years after the expiration date of the approval.
- b) If National Grid submits the information to EPA at least 180 days prior to the expiration date of this approval, this approval continues in force (i.e., does not expire) until EPA issues an approval renewal, a conditional approval renewal, or an approval request denial.
- c) If National Grid does not submit a complete approval renewal application request and, if required, a complete demonstration test plan to EPA at least 180 days prior to the expiration date of this approval, this approval will expire as specified in Condition 15.
- d) National Grid will not be allowed to operate under revised operating conditions until EPA issues National Grid a fully renewed, and revised, operating approval.

DECISION TO APPROVE NATIONAL GRID'S REQUEST TO CONDUCT PCB DECONTAMINATION

1. Approval to decontaminate natural gas pipeline and other non-porous metal surfaces contaminated with PCBs is hereby granted to National Grid of Hicksville, NY, subject to the terms and conditions expressed in this approval and consistent with the materials and data included in the application and demonstration test plans and reports submitted to EPA by National Grid.
2. Approval to filter and reuse Enviro Clean after use instead of disposing of it is hereby granted to National Grid, subject to the terms and conditions expressed in this approval, including that the PCB concentration before reuse is < 2 ppm, which is the concentration set out in § 761.79(c)(3)(iii), and that concentration is not the result of dilution.
3. Based on the demonstrations and 40 CFR part 761 subpart T validation study, the design aspects of the decontamination system, and the operating parameters and safety requirements included in this approval, EPA finds that National Grid's process performs as well as the decontamination procedures in § 761.79(c). EPA finds that National Grid's process and National Grid's reuse of Enviro Clean, when conducted in accordance with applicable PCB regulations and the terms and conditions of the approval, will not pose an unreasonable risk of injury to health or the environment.
4. EPA reserves the right to impose additional conditions or revoke this approval when it has reason to believe that National Grid's process is not achieving the relevant operating conditions and other requirements; the applicable decontamination standards are not being met; National Grid's process or National Grid's reuse of Enviro Clean may pose an unreasonable risk of injury to health or the environment; new information requires changes; or if EPA issues new regulations or standards that impact terms or conditions of this approval.
5. EPA will make best efforts, taking into account the nature of the risk, to provide reasonable advance notice to National Grid and to provide opportunity for National Grid to comment on any modifications or termination of the approval. EPA may require National Grid to immediately suspend operations while EPA is deciding whether to impose approval modifications or to terminate this approval.
6. Any departure from the terms or conditions of this approval or the terms expressed in the application must receive prior written authorization from the Director of ORCR.
7. National Grid shall be responsible for the actions of its employees and contractors that assist with National Grid's operations when those actions are related to performance of National Grid's process, including operating or moving the equipment, or reuse of Enviro Clean.
8. National Grid shall assume full responsibility for compliance with this approval and all federal, state and local regulations that apply to National Grid, including, but not limited to, requirements relating to any malfunction, spill, pollutant release, or incident or other reporting.

9. EPA reserves the right for its employees or agents to inspect National Grid's PCB decontamination or disposal activities at any location at any reasonable time.
10. Violation of any applicable regulations or condition of this approval may be subject to enforcement action and may result in termination of this approval. Violation of any requirement of this approval is a violation of 40 CFR 761.79 and 761.50(a) and may also be a violation of other provisions of 40 CFR part 761. A violation of the regulations is a prohibited act under Section 15 of TSCA.

9/18/17
Date

Kathleen Salzman for
Barnes Johnson, Director
Office of Resource Conservation and Recovery

APPENDIX I

COMPANY BACKGROUND

National Grid USA (doing business as National Grid) is the parent holding company for various wholly-owned subsidiaries, namely, Boston Gas Company, Colonial Gas Company, KeySpan Gas East Corporation, Niagara Mohawk Power Corporation, The Brooklyn Union Gas Company, and The Narragansett Electric Company.

National Grid's Environmental organization is divided into three regions: Downstate New York, Upstate New York, and New England (Mass. & Rhode Island). Soaking operations are routinely performed at two National Grid locations: Greenpoint in Brooklyn, New York, for pipe originating in Downstate and Upstate NY, and Everett, Massachusetts, for pipe originating in New England. Pipe soaking operations can be done in-house but National Grid typically uses contractors to perform transport, handling, soaking, and waste disposal functions. Miller Environmental Group performs this work at the Greenpoint facility in Brooklyn, NY, and Clean Harbors performs the work at the Everett, MA, facility.

National Grid conducted decontamination demonstrations in 2005 and 2013 to confirm performance of its decontamination method. EPA representatives observed the demonstrations and collected wipe samples before and after the decontamination. Results of the analysis from the demonstrations, which are summarized in Appendix III of the enclosed approval, indicate that National Grid's soaking method using Enviro Clean has the ability to reduce PCBs at a surface concentration of $\leq 5000 \mu\text{g}/100 \text{ cm}^2$ to levels $\leq 10 \mu\text{g}/100 \text{ cm}^2$. This level of decontamination was used as a measure of success for the demonstration, as it is the level identified for non-porous surfaces in § 761.79(b)(3)(i)(A) for unrestricted use. In addition to the demonstrations, in 2000 National Grid conducted a validation study for a decontamination solvent, Enviro Clean, in accordance with 40 CFR part 761 subpart T – "Comparison Study for Validating a New Performance-Based Decontamination Solvent Under § 761.79 (d)(4)." As identified in National Grid's approval application, National Grid filters and samples Enviro Clean, and reuses Enviro Clean if it is $< 2 \text{ ppm}$, which is the concentration set out in § 761.79(c)(3)(iii). Filters, among other decontamination wastes and residues, are disposed of in accordance with § 761.79(g).

National Grid submitted an approval renewal request to EPA, dated February 8, 2012, and an application dated April 2017.

APPENDIX II

PROCESS DESCRIPTION

Process Description:

When natural gas pipeline is removed from the system, National Grid decontaminates it to remove PCB contamination prior to disposing of it or recycling it as scrap. Instead of having to conduct testing on each section of pipe removed, National Grid has elected to assume that all pipe is contaminated, and subsequently decontaminate it using their approved soaking method.

National Grid's process is performed in a secure, designated area by trained workers wearing Level D personal protective equipment (PPE) consisting of disposable suits, gloves, hard hats and safety glasses. All workers have 40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) training (OSHA 29 CFR 1910.120). Workers are trained in National Grid's process and perform the operation under a Health and Safety Plan. Spill containment is utilized and sufficient emergency response materials are kept on-hand.

Specially designed soaking containers are used for decontaminating natural gas pipeline that has been removed from the system. These containers are constructed of steel and welded at the seams to make them liquid-tight. This method is also effective on decontaminating other non-porous metal surfaces, including: valves, offsets, and a variety of odd sized fittings as well as small diameter pipe of four inches or less. The natural gas pipeline and other non-porous metal surfaces are moved from a storage container into the soaking containers by mechanical or manual means. Also, National Grid may use the liquid-tight soaking containers for storage, in which case the soaking process can occur without moving the contents of the storage container. The materials are fully submerged in Enviro Clean for a minimum of two (2) hours at a temperature between 39 and 97 degrees Fahrenheit.

At the conclusion of the soaking process, the post-wash Enviro Clean is analyzed to confirm the PCB concentration does not equal or exceed 2 ppm per the regulatory standard cited in § 761.79(c)(3)(iii). If the Enviro Clean is ≥ 2 ppm, it is filtered with an activated carbon system and re-analyzed to verify the PCB concentration is < 2 ppm prior to reuse. Enviro Clean that is not reused is disposed of in accordance with § 761.79(g).

APPENDIX III

SUMMARY OF DEMONSTRATION TEST RESULTS
FOR THE NATIONAL GRID DECONTAMINATION PROCESS

2005 – Soaking Process:

Starting PCB Concentration (µg/100 cm ²)	Test Date	Final PCB Concentration by Soak Time (µg/100 cm ²)		
		2 hours	4 hours	6 hours
2,500	9/26/2005 [#]		<2	
2,500	9/27/2005 [#]	8.07		
2,500	9/27/2005 [#]		3.1	
2,500	9/28/2005 [#]	<2		
2,500	9/28/2005 [#]		<2	
2,500	9/29/2005 [*]	<2		
5,000	9/28/2005 [#]	<2		
5,000	9/28/2005 [#]		4	
5,000	9/28/2005 [#]			<2
5,000	9/29/2005 [*]	5.23		
5,000	9/29/2005 [*]		<2	
5,000	9/29/2005 [*]			<2
5,000	9/30/2005 [*]	<2		
5,000	9/30/2005 [*]		<2	
5,000	9/30/2005 [*]			<2

- sample plates were selected by EPA
* - sample plates were selected by National Grid at EPA's request

2013 – Reconfirmation of Soaking Processes:

Client ID	NG – PRE13	NG – PRE11	NG – PRE16	NG – POST13	NG – POST11	NG – POST16	BLANK
Battelle ID	M1214-P	M1215-P	M1216-P	M1217-P	M1218-P	M1219-P	M1220-P
Collection Date	12/05/13	12/05/13	12/05/13	12/05/13	12/05/13	12/05/13	12/05/13
Extraction Date	12/12/13	12/12/13	12/12/13	12/12/13	12/12/13	12/12/13	12/12/13
Analysis Date	12/18/13	12/18/13	12/18/13	12/18/13	12/18/13	12/18/13	12/18/13
Analytical Instrument	ECD*	ECD*	ECD*	ECD*	ECD*	ECD*	ECD*
% Moisture	NA	NA	NA	NA	NA	NA	NA
Temperature	16.8 °C	16.8 °C	16.8 °C	16.8 °C	16.8 °C	16.8 °C	16.8 °C
Matrix	WIPE	WIPE	WIPE	WIPE	WIPE	WIPE	WIPE
Sample Size	100 cm ²	100 cm ²	100 cm ²	100 cm ²	100 cm ²	100 cm ²	100 cm ²
Units	ng/100 cm ²	ng/100 cm ²	ng/100 cm ²	ng/100 cm ²	ng/100 cm ²	ng/100 cm ²	ng/100 cm ²
Aroclor 1016	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Aroclor 1221	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Aroclor 1232	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Aroclor 1242	70.6466	14.4147	57.3509	10.1405	13.8542	16.6965	0.032 U
Aroclor 1248	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U
Aroclor 1254	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U
Aroclor 1260	14.5842	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U
Total (ng/100 cm ²)	85.3	14.5	57.5	10.3	14.0	16.8	0.2 U
Total (µg/100 cm ²)	0.0853	0.0145	0.0575	0.0103	0.0140	0.0168	0.0002 U

*ECD = Electron Capture Device

For additional information, see National Grid’s application.