10.9

QUADREX ENVIRONMENTAL COMPANY
1940 NW 67th PLACE; GAINESVILLE, FL 32606
(904) 373-6066 FAX: (904) 373-0040 JOB/ORDER # NGP0806-103

QUADREX PROCESS 30-DAY ADVANCE NOTIFICATION

Notification Date: May 2, 1991

Revision Date: N/A

Revision #: 00

Issued By: Jennifer Barber

Quadrex Contacts: Mack Jones, Roger Garramore

Client and Client Address:
Natural Gas Pipeline Company of America
701 East 22nd Street
Lombard, IL 60148-5072

Client Contacts:
Richard J. Zielinski
(405)361-2363

Type of PCB Disposal Activity: Physical Separation of PCBs from Piping System Components and Cleaning Solvent

Amount and Type of PCB Material: Approximately 2000 gallons:
Aroclor 1254, possibly others

PCB Concentration Range: Less than 8,000 parts per million

Scheduled Time(s) and Date(s): 7:30 AM - 6:30 PM;
June 3, 1991 through July 3, 1991.

Other Required Contacts and Phone:

EPA - WASHINGTON, D.C.
Mr. Winston Lue
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street S.W.
Washington, DC 20460
(202) 382 - 3962

EPA Region VII
Bob Jackson
US EPA Region VII
ARTX Division
726 Minnesota Avenue
Kansas City, KS 66010
(913) 551-7020

State Agency
John C. Irwin
Kansas Department of Health and Environmental
Bureau of Waste Management
Topeka, Kansas 66620
(913) 296 - 1593

Local
John Short
Fire Chief
420 West Elm Street
Minneola, KS 67865
(316) 885 - 4361

Site Name, ID Number & Location:
Mike Donlin (316) 885-4554
Natural Gas Pipeline Company of America
Box 40
Minneola, KS 67865
3 miles east on US-54,
then 4½ miles north on Grave Road

Quadrex Site Supervisor:
Curtis Fort

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 1 1992

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

Mr. William Derrickson
Chairman
Quadrex Environmental Company
1940 N.W. 67th Place
Gainesville, Florida 32601

Dear Mr. Derrickson:

The Office of Pollution Prevention and Toxics (OPPT) extends the PCB Disposal Approval for Quadrex Environmental Company (Quadrex) for a period of one year through July 5, 1993. OPPT met with Mr. Dennis Fleetwood who requested renewal and amendment of Quadrex's Approval to dispose of PCBs. Because of the scheduled demonstration in August 1992, OPPT determined that an extension of the Approval for one year was appropriate. The Approval will be renewed and amended after the formal demonstration scheduled for August 1992. The Approval for Quadrex had been extended for one year on July 1, 1991 and will expire on July 5, 1992.

Quadrex also requested the reuse of Freon, OPS and OPS-2 containing 2 ppm and greater PCBs in cleaning pipes, air compressor appurtenances, and air receiver tanks associated with natural gas pipeline systems. OPPT grants the request provided that (a) that the liquids shall not be diluted with other liquids (Freon, OPS and OPS-2) containing less than 2 ppm PCBs and (b) when the liquids mentioned above are no longer useful for cleaning and have exceeded 2 ppm PCB concentration, they shall be disposed of in a TSCA incinerator or sent to the Physical Separation Unit as described in condition 7.

In addition, OPPT modifies the language in the Quadrex Approval. Condition 4(a)(7)(D) currently states "The total solvent volume in #3 above may be constituted of a smaller volume which is recycled...." This is changed to "The total solvent volume in (A) above may be constituted of a smaller volume which is recycled...."

Please direct questions regarding this matter to John Smith at (202) 260-3964.

Sincerely

for Elizabeth F Bryan
Joseph J. Merenda, Director
Exposure Evaluation Division

cc: PCB Coordinaters
EPA Regions I-X

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To Shelly Brodie	From Terry Smith
Co. EPA	Co. Quadrex
Dept.	Phone #
Fax # 913 551-7063	Fax # 904 273 0040

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 14 1991

Mr. William Derrickson
Chairman
Quadrex Environmental Company
1940 N.W. 67th Place
Gainesville, Florida 32606

Dear Mr. Derrickson:

The enclosed amended approval authorizes Quadrex to separate PCB[illegible] from water, to clean natural gas pipeline pipe and ap[illegible]tenances, and to separate PCBs at higher concentration using Q[illegible]ex physical separation unit. The Office of Toxic Substances [illegible] has reviewed results from two demonstration tests.

The demonstration test for disposal of PCB contaminated [illegible]ater occurred from April 21-24, 1989. The test vessel was an approximately 165 gallon tank in which water containing 50 parts per million PCBs was successfully treated through a physical separation process to contain less than 3 parts per billion residual PCBs.

The second demonstration was conducted from August 6-10, 1990. The results from the second demonstration indicated that Quadrex has successfully clean natural gas pipeline pipe (6 inch or more diameter) to levels of between 0.1 and 1 microgram per cm^2 but was unable to clean to below 0.1 microgram per cm^2. Therefore, such pipes and appurtenances cleaned at levels of between 0.1 and 1 microgram per cm^2 by Quadrex shall be unregulated for disposal, but regulated for distribution in commerce, when such distribution would result in long term dermal contact with the interior surface of the pipe or item.

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	APPROVAL TO DISPOSE
	)	
QUADREX ENVIRONMENTAL Quadrex	)	OF POLYCHLORINATED
	)	
1940 N.W. 67TH PLACE	)	BIPHENYLS (PCBs)
	)	
GAINESVILLE, FLORIDA 32606	)	AMENDED

AUTHORITY

This approval is issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act of 1976 (TSCA), Public Law No. 94-4[illegible] and the Federal PCB Regulations, 40 CFR 761.60(e) (48 FR [illegible]5, March 30, 1983). Background and Findings related to this approval are attached to this approval as Appendix I and II.

EFFECTIVE DATE

Quadrex is the sole operator of a solvent extraction process whereby items and equipment including natural gas pipeline air compressor systems, pipelines and fittings associated with natural gas pipelines, and water contaminated with PCBS are cleaned, and PCBs are removed from the cleaning solvents using a distillation process with different types of condensers using one or more mobile units. The Environmental Protection Agency (EPA) has carefully scrutinized Quadrex's operations. In addition, EPA has audited and has observed numerous demonstrations of Quadrex process capabilities. Pursuant to 40 CFR 761.60(e), EPA finds that the Quadrex process (when operated in accordance with the conditions of this approval) is equivalent to an approved incinerator for treatment of MODEF and solvents and that it does not pose an unreasonable risk of injury to human health or the environment. This approval to operate nationwide shall become effective ten (10) business days after signature by the Director of the Exposure Evaluation Division of the Office of Toxic Substances and shall expire on July 5, 1991.

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"Major modification" means any change to capacity, design, or efficiency of the Quadrex unit or process, change of waste type, or any other changes significantly affecting overall performance or environmental impact.

"Minimal" with regard to an amount of PCB wastes means less than ten percent (10%) of total wastes treated.

"Mobile operations" means those operations where the Quadrex mobile unit remains at a site for less than 180 consecutive days.

"Operations" means the process of treating PCBs, including set up and take down of the Quadrex unit as well as actual treatment.

"OTS" means the Office of Toxic Substances, United States Environmental Protection Agency (TS-798); (202) 382-3933; Facsimile (202) 382-7883.

"PCB" means polychlorinated biphenyls as defined in 40 CFR 761.3.

"PCB release" and "PCB spill" have the same meaning as "spill" as defined in EPA's PCB Spill Cleanup Policy in 40 CFR 761.123.

"Permanent operations" means those operations where the Quadrex mobile unit remains at a site for at least 180 consecutive days or longer.

"Process Failure" means the inability of the Quadrex unit to treat the feedstock for reasons other than contaminants in the MODEF or other oil (such as chlorinated solvents).

"Single Pass" means the original waste feed is distilled and the distillate does not need to be treated again provided it meets the concentration level of < 2 ppm.

"Site" means the geographically contiguous property unit (such as a single manufacturing plant) at which the Quadrex disposal operations are conducted. More than one transformer may be serviced at a single site.

"Site location" means a street address or a directional description which would allow a site to be found by an EPA inspector.

"Year" means 365 days.

(3) The nature of the PCB disposal activity, including estimates of the amount and type (e.g., MODEF, hydraulic oil, heat transfer oil) of PCB material to be treated and estimates of the concentration of PCBs in the material. The estimates shall be based on any one or combination of the following:

(A) analytical data or the results of analytical data provided by the customer;

(B) Quadrex analytical data; or

(C) a statement that the customer has applied the "assumption rule" codified at 40 CFR 761.3 defining PCB- Contaminated Electrical Equipment.

(4) The site location(s) and a telephone contact(s).

(5) The time(s) and date(s) the PCB disposal activity is scheduled to take place.

An acceptable sample form for the 30-day advance written notification of intent to operate under mobile operations is included as Appendix III A.

For Quadrex operations under Mobile Operations where there are frequent site changes, the following additional notification is required:

(6) Every week, Quadrex shall provide by telephone facsimile transmission a two-week activity schedule to the OTS and the EPA Regional Contact for each Region where a PCB disposal activity will occur. This two-week activity schedule shall include for each job:

(A) EPA Region where the Quadrex unit will be located;

(B) most probable date that the Quadrex unit will be performing PCB disposal activities;

(C) the time(s) and date(s) the PCB disposal activity is scheduled to take place;

(D) the expected number of sites; and

(E) either:

(1) the county or counties where PCB disposal activities will occur, or

EPA REGIONAL CONTACTS

Name, Region Number	Telefax Number	and Contact
Winston Lue, EPA Headquarters	(202) 475-7724	/ (202) 382-3962
Tony Palermo, Region I	(617) 565-4939	/ (617) 565-3279
Dan Kraft, Region II	(201) 321-6788	/ (201) 321-6669
Ed Cohen, Region III	(215) 597-3156	/ (215) 597-7668
Carin Debenedictis, Region IV	(404) 347-1681	/ (404) 347-3222
Dr. Sheldon Simon, Region V	(312) 886-2591	/ (312) 886-6087
Donna Mullins, Region VI	(214) 655-2164	/ (214) 655-7244
Bob Jackson, Region VII	(913) 551-7065	/ (913) 551-7020
Dan Bench, Region VIII	(303) 293-1229	/ (303) 293-1443
Greg Czajkowski, Region IX	(415) 974-6612	/ (415) 974-7295
Bill Hedgebeth, Region X	(206) 442-0110	/ (206) 442-7369

Permanent Operations

Quadrex must submit an advance written notification of manent operations to the addressees at least 180 days in vance of the proposed Permanent Operations at a site. When a adrex unit is to be operated at a site for 180 consecutive days or more, the following information must be included in the notification and verified by EPA to conform to the informational requirements before the 180-day review period can begin. This advance written notification shall include a site evaluation and must include the following:

(1) All information required under items 1.b.(1)(A) through (E) of Mobile Operations.

(2) Additional information presented below:

(A) estimates of fugitive emissions of PCBs and any other hazardous materials;

(B) amounts of waste generated during the entire operation and how that waste will be disposed;

(C) plans of action in case of an emergency (including arrangements with local fire fighters, law enforcement personnel, and public health officials);

(D) site-specific spill prevention control and countermeasures (SPCC) plan or containment installations and procedures; and,

handled or generated as the result of PCB disposal must be discussed. Also, discussions of all storage facilities and their containment, process water systems, and other waste stream processing shall be included.

(C) Disposal Activities to Be Conducted On-Site

A summary of the process operations which are described in detail in the original permit application shall be submitted, not to exceed one typewritten single spaced page. The permittee shall discuss activities and the amount of time involved in setting up and taking down disposal operations of the MDU at the site. Also, the permittee shall provide a discussion of monthly and annual: amounts and concentrations of waste and amount of PCBs to be processed; amounts and concentrations of PCBs and other hazardous materials stored on site; amounts and concentrations of contained, controlled, and fugitive emissions of toxic and non-toxic materials and how contained materials will be disposed of; proposed hours of operations; and expected duration of disposal activities at the site.

(D) Safety Measures

The permittee must describe systems and/or structures for the detection and/or containment of leaks and hazardous wastes/by-products must be described, including process shutdowns resulting from automated monitoring of process emissions. A brief discussion of the automatic process controls, such as those which control extreme temperature and pressure fluctuations or departure from a permitted range, must be included. The location and action plans for all other emergency equipment shall be provided. Maintenance plans and schedules shall be provided. Safety and/or quality control/quality assurance inspection schedules, procedures, and recordkeeping must be detailed.

(E) Emergency Preparedness and Contingency Plans

Emergency preparedness plans must be submitted to local authorities and approved by the EPA Region. These plans shall include (1) exactly what actions take place for each level of problem, (2) the names of the persons responsible for handling expected problems, and (3) facility personnel names and appropriate phone numbers for 24-hour a day contact in the event of an emergency. Frequent problems and reasonable worst case problem scenarios such as: spills during processing, storage, and transportation; fires; floods; and equipment malfunction resulting in personal injury must be addressed. The information shall include (1) names and phone numbers of fire, police, medical emergency contacts, and (2) training sessions, documents, or other information provided to these services.

Public Participation

Quadrex shall provide public notice (sample form included in Appendix IIID) in the local newspaper initiating a 30-day comment period for public review of appropriate permit related documents (such as the sanitized (non-confidential business information) permit application, any existing PCB disposal permit, any existing draft revised PCB disposal permit, and the site evaluation). The notice shall also advise that a public meeting will be held on a specified date and at a specified place and time not more than 45 days after the initial public notice, if EPA determines that there is sufficient public interest for a public meeting. A public notice will not be published until a complete submission of requirements under Item (3)(A) through (G) above has been received and approved by EPA.

The public meeting will be hosted by the EPA Region. OTS and the EPA Region may collectively determine what the schedule and the agenda for the public meeting shall be. After Quadrex has given the EPA Regional Office, the State agency, and the local jurisdiction a notice of intent to operate at a site for at l[illegible] 180 consecutive days or more, and once OTS and the local j[illegible] Region are satisfied that the site specific information [illegible]mitted in this notice meets the requirements set forth in [illegible]ragraphs (1), (2) and (3) above, a 180-day public notification [illegible]d review process shall begin.

Based on the comments and questions received during the 30-day comment period, the EPA Region will determine whether a public meeting is necessary. The public meeting shall be held: (a) to discuss comments made by the public during the 30-day comment period and notification for the public meeting; (b) to allow the public to make comments on the proposed operations and site; and (c) to allow the public to ask questions of EPA representatives on the proposed operations.

Not more than 150 days after the close of the public comment period, EPA shall make a decision on the authorization of Permanent Operations and on what additional conditions, if any, shall be imposed on the Quadrex Permanent Operations. The decision will be based on review of comments during the 30-day comment period, and comments made during the public meeting. The decision could be that Quadrex may begin operations without additional permit conditions, or the decision could be made to require additional site-specific permit conditions which must be met before Permanent PCB Disposal Operations may begin at the [illegible]e.

Authorized Use of the Quadrex mobile PCB disposal system

The Quadrex mobile PCB disposal systems have been authorized to use the solvent Freon 113™ and the proprietary solvents QPS and QPS-2 for three distinct functions. Descriptions of these three functions follow. Distillates of these solvents recovered from the Quadrex alternate disposal process must contain less than 2 microgram PCBs per gram before use, with quantitation based on the original formulation of PCBs in the material rinsed (Aroclor™ quantitation). The still bottoms containing the PCBs removed from the solvents must be disposed of in accordance with 40 CFR 761.60.

a. The Quadrex mobile PCB disposal systems are authorized to use Freon 113™, QPS, or QPS-2 to rinse individual, drained transformers that had contained PCB askarel or MODEF, and to rinse drained systems that had contained heat transfer and hydraulic fluid.

Prior to treatment, the systems or transformers must be drained of all free-flowing fluids. The drained fluids must be disposed of in accordance with 40 CFR 761.60. In addition, Quadrex must advise its customers that transformers treated with the Quadrex process and returned to service cannot be reclassified unless the replacement dielectric fluid is tested following a minimum of ninety days of in-service use. In-service use is defined as use under electrically loaded conditions in which the dielectric fluid is raised to a minimum of 50°C.

b. The Quadrex mobile PCB disposal systems are also authorized to use Freon 113™, QPS, or QPS-2 to spray clean the following items that have been surface contaminated with PCBs. The decontamination criteria for these items shall be consistent with the EPA Spill Clean-Up Policy.

(1) to clean paper, file folders, and other cellulose-based documents and small document containers (excluding cardboard boxes) surface contaminated with askarel transformer fluids,

(2) to clean office equipment such as telephones, desk calculators, typewriters, tools, metal parts, printed circuit boards, and other similar articles when these items have become surface contaminated with askarel transformer fluids,

(3) to clean industrial, institutional, and commercial hardware and equipment contaminated by a PCB spill, use, fire, release, contact or proximity to a PCB device, and

In Condition 3 (c), the Quadrex mobile PCB disposal system is authorized to use the solvent Freon 113 $_{TM}$ and the proprietary solvent QPS-2 and QPS to clean natural gas air compressor systems. In Condition 3 (f), the Quadrex mobile PCB disposal system is authorized to use the proprietary solvent QPS-2 to clean natural gas pipe (six inches and less inner diameter) systems. In order for these air compressor systems and natural gas pipelines to be unregulated for: (a) further distribution in commerce and use as air compressor systems for natural gas pipeline compressors, or (b) disposal, residual surfaces must be cleaned to below 100 micrograms per 100 square centimeters, which is the same as one microgram per one square centimeter (1 $\mu g/1$ cm^2). Failure to clean to the 1 $\mu g/1$ cm^2 level, or to lower levels, subjects the equipment to TSCA requirements based on the measured concentration of PCBs in the air compressor systems prior to contamination. This is true even though it is acknowledged that the measured concentration may have resulted from dilution of the original PCB-containing materials used in the system. It is recognized, however, that an EPA consent agreement/decree may require or allow other surface levels or other residual PCB levels in a solvent rinse. The procedure for determining whether or not the Quadrex clean-up process has met the 1 $\mu g/1$ cm^2 surface level requirement follows.

a. For Quadrex to determine whether the Quadrex process has cleaned an AIR COMPRESSOR RECEIVER TANK to 1 $\mu g/1$ cm^2, the efficacy of the process must be verified with a surrogate sampling procedure. The surrogate sampling procedure must be used because standard EPA wipe sampling procedures, based on representative sampling, cannot be carried out without cutting or damaging the equipment.

In the Quadrex process, receiver tanks are spray-rinsed under pressure with a solvent. This spray rinsing under pressure dislodges rust, scale and solids. Quadrex will continue this spray cleaning until visual inspection of the rinsate shows the presence of a minimal quantity of suspended solids. When Quadrex decides from the visual appearance of the solvent to end the spray cleaning process, the surrogate sampling procedure will begin.

(1) In the surrogate sampling procedure, the theoretical volume of solvent allowable for use in the final rinse pass of the equipment is first calculated. The purpose of the theoretical calculation is to ensure that the PCB concentration of the rinse solvent is never diluted below the Limit of Quantitation (4 ppm) for PCB analysis with Gas Chromatography.

(2) Quadrex shall calculate from the following equation the maximum amount of solvent with a minimum theoretical concentration of 4 ppm PCBs allowable for use in the final rinse pass:

-- In one acceptable procedure, collect all of the rinse in a single container. Circulate the solvent by pumping out of the bottom of the container and into the top until at least three total volumes of the solvent have been pumped. Stop the pumps and immediately sample the solvent.

-- In the other acceptable procedure, continuously sample small portions of the solvent over the entire time of the rinse. This is accomplished by using a small peristaltic pump and continuously sampling the solvent at the point where the solvent flows out of the receiver into the pump. The sample shall be collected before any filters and the peristaltic pump shall be operated so that the rate of the pump allows for production of a sample of proper size for use with the Quadrex analytical procedure.

(6) The collected, representative samples must be analyzed with Gas Chromatography. The analytical procedures used are described in Quadrex applications on file at the EPA.

If the definitive GC analysis shows that a sample is less than the "target" theoretical PCB concentration used in Equation (2), the receiver tank is unregulated for distribution in commerce, use or disposal. If the definitive GC analysis of a sample shows that the PCB concentration of the rinse solvent is equal to or greater than the "target" PCB concentration used in Equation (2), Quadrex shall rerinse a receiver tank clean in increments with additional rinse passes until the PCB concentration is less than the "target" concentration when measured with Gas Chromatography. Each additional rinse pass, as defined in the Quadrex application, shall be sampled representatively, and analyzed with GC until the concentration of a rinse pass measures less than the "target" PCB concentration.

(7) This alternative performance based procedure includes rinsing the interior surface with no less than three successive rinse cycles using either Freon 113™, QPS-1 or QPS-2. For each rinse cycle, all of the following conditions apply:

(A) The total volume of solvent sprayed over the surface of the small pressurized tank/bottle must be equal to or greater than ten percent of the volume of the tank.

piping between the receivers and the air compressors; and other natural gas pipeline compressor station equipment such as instruments and tools driven by compressed air. The differences in the surrogate sampling procedures arise because the cleaning process involves filling the natural gas pipeline pipe (six inches inner diameter and less) or air compressor piping system and the Quadrex processing equipment with solvent and pumping all of this solvent through the systems. This solvent will rinse surfaces of the Quadrex processing equipment not originally contaminated and invalidate the use of Equation A(2) to calculate the PCB concentration of the solvent. Therefore, Quadrex shall use the following procedure for verification that the natural gas pipeline pipe (six inches inner diameter and less) and air compressor systems are clean and can be deregulated.

(1) Quadrex shall flush natural gas pipeline pipe (six inches inner diameter and less) or the entire air compressor system, exclusive of the receiver tanks, in increments, with solvent containing less than 2 ppm PCBs and circulating pumps. After each flush, Quadrex shall drain the flush solvent. Quadrex may then continue this flushing for as long as it deems necessary before draining prior to the verification rinse required in (2) below.

(2) In the verification rinse or flush, Quadrex shall refill the natural gas pipeline pipe (six inches inner diameter and less) or entire air compressor system, exclusive of the receiver tank or tanks, with solvent containing less than 2 ppm PCBs. The entire volume of solvent in the filled system shall be recirculated by pumping long enough for three times the total volume to pass through the closed system or for 15 minutes, whichever is <u>longer</u>. For example, if the total volume of the system is 1,000 gallons and the pump rate is 500 gallons per minute, then the recirculation time would be 6 minutes (3 times 1,000 gallons divided by 500 gallons per minute). In this example case the circulation time would be 15 minutes.

(3) Quadrex shall drain the solvent used in the verification rinse from natural gas pipeline pipe (six inches inner diameter and less) or the air compressor system and obtain a representative sample for GC analysis using either one of the two sampling procedures that follow.

If the result of this calculation shows that the overall system average is greater than 4 ppm, selected individual segments can be cleaned by repeating the verification rinse procedure on the individual segments until the overall weighted system average is less than 4 ppm.

If the system concentration from this calculation is less than 4 ppm, the overall system and all components cleaned in these procedures will be considered decontaminated and unregulated for further distribution in commerce, use, or disposal.

5. Authorized use to clean natural gas systems

In Condition 3 (c), the Quadrex mobile PCB disposal system is authorized to use the the proprietary solvent QPS to clean natural gas pipeline pipe(six inches and greater in inner diameter and no greater than 40 feet in length) and appurtenances. In order for these natural gas systems to be unregulated for: (a) further distribution in commerce and use as natural gas pipeline, or (b) disposal, residual surfaces must be cleaned to below 100 micrograms per 100 square centimeters, which is the same as one microgram per one square centimeter (1 $\mu g/1\ cm^2$). Failure to clean to the 1 $\mu g/1\ cm^2$ level, or to lower levels, subjects the equipment to TSCA requirements based on the measured concentration of PCBs in the natural gas pipeline pipe and appurtenances prior to decontamination. This is true even though it is acknowledged that the measured concentration may have resulted from dilution of the original PCB-containing materials used in the system. It is recognized, however, that an EPA consent agreement/decree may require or allow other surface levels or other residual PCB levels in a solvent rinse. The procedure for determining whether or not the Quadrex clean-up process has met the 1 $\mu g/1\ cm^2$ surface level requirement follows.

Pipe (six inches and greater) and equipment which have been verified to meet the designated 1 $\mu g/cm^2$ cleanup levels, but are above 0.1 $\mu g/cm^2$, shall be unregulated for disposal, but regulated for distribution in commerce, when such distribution would result in long term dermal contact with the interior surface of the pipe or equipment.

In the Quadrex process, 1) the bottom of the pipe in its installed condition is marked; 2) the ends are closed off, and the pipe is sloped to facilitate draining; 3)the spray solvent is allowed to drain at the low end of the pipe; 4) provisions for the spray head and the solvent feed pipe are made at the high end. Only those portions of the pipe that are exposed to pressure spraying are deemed to be processed. Extension pieces may be installed at both ends to effect full exposure of the pipe segments. The pipe shall be sprayed such that the spray fan passes over the entire internal area of the pipe. Quadrex shall

For Quadrex to determine whether the Quadrex process has cleaned small miscellaneous valves, controllers, meters, and other pipeline equipment contaminated by PCBs found in natural gas pipeline, the efficacy of the process is determined by a surrogate wipe sampling process. In this process, the items to be cleaned are disassembled as necessary to expose all surfaces for cleaning, and placed in a tank as described in the permit application which is on file at EPA Headquarters. The items are placed in such a way that their internal and external surface areas are exposed to a laminar mixing. During tank loading, two surrogate samples shall be placed in corners of least turbulence. These surrogate samples are plates of at least 100 cm^2, which have been dipped in a solvent spiked with PCBs, allowed to dry and placed in a piece of pipe closed at one end. One side of the plate is permanently marked. After the solvent is dried, the permanently marked side of the plate is wiped sampled. The tank is then filled with QPS-2 to a depth of at least 1 inch greater than the height of the items and sealed to prevent volatile organic emissions. Any vapors shall be vented through a carbon adsorber canister. For a period of at least two hours, a continuous high volume recirculating flush shall be established an external pump, filter circuit. At the end of the soak/flush cycle the tank shall be drained and the parts removed, and the surrogate sample pieces sampled as follows:

1) A standard 100 cm^2 wipe sample shall be taken at each surrogate sample's side which is not permanently marked.

2) The samples shall be analyzed with Gas Chromatography. The analytical procedures used are described in Quadrex applications on file at EPA Headquarters.

3) If the analyses indicate the surrogate sample's side which is not permanently marked is contaminated with PCBs at a level less than 1 $\mu g/cm^2$, the processed batch shall be unregulated for disposal but the processed batch is regulated for distribution in commerce. If the surface concentration is less than 1 $\mu g/10\ cm^2$, it is unregulated under TSCA.

4) If the analyses shows that the surrogate contaminated with PCBs at a surface concentration of greater than or equal to 1 $\mu g/cm^2$, Quadrex shall repeat the soak/flush process until the desired surface concentration is met.

6. Authorized use for water treatment system

The Quadrex mobile PCB treatment process has been authorized for separating PCBs from a water based matrix, which contains other contaminants such as surfactant cleaning agents and oils. Prior to conducting the treatment process, Quadrex must conduct a test to determine the appropriate coagulant to use for the specific water matrix. Quadrex shall only treat a batch of maximum volume of 165 gallons and a maximum concentration of 50 ppm of PCBs.

The PCB concentration in the QPS-2 mixture in the still with the air cooled condenser doing a single pass shall not exceed the following levels:

- o 8,100 ppm Aroclor 1242
- o 30,000 ppm Aroclor 1260
- o A total of not more than 38,100 ppm Aroclors 1242, 1254, and 1260, where the total Aroclor 1242 and Aroclor 1254 concentrations combined is no more than 8,100 ppm and the Aroclor 1260 concentration is no more than 30,000 ppm.

The PCB concentration in the QPS mixture in the still with the air cooled condenser doing a double pass shall not exceed the following levels:

- o 920 ppm Aroclor 1242
- o 100,000 ppm Aroclor 1260
- o A total of not more than 100,920 ppm Aroclors 1242, 1254, and 1260, where the total Aroclor 1242 and is no more than 920 ppm and the Aroclor 1260 concentration is no more than 100,000 ppm.

Prior to treatment, samples of the Freon 113™, QPS, or QPS-2 feedstocks must be obtained from the still and analyzed using gas chromatography procedures specified in EPA-approved procedures outlined in the following documents:

"Guidelines for PCB Destruction Permit Applications and Demonstration Test Plans for PCB Disposal by Non-Thermal Alternative Methods," August 21, 1986;

"Recommended Analytical Requirements for PCB Data Generated On-Site During Non-Thermal PCB Destruction Tests," USEPA, March 19, 1986 (Draft);

"Quality Assurance and Quality Control Procedures for Demonstrating PCB Destruction in Filing for PCB Disposal Permit," USEPA, June 28, 1983 (Draft); and

"Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," QAMS-005/80, Office of Research and Development, USEPA, December 29, 1980.

Should Quadrex Environmental Company successfully demonstrate to EPA through controlled experimentation or actual demonstration that the Quadrex process is capable of treating higher concentrations of PCBs in a particular fluid, this condition may be modified accordingly. Authorized EPA representatives may witness the demonstration and obtain split samples for verification of analytical results.

units. The affected unit shall not resume operation until the problem has been corrected to the satisfaction of the Chief, PCB Disposal Section. A unit which has been decommissioned must also be reported immediately to the Chief, PCB Disposal Section and at EPA Headquarters the Regional PCB Coordinator for the EPA Region in which such unit is decommissioned.

10. Process Waste Restrictions

a. All wastes generated by the Quadrex process shall be treated or disposed of as if the waste stream contained the PCB concentration of the original feedstock or pipe, valves , fittings and appurtenances as required by the "dilution rule" at 40 CFR 761.1(b). However, still bottoms produced as a result of the distillation process shall be sent to a TSCA approved incinerator.

11. Process Monitor/Recordkeeping

Provisions must be made to assure that the following information is suitably monitored and recorded for PCBs processed, such that materials harmful to health or the environment are not inadvertently released:

a. name, address, and telephone number of the Quadrex disposal unit operator and supervisor;

b. the name and business address of the person or firm whose PCB containing transformer, natural gas air compressor system or pipeline pipe and appurtenances, PCB containing wastewater are being processed;

c. the location, manufacturer, rated capacity and identification (serial) number of the transformer, heat transfer system or hydraulic system, natural gas pipeline appurtenances;

d. a description of the air compressor system, natural gas pipeline pipe and appurtenance including the estimated dimensions of all receivers and the estimated dimensions of the air compressor system exclusive of the receivers, including the diameter and length of all the pipe in the system;

e. a copy of all calculations used in surrogate sampling procedures and verification rinses for air compressor systems and natural gas pipeline pipe;

f. the date the transformer/system is received by Quadrex, the date(s) processed, and the date returned to the custody of the owner (if applicable);

of business on the regular business day following the incident. No PCBs may be processed in that facility until the release problem has been corrected to the satisfaction of the appropriate EPA Region.

13. PCB Spills

Any spills of PCBs or other fluids shall be promptly controlled and cleaned up as provided in the Quadrex Spill Prevention Control and Countermeasure Plan, and in accordance with the TSCA PCB Spill Cleanup Policy (52 FR 10688, April 2, 1987). In addition, a written report describing the spill, operations involved, cleanup actions and changes in operation to prevent such spills in the future must be submitted to the appropriate EPA Regional Contact, Regional Administrator, and Director, EED of OTS within 5 business days.

PCB spills must be reported in accordance with the spill reporting requirements prescribed under Section 311 of the Clean Water Act for discharges to navigable waters and under the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) for discharges to other media.

14. Safety and Health

Quadrex shall comply with all applicable safety and health standards, as required by Federal, State and local regulations and ordinances. Any lost time injury must be reported to the appropriate EPA Regional Contact, Regional Administrator, and Director, EED of OTS by the end of the next business day.

15. Facility Security

The Quadrex mobile unit shall be secured (such as a fence, alarm system, or barricades, as appropriate) at each site to restrict or control public access to the area.

16. Any reports required by Conditions (7), (9), (10), and (12) are to be submitted by telephone to the appropriate regional PCB Disposal Site Coordinator within the time frame specified. In addition, Quadrex shall file written reports with the Regional Administrator of the appropriate EPA region, and the Director of the Exposure Evaluation Division within the time frame specified in the aforementioned conditions.

17. Personnel Training

Quadrex shall be responsible for ensuring that the supervisory personnel directly involved with the handling or disposal of PCB contaminated fluid using the Quadrex Process are demonstrably familiar with the general requirements of this approval. At a minimum, this must include:

21. Financial Assurance

Quadrex shall incorporate financial assurance of closure and liability coverage provisions into its closure plan. These provisions must be equivalent to those specified in 40 CFR Part 264, issued under Subpart H of the Resource Conservation and Recovery Act (RCRA), and provide funds for:

a. proper closure of the mobile PCB disposal units and support operations; and

b. compensating others for bodily injury and property damage caused by accidents arising from operations of the mobile disposal units.

Quadrex has filed with the Director, Exposure Evaluation Division Administrator documentation of compliance with these requirements. Quadrex must submit annual updates to the Director, Exposure Evaluation Division of the financial assurance of closure and liability coverage provision described herein.

Additional Unit

Quadrex must file a written pre-operation report with the Director of the Exposure Evaluation Division within thirty (30) days from the date of manufacture of each additional Quadrex mobile unit which is to be operated in the United States. This report shall contain the following information:

a. date of manufacture of the unit;

b. identification and/or serial number of the new Quadrex mobile unit;

c. certification by an independent, registered professional engineer to the effect that the Quadrex mobile unit is substantially identical to the original unit in terms of engineering design, hardware, process capacity, quality and workmanship;

d. certification by the chief executive officer of Quadrex Environmental Company signifying that the Quadrex mobile unit construction has been completed in such manner; and

e. a list of all substantive and nonsubstantive changes made to the design and construction of any new Quadrex mobile unit which is not identical to the original Quadrex mobile unit.

28. This approval shall supersede all previous U.S. EPA Headquarters and/or U.S. EPA Regional PCB disposal approvals or amendments for the Quadrex PCB Disposal Process.

APPENDIX I
TO THE QUADREX APPROVAL TO DISPOSE OF POLYCHLORINATED BIPHENYLS

BACKGROUND

Section 6(e)(1)(A) of the Toxic Substances Control Act (TSCA) requires that EPA promulgate rules for the disposal of polychlorinated biphenyls (PCBs). The rules implementing section 6(e)(1)(A) were published in the Federal Register on May 31, 1979 (44 FR 31514) and recodified in the Federal Register of May 6, 1982 (47 FR 19527). Those rules require, among other things, that various types of PCBs and PCB Articles be disposed of in EPA-approved landfills (40 CFR 761.75), incinerators (40 CFR 761.70), high efficiency boilers (40 CFR 761.60), or by alternative methods (40 CFR 761.60(e)) that demonstrate a level of performance equivalent to EPA-approved incinerators or high efficiency boilers. The May 31, 1979 Federal Register also designated Regional Administrators as the approval authority for PCB disposal facilities.

On March 30, 1983, EPA issued a procedural rule amendment to the PCB rule (49 CFR 13181). This procedural rule change transferred the review and approval authority of mobile and other PCB disposal facilities that are used in more than one region to the Office of Pesticides and Toxic Substances (OPTS). The purpose of the amendment was to eliminate duplication of effort in the regional offices and to unify the Agency's approach to PCB disposal. The amendment gives the Assistant Administrator authority to issue nationwide approvals (i.e., approvals which will be effective in all ten EPA regions) to mobile and other PCB disposal facilities that are used in more than one region.

On April 15, 1988, this nationwide approval authority was delegated from the Assistant Administrator of OPTS to the Director of the Exposure Evaluation Division of the Office of Toxic Substances with another procedural amendment (53 FR 12524).

On November 17, 1984, Quadrex HPS, Incorporated, now known as Quadrex Environmental Company (Quadrex) submitted to EPA a permit application and demonstration test plan for nationwide approval to treat the interior of drained mineral oil dielectric fluid (MODEF) transformers, heat transfer fluid and hydraulic fluid systems containing PCBs. The demonstration test plan was approved by the Director of the Office of Toxic Substances on April 19, 1985. The trial demonstration took place at the Quadrex facility in Gainesville, Florida April 22-26, 1985, with EPA personnel on site to witness the demonstration, to verify Quadrex's on-site chemical analyses, and to obtain split samples for subsequent analysis and verification by EPA.

In the April 1985 demonstration, the Quadrex process successfully removed PCBs from a Freon 113 test matrix that included hydraulic fluid, heat transfer fluid, or MODEF containing PCBs. As a result, the EPA found that the Quadrex

process is equivalent to a 40 CFR Section 761.70 incinerator or a 40 CFR 761.60 high efficiency boiler, and that the operation of the Quadrex PCB disposal unit does not present an unreasonable risk of injury to human health or the environment. Quadrex was issued a final nationwide PCB disposal approval on July 5, 1985.

On September 4, 1985, EPA received a demonstration test plan from Quadrex outlining procedures for demonstrating the process to remove PCBs from solid surfaces and a liquid matrix. Specifically, Quadrex proposed to use its decontamination/disposal method to clean PCB-contaminated office items and to process the PCB/Freon solvent matrix generated during the cleaning operations. The demonstration was conducted September 12-13, 1985 at the New Mexico State Highway Department General Office Building in Santa Fe, New Mexico.

On August 4, 1986, EPA received a demonstration test plan from Quadrex for the separation of PCBs from an additional proprietary solvent (QPS). The demonstration was performed on August 25-29, 1986 at the Quadrex facility located in Gainesville, Florida. EPA personnel witnessed the September 1985 and August 1986 demonstrations to monitor the Quadrex operations and verify the on-site chemical analysis of the treated materials. In addition, split samples were obtained for subsequent analysis and verification by an EPA laboratory.

EPA received an application dated January 11, 1988 from Quadrex for a permit to clean air compressor pipeline and air compressor pressurized receiver tanks associated with natural gas pipeline compressor stations. EPA also received from Quadrex supplemental procedures on February 5, 1988. From January 26-28, 1988 and from February 12-14, 1988 Quadrex demonstrated the process on air compressor pipelines and on air compressor pressurized tanks at a United Gas Pipeline natural gas compressor station in Sligo, Louisiana. This demonstration was evaluated on-site by EPA technical specialists.

At a compliance monitoring inspection conducted by EPA Region VI before the demonstration, the condensate in the pressurized tanks was measured at approximately 1,000 parts per million (ppm) PCBs. The Office of Toxic Substances (OTS), after consultation with the EPA Regions, then established a cleanup level of less than one hundred micrograms per one hundred square centimeters on the surfaces on which Quadrex used the rinse process. EPA collected split samples of the treated and untreated rinse solvent to verify the analytical results from the off site Quadrex laboratory in Gainesville, Florida.

On April 12, 1989, EPA received a demonstration test plan from Quadrex for the separation of PCBs from an additional proprietary solvent (QPS-2) and to demonstrate its polychlorinated biphenyl (PCB) water decontamination unit. The demonstration was performed on April 24-27, 1989, at the Quadrex facility located in Gainesville, Florida. EPA personnel

witnessed the April 1989 demonstration to monitor the Quadrex operations and verify the on-site chemical analysis of the treated materials. In addition, split samples were obtained for subsequent analysis and verification.

On February 20, 1990, Quadrex petitioned EPA to vary the surrogate sampling procedure required to verify that a decontaminated surface has been cleaned to a designated residual surface PCB contamination. Quadrex maintains that for certain small pressurized tanks/bottles in air compressor systems associated with natural gas pipeline compressors, condition 4 in the Quadrex December 8, 1989 PCB Disposal permit is practically impossible to apply. The Quadrex assertion is based on the fact that the amount of liquid necessary to fill its cleaning process equipment/apparatus is greater than the amount of liquid which would be the maximum allowed under this condition.

On July 13, 1990, EPA received a demonstration test plan from Quadrex, and in subsequent discussions, and with Quadrex agreement, granted a demonstration approval for 1) the separation of PCBs at higher concentrations from QPS and QPS-2 solvents using the Quadrex physical separation unit with an air condenser version of Transform machine; 2) for the removal of polychlorinated biphenyls from natural gas pipelines, valves, controllers metering equipment and fittings. The demonstration was performed on August 6-10, 1990, at the Columbia Gas Transmission Corporation facility in Downingtown, Pennsylvania. EPA personnel witnessed the August 1990 demonstration to monitor the Quadrex operations and verify the on-site chemical analysis of the treated materials. In addition, split samples were obtained for subsequent analysis and verification.

Pipe larger than six (6) inches in diameter were cleaned during the demonstration by pressure spray rinsing with clean (<2 ppm PCBs) QPS-2. Pipe 6" in diameter and smaller were cleaned by flushing with clean (<2 ppm PCBs) QPS-2. Miscellaneous equipment such as valves, controllers, meter fittings of various sizes were cleaned in a fully enclosed glove box chamber with QPS-2 served by high pressure pumps and spray wands. The above miscellaneous equipment cleaning was also demonstrated by using a low volume soaking/flush protocol.

The findings presented below are for the Quadrex PCB disposal demonstrations conducted during April 1985, September 1985, August 1986, January 1988, February 1988, April 1989 and August 1990. Complete, acceptable demonstration test reports for all of these demonstrations are in EPA's files.

APPENDIX II
TO THE QUADREX APPROVAL TO DISPOSE OF POLYCHLORINATED BIPHENYLS

FINDINGS

1. Quadrex Environmental Company of Gainesville, Florida, has demonstrated a solvent extraction process whereby items and equipment contaminated with PCB askarel are washed with a solvent, trichlorotrifluoroethane (Freon 113™), and PCBs are subsequently removed from the solvent using filters and a distillation method. In addition, Quadrex has demonstrated removal of PCBs from proprietary solvents QPS and QPS-2 using filters and a distillation method. This distillation method is effective in removing PCBs from the Freon 113™ or proprietary solvents to a concentration of PCBs less than 2 parts per million (ppm) (total concentration). The concentrated PCB still bottoms are then prepared for removal and sent to an EPA-approved PCB disposal facility. The distillation process has already been approved by EPA for treatment of office equipment, MODEF transformers, heat transfer, hydraulic fluid systems, and compressed air systems using Freon 113™ and the proprietary solvents QPS and QPS-2.

2. The ability of the solvents QPS and QPS-2 to spray clean any items, air compressor systems, or other equipment contaminated with PCBs has not been demonstrated, and the EPA takes no responsibility for any damage that these solvents might cause to any items or equipment during the cleaning process. Also, Quadrex may not redistill and reuse any solvent that, after the spray-cleaning process, contains substances that interfere with the operation of the distillation process or with the GC analyses to determine the concentration of the PCBs in the solvents.

3. Only operation of the Quadrex solvent extraction process by Quadrex personnel has been demonstrated to the EPA. Therefore, this permit only applies to PCB decontamination/disposal units operated by Quadrex personnel. Quadrex-manufactured PCB decontamination/disposal units under lease to other companies or persons are <u>not</u> approved for operation under this permit.

4. The Quadrex PCB decontamination/disposal unit is a completely enclosed, mobile process that is designed to prevent release of PCBs to air, water, or to surfaces. The Quadrex PCB decontamination/disposal unit was developed by Quadrex and is analogous to similar units developed for clean-up of radioactive materials. From the results of demonstrations conducted during April 1985, September 1985, August 1986, January 1988, February 1988, April 1989, and August 1990, the distillation process is effective in removing PCBs from either Freon 113™ or from the proprietary solvents to below the level of 2 ppm total concentration, as compared to an external standard.

. In the September 1985 demonstration, PCB-contaminated items (e.g., typewriters, computers, tools, and other equipment) were placed on a movable table in a closed cleaning chamber. The table was rotated back and forth as Freon 113™ was sprayed on the items. In the August 1986 demonstration, the proprietary solvent QPS was spiked with PCB askarel fluid and reclaimed successfully. In the January 1988 and February 1988 demonstrations, Freon 113™ was high-pressure sprayed on the interior surfaces of pressurized tank vessels and flushed through pipes running from air compressors to the pressurized tanks. In the April 1989 demonstration, another proprietary solvent, QPS-2, was spiked with PCB askarel fluid, and reclaimed. The PCB-contaminated Freon 113™ generated from the cleaning operations or PCB-contaminated proprietary solvents were filtered first for PCB removal via canistered filtration media and/or placed in a distillation unit where the temperature was elevated to permit the Freon 113™ or proprietary solvents to vaporize. The Freon 113™ or proprietary solvents were then cooled and allowed to return to the liquid state for reuse. After complete distillation of the Freon 113™ or proprietary solvents, the distillation unit was thermostatically turned off and the remaining PCB material was drained and packaged for disposal at an EPA-approved incinerator. Filtration canisters were also prepared for transfer to a disposal site (incineration). Further details of the methods and equipment used in distillation for the separation of PCBs from Freon 113™ and from proprietary solvents are included in the permit application and process demonstration test plans on file at EPA Headquarters. In the August 1990 demonstration, an air condenser version of the Transform machine was used to separate PCBs from QPS and QPS-2 at higher concentrations than those demonstrated in April 1989.

6. In the April 1989 demonstration, the treatment was conducted in relatively small tanks (165 gallon capacity). Prior to treatment, three waste streams were combined into one matrix and subjected to a jar test to determine the most effective coagulant to be used in the treatment process. The water decontamination process consists of the following steps: mixing, flocculation, settling, air stripping, and absorption. The separated floc and absorbent was packaged for disposal and treated by a permitted PCB disposal facility. The initial water concentration was be less than 50 ppm, Water was treated to less than three parts per billion total PCB concentration.

7. The Quadrex PCB decontamination/disposal unit operates as a batch process. The unit uses a variable amount of Freon 113™ or of proprietary solvents to remove PCBs from actual surfaces and from PCB liquids such as askarel, MODEF, heat transfer fluid or hydraulic fluid which adhere to surfaces. As the process has been demonstrated to the EPA, after the PCB items are cleaned, either with Freon 113™ as demonstrated, or with QPS or QPS-2, the solvents are run through the distillation process until Quadrex personnel determine through GC analysis that the total PCB concentration in the solvent is less than 2 ppm. PCB

analyses were carried out on-site in five demonstrations and off-site in three demonstrations when the samples were sent to the lab in Gainesville, Florida for analysis. The Freon 113™ or proprietary solvents recovered were then ready for reuse. PCB still bottoms were removed, along with any contaminated filters, for disposal by incineration. All records of chemical analysis conducted during the demonstrations were submitted to EPA in accordance with the procedures and schedules outlined in the process demonstration test plans.

8. The Quadrex decontamination unit is designed for safety. The Quadrex decontamination unit has shut-off valves at key locations and has other safety features that will act to prevent spills into the environment. The decontamination/disposal unit is under low pressure, and is designed with automatic shut-off devices should pressure or temperature exceed specified safety limits.

9. The Quadrex decontamination/disposal unit is a closed system and does not emit harmful materials into the air, water, soils, or other surfaces. The process demonstration test plans state that operators of the unit, and persons conducting sampling of the unit use specified safety procedures and have proper protective clothing to minimize worker exposure. Liquid still bottom residues will be drained, then packaged in Department of Transportation (DOT) and EPA acceptable packaging to include appropriate liquid transport drums of 55 gallon or 30 gallon size and/or 1 to 5 gallons placed in an overpack 55 gallon or 30 gallon drum with absorbent materials sufficient to absorb twice the volume of the liquid present. These liquid wastes will be disposed of by incineration at an EPA-approved disposal site.

10. The Quadrex disposal process was shown to have a level of performance equivalent to that of thermal destruction methods (incinerators and high efficiency boilers). Under EPA regulations (40 CFR 761.60(e)) many factors are used to determine the appropriate destruction equivalency goals for alternate PCB destruction methods. Submissions from Quadrex during the permit application process have indicated that the decontamination method used to remove PCBs from Freon 113™ and proprietary solvents meet the standards set by EPA for equivalence to an approved incinerator or high efficiency boiler, in terms of the efficiency of removal. Furthermore, the Quadrex PCB decontamination/disposal unit is designed to protect workers from PCB exposure and precludes any apparent release of PCBs to the environment.

11. The Quadrex PCB disposal unit is applicable for cleaning surfaces contaminated with PCBs to acceptable levels without destruction of those surfaces. Therefore, EPA finds that the Quadrex PCB disposal method is equivalent to a 40 CFR 761.70 incinerator or 40 CFR 761.60 high efficiency boiler and that operation of the Quadrex PCB disposal unit does not pose an unreasonable risk of injury to human health or the environment.

TO THE QUADREX APPROVAL TO DISPOSE OF POLYCHLORINATED BIPHENYLS

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SAMPLE Quadrex PROCESS 30-DAY ADVANCE NOTIFICATION FORM

Client Name:
Client Address:

Quadrex Contact:
Phone:

Contact:
Phone:

Type of PCB Disposal Activity:

Amount and Type of PCB Material:

PCB Concentration Range:

Scheduled Time(s) and Date(s):

Contacts and Phone:

EPA - Wash., D.C.	EPA Region	State Agency	Local
Winston Lue 401 "M" St., S.W. Wash., D.C. 20460 202-382-3962			

Site Locations:

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APPENDIX III B

TO THE QUADREX APPROVAL TO DISPOSE OF POLYCHLORINATED BIPHENYLS

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SAMPLE QUADREX PROCESS TWO WEEK ACTIVITY SCHEDULE FORM

Period Covered:

EPA Location & Region	Most Probable Operating Date	Scheduled Date(s) & Time(s)	No. of Sites	County(s) of Operation or Central Contact Phone No.

Week No. 1:

Week No. 2:

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APPENDIX III C

TO THE QUADREX APPROVAL TO DISPOSE OF POLYCHLORINATED BIPHENYLS

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SAMPLE THIRTY DAY NOTIFICATION FORM FOR CONDITION NO. 1

Company Name, Address, Phone Number, and Contact Person;

Person, Organizational Affiliation/Title, and Phone Number for:

EPA Regional Contact:

State Contact:

Local (Town/City/County) Contact:

Nature of the Disposal Activity:

Kind of PCB Disposal Process:

Kinds of Material Containing PCBs:

Numbers and Sizes of Pieces of Equipment Containing PCBs:

Quantity of Solids and/or Volume of Liquid(s) Containing PCBs:

Concentration(s) of PCBs in the Material Treated:

Location

Street Address or Other Identifier for All Sites:

Telephone Contact and Address for Site Manager:

Time of Processing

Date(s):

Time(s):

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APPENDIX IIID

NOTICE OF INTENT TO OPERATE AND PUBLIC MEETING

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA

Date of this notice: December 26, 1993
Public Notice No: TSCA 1002

The Company XYZ, which is located at 12345 Main Street, Anytown, PA 67890 proposes to commence permanent operations for the storage and destruction PCBs wastes. A TSCA permit was granted to XYZ, Inc. on June 1, 1992 under the authority of the Toxic Substances Control Act.

Persons wishing to comment on the intent to commence permanent operation must submit in writing. Written comments must be sent to United States Environmental Protection Agency, 6th and Walnut Streets, Philadelphia, PA 19106, Attention: Joe Green (3TS9) and must be received by EPA on or before January 25, 1994.

If the written comments warrant a public meeting, then it will be held by EPA to receive such comments on February 10, 1994 in the JFK High School located at 1 Eagle Way, Chester, PA at 7:00 p.m.

All comments should address the appropriateness of the decision to grant permanent operations to XYZ. All comments must raise ascertainable issues and should be accompanied by all reasonably available arguments, factual grounds and supporting material. It is EPA' intent to limit comments at the meeting to a maximum of five minutes per speaker so persons wishing to participate in the hearing are encouraged to prepare written material to be submitted along with any oral comments.

All written comments received by the above date and all comments received at the meeting will be considered in the formulation of final determination regarding permanent operations. After considering all comments and the requirements and policies in TSCA and its implementing regulations, the EPA Regional Administrator will make a decision regarding permanent operations.

The administrative record, including the application, all data submitted by the applicant, the fact sheet, the approval, maps showing the exact facility locations and comments received and copied at EPA Region III, 6th & Walnut Streets, Philadelphia, PA 19106, between the hours of 8:30 a.m. and 4:30 p.m. Monday through Friday. A copying machine will be provided for public use at a charge per page. Any person desiring further information,

to review the record should contact Joe Green at the above address or call (215) 597-1234.

An additional copy of the application, approval and fact sheet will be available for review at the Pennsylvania Department of Environmental Resources, Solid Waste Division, 123 Main St., Philadelphia, PA 19111.