MWH
MONTGOMERY WATSON HARZA

August 2, 2001

Mr. Mark Drews
Wisconsin Department of Natural Resources
4041 N. Richards Street
P.O. Box 12436
Milwaukee, WI 53212

Re: WPDES General Permit Application
Johnson Controls, Inc.
3713 North Humboldt Boulevard
Milwaukee, Wisconsin
WDNR Site No. FID 241039040

Dear Mr. Drews:

Enclosed is the completed Wisconsin Pollution Discharge Elimination System (WPDES) permit for the Former Johnson Controls, Inc Facility located at 3713 North Humboldt Boulevard, Milwaukee WI. Johnson Controls, Inc. [illegible] the facility, and the current owner is Tramont Corporation. Johnson Controls Inc. is responsible for the environmental restoration of the facility.

Two separate groundwater extraction and treatment systems are proposed for the facility to treat groundwater impacted by solvents. Each treatment system will consist of activated carbon prior to discharge to two separate existing stormwater manholes. It is anticipated that the groundwater flowrate through each treatment system will be less than 2 gallons per minute.

The groundwater extraction and treatment system located on the west side of the building has already been granted a WPDES permit, WPDES Permit WI-0046566-4, this application is for the system located in the basement of the facility.

In addition to the drawings showing the treatment system, a map showing the City of Milwaukee storm sewer system is included.

Concurrent with this application, we are also requesting permission from the City of Milwaukee to use the City stormwater conveyance system.

One Science Court
P.O. Box 5385
Madison, Wisconsin
53705-0385

Tel: 608 231 4747
Fax: 608 231 4777

Please call at (608) 231-4747 if you required any further information.

Sincerely,

MONTGOMERY WATSON HARZA

Keith R. Gilkey, P.E.
Engineer

Enclosures: WPDES Application
Table 3 - Summary of Groundwater VOC Analytical Results
Drawing D1 – Title Sheet
Drawing D2 – Abbreviations, General Notes and Legend
Drawing D3 – Site Features Map
Drawing D4 – SVOC Soil Excavation, Utility Trench Cutoff Locations and Details
Drawing D5 – Details
Drawing D6 – Details
Drawing D7 – Details
Map of Storm Sewer
Attachment A - Laboratory Results
Attachment B – Sampling Schedule

cc: Ted Jankowski - Johnson Controls Inc.
Gina Keenan - Wisconsin Department of Natural Resources
Jane Fowler – Quarles & Brady

KRG/vlr/DTL
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2082302.06258901 MAD-I

Date Received_____
(Leave blank)

REQUEST FOR COVERAGE UNDER
Wisconsin Pollutant Discharge Elimination System (WPDES)
Wastewater Discharge Permit for
Contaminated Groundwater from Remedial Action Operations

(Revised 05/2001)

Please type or print required information, except for the signature.

I. GENERAL INFORMATION

A. 1. Name of Facility/Project: Johnson Controls Inc.

2. Location Address: 3713 North Humboldt Boulevard

Milwaukee, WI

(Number and Street, City, Town or Village) or (Highway or Road with Distance and Direction from nearest City)

3. County and TRS: Milwaukee County SE¼, NW¼, S9, T7N, R22E

(Give quarter-quarter, Section, Town, and Range Description)

4. Official Representative's Name: Theodore S. Jankowski Title: Dir. Corp. Legal Services

(Person signing this form if he/she is located at this facility's address)

B. Individual, parent company, or organization with direct control over the facility. Enter full official legal name of the owner or parent company, if there is one, the mailing address, and the name and title of the official representative (responsible party) signing this application if he/she is located at address of parent company.

1. Owner/Company Name: Johnson Controls, Inc.

2. Mailing Address: P.O. Box 591 Milwaukee WI 53201-0591

(Number and Street, Box and/or Route, City, State, Zip Code)

3. Official Representative's Name: Theodore S. Jankowski Title: Dir. Corp. Legal Services

(Person signing this form if he/she is located at the address of parent company)

4. Responsible Party's Name:_____ Title:_____

(If different from official representative)

C. 1. Consulting Firm: Montgomery Watson Harza

2. Mailing Address: 1 Science Ct. Madison WI 53711

(Number and Street, Box and/or Route, City, State, Zip Code)

3. Contact's Name: Keith Gilkey Title: Engineer

D. Name of Person to Receive Discharge Monitoring Report Forms from Department:

Keith Gilkey - Montgomery Watson Harza

E. DNR Environmental Response & Repair Project Number and DNR Project Manager name:

GINA Keenan

II. SPECIFIC INFORMATION ON PROJECT

A. Pollutants

1. The suspected sources of the pollutants (estimate quantity of material released and activities that contributed to the contamination): Former Solvent Storage tank (removed).

2. Check all fuel and waste types suspected in the contamination at this site:

____ Unleaded Gasoline	____ Jet Fuel	____ Pesticides
____ Leaded Gasoline	____ Waste Oil	____ Fertilizers
____ Diesel Fuel	X Solvents	
____ Heating Oil	____ Other:____	

3. Check all pollutants identified at this site:

____ BETX (Benzene, Ethylbenzene, Toluene, Xylene)	____ Pesticides/Fertilizers
____ PAHs (Polynuclear aromatic hydrocarbons)	____ Total Recoverable Lead *
X VOCs (Volatile Organic Chemicals)	____ Other____

SEE TABLE 3 * Include upstream receiving water hardness analysis if lead is detected.

B. Treatment

1. Describe the proposed treatment system: 2 Granular Activated Carbon units

2. Identify any additives to be used for cleaning, softening, or descaling of the treatment system. Provide Material Safety Data Sheets. None

3. Anticipated discharge startup and duration: Sept 1, 2001

4. Anticipated rate and volume of treated water to be discharged: Less than 2 GPM

5. Proposed discharge location: Storm Sewer located North of Building (See Drawings)

6. Is an air permit from the DNR air management program required? If not, why not? No - Treatment is activated carbon, there is no air emissions.

III. DISCHARGE MANAGEMENT PLAN

Include the following information:

1. A **summary** of analytical results for contaminants **detected** at the site. SEE TABLE 3

2. The results from the most recent volatile organic compounds (VOC) scan, including methods used and detection levels. SEE Attachment A

3. The results from an analysis of the following polynuclear aromatic hydrocarbons (PAHs), including methods used and detection levels:

benzo(a)anthracene	dibenzo(a,h)anthracene
benzo(a)pyrene	fluoranthene
benzo(b)fluoranthene	indeno(1,2,3-cd)pyrene
benzo(g,h,i)perylene	naphthalene
benzo(k)fluoranthene	phenanthrene
chrysene	pyrene

Analysis for PAHs has not been performed.

The lab should attempt to reach the lowest detection level achievable for each parameter because of the low limit for total PAHs. (EPA test method SW-846 8310 is recommended)

4. The contaminants proposed for periodic monitoring and demonstration of why any monitoring required in the permit should be exempted due to low level of contaminants in the wastewater discharge. SEE ATTACHMENT B

5. Information to support request for any alternate effluent limit for discharges to groundwater (Part E. of permit) or request for temporary exemption for in-situ discharges (Part F. of permit). Not Required

6. Plans and specifications of the proposed treatment system identifying sampling points; for supplier furnished package treatment units: only a flow diagram, design summary, and unit sizing calculations are required. SEE DRAWINGS

7. A site plan that identifies general land uses, UST's and pipelines, groundwater monitoring and recovery wells, contaminant plume definition and zone of influence, other known spills in the area, septic tanks and drain fields, separation distances to potable water supply wells and residences, and other pertinent information. SEE DRAWINGS

8. A detailed map of the proposed discharge location, showing if discharge is direct or via a storm sewer or other conveyance. Indicate distance from site to discharge location and other impacted water bodies or wetlands.

- If a city storm sewer is used, approval from the municipality is required. IN PROCESS

- If a new outfall structure is proposed, the plans should identify the outfall and incorporate appropriate erosion control methods. A permit for riprap projects (available at most DNR offices) should be obtained. Not Applicable - No new outfall structure

- Wetland discharges are not allowed unless they meet wetland protection requirements of Ch. NR 103, Wis. Admin. Code. Not Applicable

III. SIGNATURES

A. Signature of person completing the form, attesting to the accuracy and completeness of the statements made.

Keith Gilkey — Engineer- MWH — 8/1/01

Name — Title — Date Signed

Montgomery Watson Harza 1 Science CT Madison WI 53711 — (608) 231-4747

Address — Telephone Number

B. This application must be signed by the official representative of the permitted facility (responsible party) who is: the owner, the sole proprietor for a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government, or an executive officer of at least the level of vice president for a corporation, having overall responsibility for the operation of the facility. If the application is not signed, or is found to be incomplete, it will be returned.

Keith Gilkey — Engineer- MWH

Typed or Printed Name of Official Representative — Title

Keith Gilkey — 5/18/01

Signature of Official Representative — Date Signed

Please submit the application to the **DNR Regional office nearest you,** or to:
Department of Natural Resources, WPDES Permit Applications-WT/2,
P.O. Box 7921, Madison, WI 53707.

The decision on whether to cover this discharge under the remediation general permit will be made by regional DNR wastewater staff. If sent to Madison, this application will be forwarded to the appropriate regional staff person.

A copy of the submittal should also be sent to the Department LUST or ERF Project Manager.

Watershed Central:\General Permits\Reissue Docs\Grw Remediation\Request For Coverage.doc

TABLE 3
Summary of VOC Analytical Results - Northeast Basement Sump
Johnson Controls Inc. - Humboldt Facility
Milwaukee, Wisconsin

	Sump S01		NR 140 Standards	
Date Sampled	2/18/00	6/22/00	ES	PAL
Analyte (ug/L)				
1,1,1-Trichloroethane	<0.20	0.52	200	40
1,1,2-Trichloroethane	0.44	**0.7**	5	0.5
1,1-Dichloroethane	<0.10	0.54	850	85
1,1-Dichloroethene	<0.20	0.2	7	0.7
cis-1,2-Dichloroethene	5.2	**8.8**	70	7
trans-1,2-Dichloroethene	0.27	1	100	20
Benzene	<0.10	0.11	5	0.5
Bromodichloromethane	<0.10	**0.38**	0.6	0.06
Chloroform	<0.10	0.58	6	0.6
Tetrachloroethene	<0.10	0.18	5	0.5
Trichloroethene	***880***	***1700***	5	0.5

Notes:

1. Bolded results indicate that the concentration equals or exceeds the Wisconsin Administrative Code Chapter NR 140 Preventative Action Limit (PAL).
2. Bolded and italicized results indicate that the concentrations equals or exceeds the Wisconsin Administrative Code Chapter NR 140 Enforcement Standard (ES).
3. Only detected compounds are presented in this table. For complete analytical results see Appendix C.

Created By: MLN
Updated By: MLN
Checked By: PHL
m:\jobs\1242\288\01\GW_VOCs updated July 2000.xls (Sump)
1242288.01160101-MD
8/1/01

Commonwealth
Technology, Inc.
Laboratory Division

Hall

1230 Lange Court
Baraboo, WI 53913-3109
Phone: (800) 228-3012
Fax: (608) 356-2766
EMail: bld@ctienv.com

ANALYTICAL REPORT

MONTGOMERY WATSON
DAN HALL
ONE SCIENCE CT
MADISON, WI 53711

Project Name: JCI-HUMBOLDT
Contract #: 1510
Project #: 1242288-01160101
Folder #: 6377
Purchase Order #:
Arrival Temperature Deg. C: ON ICE
Report Date: 7/7/00
Date Received: 6/23/00

CTI LAB#: 24276 Sample Description: SUMP S1 Sampled: 6/22/00 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,1-Trichloroethane	0.52	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
1,1,2-Trichloroethane	0.70	ug/L	0.10	0.40	1			7/2/00	RLD	EPA 8260
1,1-Dichloroethane	0.54	ug/L	0.10	0.40	1			7/2/00	RLD	EPA 8260
1,1-Dichloroethene	0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.80	1			7/2/00	RLD	EPA 8260
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.70	1			7/2/00	RLD	EPA 8260
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	1.2	1			7/2/00	RLD	EPA 8260
1,2-Dibromoethane	<0.10	ug/L	0.10	0.20	1			7/2/00	RLD	EPA 8260
1,2-Dichloroethane	<0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
cis-1,2-Dichloroethene	8.8	ug/L	0.20	0.50	1			7/2/00	RLD	EPA 8260
trans-1,2-Dichloroethene	1.0	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
1,2-Dichloropropane	<0.20	ug/L	0.20	0.60	1			7/2/00	RLD	EPA 8260
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
1,3-Dichlorobenzene	<0.10	ug/L	0.10	0.20	1			7/2/00	RLD	EPA 8260
1,3-Dichloropropane	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
1,4-Dichlorobenzene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
2,2-Dichloropropane	<0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
2-Chlorotoluene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
4-Chlorotoluene	<0.20	ug/L	0.20	0.50	1			7/2/00	RLD	EPA 8260

WI DNR Lab Certification Number: 157066030
DATCP Certification Number: 289

Solid sample results reported on a Dry Weight Basis

Commonwealth Technology, Inc.
Laboratory Division

MONTGOMERY WATSON

Project Name: JCI-HUMBOLDT
Project #: 1242288-01160101

Contract #: 1510
Folder #: 6377

CTI LAB#: 24276 Sample Description: SUMP S1 Sampled: 6/22/00 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Benzene	0.11	ug/L	0.10 *	0.20	1			7/2/00	RLD	EPA 8260
Bromobenzene	<0.10	ug/L	0.10	0.20	1			7/2/00	RLD	EPA 8260
Bromodichloromethane	0.38	ug/L	0.10 *	0.40	1			7/2/00	RLD	EPA 8260
n-Butylbenzene	<0.10	ug/L	0.10	0.40	1			7/2/00	RLD	EPA 8260
sec-Butylbenzene	<0.20	ug/L	0.20	0.60	1			7/2/00	RLD	EPA 8260
tert-Butylbenzene	<0.10	ug/L	0.10	0.20	1			7/2/00	RLD	EPA 8260
Carbon tetrachloride	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
Chlorobenzene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
Chlorodibromomethane	<0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
Chloroethane	<0.40	ug/L	0.40	1.2	1			7/2/00	RLD	EPA 8260
Chloroform	0.58	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
Chloromethane	<0.20	ug/L	0.20	0.50	1			7/2/00	RLD	EPA 8260
Dichlorodifluoromethane	<0.10	ug/L	0.10	0.40	1			7/2/00	RLD	EPA 8260
Diisopropyl ether	<0.10	ug/L	0.10	0.40	1			7/2/00	RLD	EPA 8260
Ethylbenzene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
Hexachlorobutadiene	<0.20	ug/L	0.20	0.60	1			7/2/00	RLD	EPA 8260
Isopropylbenzene	<0.10	ug/L	0.10	0.20	1			7/2/00	RLD	EPA 8260
p-Isopropyltoluene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.0	1			7/2/00	RLD	EPA 8260
Methylene chloride	<0.40	ug/L	0.40	1.2	1			7/2/00	RLD	EPA 8260
Naphthalene	<0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
n-Propylbenzene	<0.10	ug/L	0.10	0.20	1			7/2/00	RLD	EPA 8260
Tetrachloroethene	0.18	ug/L	0.10 *	0.30	1			7/2/00	RLD	EPA 8260
Toluene	<0.20	ug/L	0.20	0.40	1			7/2/00	RLD	EPA 8260
Trichloroethene	1700	ug/L	20	40	100			7/2/00	RLD	EPA 8260
Trichlorofluoromethane	<0.20	ug/L	0.20	0.50	1			7/2/00	RLD	EPA 8260
Vinyl chloride	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260
m & p-Xylene	<0.20	ug/L	0.20	0.70	1			7/2/00	RLD	EPA 8260
o-Xylene	<0.10	ug/L	0.10	0.30	1			7/2/00	RLD	EPA 8260

WI DNR Lab Certification Number: 157066030
DATCP Certification Number: 289

Solid sample results reported on a Dry Weight Basis

Notes: * Indicates Value in between LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: _____

Record Reviewe

Solid sample results reported on a Dry Weight Basis

COC # CHAIN OF CUSTODY Page 1 of 1

Client: Montgomery Watson
Project Name: JCI - Humboldt
Project #: 1242288. 01160101 Acct #:
Quote #: P.O. #:
Project Contact: Leo Linnemanstons
Phone #: (608) 231-4747
Collected By: Leo Linnemanstons
Landfill License #: / PWS ID #:

Commonwealth Technology, Inc.

1230 Lange Court, Baraboo, WI 53913

Phone: 608-356-2760
Toll Free: 800-228-3012
Fax: 608-356-2766
email: boolab@ctienv.com

Mail Report To: Dan Hall
Company: Montgomery Watson
Address: One Science Court
City/ State/ Zip: Madison, WI 53711
Invoice To: - Same as above -
Company:
Address:
City/ State/ Zip:

Shipped Via: Fed-Ex / UPS / Courier / CTI
Airbill #:
COC Seal #:

Turnaround Time:
10 - Day / 5 - Day / 3 - Day / 24 - Hours / Other
Date / Time Needed:
QC Level:
I / II / III / IV / CLP-Like
EDD: Yes No

* Matrix
A - Air
DW - Drinking Water
GW - Groundwater
L - Liquid
SD - Sediment
S - Soil
SL - Sludge
ST - Stormwater
SW - Surface Water
W - Waste
WW - Wastewater
O - Other:

** Preservation Type: HA

Requested Analyses: VOCs (8260)

** Preservation Code
AA - Ascorbic Acid
AC - NH_4Cl
E - EnCore®
HA - HCl
M - Methanol
NA - HNO_3
SA - H_2SO_4
SH - NaOH
SS - Na_2SO_3
ST - $Na_2S_2O_3$
ZA - Zinc Acetate
O - Other:

6377

Sample I.D.	Location	Collection Date	Collection Time	Sample Matrix	Grab / Comp.	Filt'd Y/N	# of Containers Per Analysis	CTI Lab #	Comments
	Sump S1	6-22-00	12:00	GW	Grab	N	3		24276

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Date / Time
Leo Linnemanstons	6-23-00/9:00		
			6/23/00

Properly Preserved: (Yes / No) Headspace: (Yes / No)
COC Seals Intact: (Yes / No / NA) Bottles Intact: (Yes / No)
Temp. Upon Receipt (°C) ~~on ice~~ By:
Field Document Attached: (Yes / No)

White Copy - Original / Accompanies Samples) Yellow Copy - Lab Pink Copy - Other Golden Rod - Client

Proposed Monitoring Schedule

Basement Sump Groundwater Extraction and Treatment System
Johnson Controls, Inc.
3713 North Humboldt Boulevard
Milwaukee, Wisconsin

Sample Location	Sampling Frequency	Sample Parameters
Before First GAC Unit	Once per Month	VOCs and PAHs
Between GAC Units	Once per Month	VOCs
After Second GAC Unit	Twice Per Month	VOCs and PAHs

Notes: GAC = granular activated carbon
VOCs = volatile organic compounds
PAHs = polynuclear aromatic hydrocarbons

KRG/krg/
N:\Jobs\208\2302\06\Proposed Monitoring Schedule2.doc
2082302.06258901