STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 92-061

WASTE DISCHARGE REQUIREMENTS
FOR
JOHNSON CONTROLS, INC.
FILE NO. 91-36

The California Regional Water Quality Control Board, Los Angeles Region finds:

1. Johnson Controls, Inc., of Milwaukee, Wisconsin, has filed a report of waste discharge with this Board in accordance with the California Code of Regulations.

2. Johnson Controls, Inc., formerly operated a pipe and expansion joint fabrication plant at 1707 West Compton Boulevard, Compton, California.

3. Gasoline contamination was detected in soil during the removal of an underground gasoline storage tank in November 1985. The tank shell was found to be pitted with small holes due to corrosion, suggesting a gasoline leak. Duration and quantity of the gasoline discharge could not be determined. To remove the contaminated soil, the tank area was excavated to a depth of 20 feet below ground surface and was backfilled with imported clean soil.

4. Subsequent investigations of the site as directed by Board staff, indicated the presence of gasoline in the soil beneath the excavation area and in the ground water downgradient from the tank area. Free gasoline product was also discovered in two onsite ground water monitoring wells. The extent of the contaminant plume at this site has been defined.

5. Johnson Controls, Inc., owned and operated this property from late 1940's through 1986. The property is currently owned by Gary Zamir. The "discharger" referred to in this Order, is Johnson Controls, Inc.

6. Johnson Controls, Inc., has submitted a <u>conceptual</u> site remedial cleanup plan which includes the following tasks:

June 25, 1992
July 31, 1992
EH

a. Soil vapor extraction system consisting of vapor collection and destruction by catalytic oxidation or carbon absorption before discharge to atmosphere, subject to South Coast Air Quality Management District (SCAQMD) permit requirements.

b. Free hydrocarbon product removal system consisting of extraction and phase separation of product and water disposal by hauling offsite or reuse onsite.

c. Dissolved hydrocarbon cleanup in the groundwater by in-situ bioremediation utilizing indigenous bacteria enhanced by oxygen enrichment and addition of nutrient material. A pilot program will first be implemented for a maximum period of one year. Data generated from this study will be used to design and develop the full scale ground water cleanup plan for the site. This plan will be submitted to the Board for staff review and approval.

7. The Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on June 3, 1991. The plan contains water quality objectives for ground water of the Central Basin Hydrologic Subarea. The requirements contained in this Order as they are met, will be in accordance with the goals of the Water Quality Control Plan.

8. Ground water in the Central Basin Hydrologic Subarea is beneficially used for municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.

9. This action is being taken for the protection of the environment and as such is exempt from the provisions of the California Environmental Quality Act (Public Resource Code, commencing with Section 21100) in accordance with Section 15308, Chapter 3, Title 14, of the California Code of Regulations.

The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity to submit their written comments and recommendations.

The Board at a public meeting, heard and considered all comments pertaining to this discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that the Johnson Controls, Inc., shall comply with the following:

A.1. Groundwater Treatment Requirements

1. The addition of oxygen, inoculants, and nutrient solutions shall be limited to the contaminated ground water zone only.

2. The discharge of waste water to the ground surface, a water course or drainage ditch, or any tributary to surface waters is prohibited.

3. All wastes removed off-site for disposal shall be properly manifested and be disposed of at a legal disposal site.

4. In the event that the ground water cleanup via the in-situ biodegradation process becomes ineffective, these requirements shall become void. New waste discharge requirements may be required for further ground water cleanup operations.

A.2. Soil Cleanup Requirements

1. All equipment associated with the soil venting system must be properly maintained and kept in good condition at all times.

2. Vapor collected by this system shall be decontaminated by catalytic oxidation/incineration method or any other method approved by Air Quality Management District.

3. Each well shall be securely sealed to prevent venting of vapor to the atmosphere.

4. Any breakdown or malfunction of vapor collection and treatment system resulting in the emission of raw vapors shall be reported and immediate remedial measures must be undertaken to correct the problem and prevent further emissions into the atmosphere.

5. The vapor monitoring system shall be installed prior to operating the soil venting and treatment systems.

B. Provisions

1. This Order includes the attached "General Monitoring and Reporting Provisions."

2. A copy of these waste discharge requirements shall be maintained at the discharger facility so as to be available at all times to operating personnel.

3. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Board.

4. In accordance with Section 13267 of the Water Code the discharger shall furnish under penalty, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted.

5. In accordance with Section 13260 of the Water Code, the discharger shall file a report of any material change or proposed change in the character, location or volume of the discharge. A report of waste discharge is not required if additional injection or extraction wells are added to this system but the Board shall be so notified by letter.

6. The discharger shall notify this Board immediately by telephone of any adverse condition resulting from this discharge or from operations producing this waste discharge, such notifications to be affirmed in writing within one week from the date of such occurrence.

7. According to Section 13263 of the Water Code, these requirements are subject to periodic review and revision by this Regional Board.

8. By October 31, 1992, a report detailing the design of the proposed soil and ground water remediation and monitoring systems shall be submitted to this Board for Executive Officer review and approval. The report shall include a

plot plan and as built drawings showing the types, locations and the technical specifications of the equipment used, as well as the construction details of the associated wells and the monitoring program.

9. Prior to installation of new ground water monitoring, extraction or injection wells, a workplan must be submitted for Executive Officer review and approval. The workplan must include well locations, depth, and construction details.

10. A technical report evaluating the effectiveness of this cleanup program shall be submitted by December 31, 1993, for Executive Officer review and evaluation. The report must include soil and water testing data, conclusions and recommendations concerning the effectiveness of the soil venting and ground water cleanup programs as implemented.

11. These requirements do not exempt the operator of this waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

12. This Order expires September 20, 1994.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on August 31, 1992.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D. Env.
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. 7196
FOR
JOHNSON CONTROLS, INC.
(FILE NO. 91-36)

The discharger shall implement this monitoring program on the effective date of this Order. The first monitoring report (September) under this program is due October 15, 1992. If no discharge occurred, the report shall so state.

Monitoring reports shall be submitted monthly, by the 15th day of the second month.

Each monitoring report must affirm in writing that all analyses were conducted at a laboratory certified for such analyses by the State Department of Health Services or approved by the Executive Officer and in accordance with current EPA guideline procedures or as specified in this Monitoring Program.

For any analyses performed for which no procedure is specified in the EPA guidelines or in this Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

If no flow or cleanup activities occurred during the month, the report shall so state.

The report shall state whether there was any change in the type of cleanup operation as described in the application, during the reporting period.

Where the units of a parameter are listed as µg/l (ppb) suitable analytical techniques shall be used to achieve this provision.

I. Ground Water Monitoring

1. A ground water monitoring program shall be instituted at this facility. The program shall include sampling of the recovery and monitoring wells.

2. Samples shall be collected from these wells just prior to startup and monthly thereafter. The water samples shall be analyzed for the following parameters:

CONSTITUENT	UNITS	EPA METHOD NUMBER	TYPE OF SAMPLES
Total petroleum hydrocarbons	µg/l	8015	grab
Benzene	µg/l	602 or 624	grab
Toluene	µg/l	602 or 624	grab
Xylene	µg/l	602 or 624	grab
Ethylbenzene	µg/l	602 or 624	grab
Total lead	µg/l	7421	grab

Samples shall be collected from these wells prior to start up and semi-annually thereafter. The water samples shall be analyzed for the following parameters for baseline and followup monitoring purposes:

CONSTITUENT	UNITS	EPA METHOD NUMBER	TYPE OF SAMPLES
Dichloroethane	µg/l	601 or 624	grab
Dichloroethylene	µg/l	601 or 624	grab
Trichloroethylene	µg/l	601 or 624	grab
Trichlorotrifluoromethane	µg/l	601 or 624	grab

Samples shall be collected from all monitoring wells prior to start up and monthly thereafter for nutrient levels and bacterial count. The water samples shall be analyzed for the following parameters for baseline and followup monitoring purposes.

pH [1]
Nitrate nitrogen
Ammonia
Total dissolved solids
Carbon dioxide [1]
Phosphate
Chloride
Dissolved oxygen [1]
Bacterial count

More frequent sampling of these and additional parameters may be required to monitor the treatment process and document remediation.

[1] Field determination

II. Soil and Vapor Testing

1. Prior to startup of the soil venting system, Johnson Controls, Inc., shall submit a vapor monitoring and testing program to document the effectiveness of the soil venting system.

2. Prior to closure of soil venting operations, Johnson Controls, Inc., shall submit a soil sampling and testing program to document the decontamination of the soil.

III. Reporting Program

Monitoring reports shall be submitted monthly. The reports shall include, but not be limited to, the following items:

a. Water sample analytical data.

b. Vapor monitoring data.

c. Analytical methods employed.

d. Daily ground water volumes extracted.

e. Quantities and types of nutrients used.

f. Volume of air or oxygen injected.

g. An evaluation of the analytical results and effectiveness of ground water treatment and soil venting systems.

Johnson Controls, Inc.
Monitoring and Reporting
Program No. 7196

File No. 91-36

Operation and Maintenance Report

The discharger shall file a technical report with this Board by September 30, 1992, relative to the operation and maintenance program for the soil and ground water treatment systems. The information to be contained in that report shall include, as a minimum, the following:

a. The name and address of the person or company responsible for operation and maintenance of the facility.

b. Type of maintenance (preventive or corrective).

c. Frequency of maintenance, if preventive.

Hauling Report

In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported:

a. Type of waste and quantity of each type.

b. Name and address for each hauler of wastes (or method of transport if other than hauling); and

c. Location of the final point(s) of disposal for each type of waste.

ORDERED BY:

Robert P. Ghirelli

ROBERT P. GHIRELLI, D. Env.
Executive Officer

Date: 9-10-92