

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-163

WASTE DISCHARGE REQUIREMENTS
FOR
USA GASOLINE CORPORATION
(Service Station No. 223)
(File No. 00-094)

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

1. USA Gasoline Corporation (hereinafter USA Gasoline or Discharger) has filed a Report of Waste Discharge (ROWD) and applied for waste discharge requirements (WDRs). These WDRs are for disposal of treated condensate water from hydrocarbon vapor extracted from vapor extraction wells.
2. USA Gasoline owns and operates Service Station No. 223 (site) located at 5040 Saviers Road, Oxnard, California (Figure 1 shows the location of the service station). The subsurface investigations in July 1989 and January 1990 revealed that soils beneath the site were contaminated with petroleum hydrocarbons (gasoline) due to underground storage tank leaks. The highest concentrations of total petroleum hydrocarbons (TPH) were measured in areas beneath and adjacent to the underground storage tanks (USTs) and along the southern and western portions of the site.
3. A vapor extraction system (VES) was installed and operated at the site from 1996 through 1998 to remove hydrocarbon vapor from soils beneath the site. The VES operations were suspended due to the high cost to dispose of condensate water (approximately 250 gallons of water per day). However, a significant amount of gasoline still remains in the unsaturated and saturated soils beneath the site requiring the resumption of the VES operation.
4. Soil vapor will be drawn from selected extraction wells under vacuum to the 250 standard cubic feet per minute (SCFM) thermal/catalytic oxidizer. Water vapor will be separated from hydrocarbon gas by condensing into an 80-gallon water dropout tank. Hydrocarbon gas will be directed through the catalytic oxidizer for destruction. The condensate water will be automatically pumped to two 1,000-pound activated carbon canisters in series for removing TPH.

Following treatment, the water exiting the carbon vessels will be stored in a 500-gallon holding tank in preparation for re-injecting at a rate of 5 gallons per minute, back into selected vapor extraction wells for percolation into the shallow groundwater zone. The holding tank will have a high water level switch to turn off the VES and to prevent overflow in case any of the subsurface pipes become plugged. The discharge will be continuous for three years, the anticipated lifetime of the project.

August 16, 2000
November 9, 2000

5. GAC has been used to clean up ground water contaminated with petroleum hydrocarbons. The above-described treatment represents the BAT economically achievable.
6. Analysis of the condensate water shows high concentrations of petroleum hydrocarbons (TPH = 540 $\mu\text{g/L}$, benzene = 32 $\mu\text{g/L}$, toluene = 14 $\mu\text{g/L}$, and xylene = 130 $\mu\text{g/L}$ and methyl tertiary butyl ether (MTBE) = 9,300 $\mu\text{g/L}$). GAC has effectively removed these pollutants from contaminated groundwater to non-detected levels. Similar results are expected for this project.
7. There are no drinking water supply wells within 100 feet of the site.
8. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties*. The Basin Plan contains water quality objectives for, and lists the following beneficial uses of the Oxnard Plain unconfined and perched aquifers of the Ventura Central Ground Water Basin (Basin No. 4-4).

| | |
|------------|-----------------------------------------|
| existing: | municipal and agricultural water supply |
| potential: | industrial service supply |
9. The requirements contained in this Order are based on the Basin Plan; as they are met, will be in conformance with the goals of the aforementioned water quality control plan(s) and will protect and maintain beneficial uses of the ground water.
10. This project involves an action by a regulatory agency to maintain, restore, or enhance the environment, other than construction activities, where the regulatory process includes procedures to protect the environment and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15308.
11. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

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

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

IT IS HEREBY ORDERED that USA Gasoline Corporation shall comply with the following:

A. EFFLUENT LIMITATIONS

1. Waste discharged shall be limited to treated condensate water from the soil vapor extraction system only, as proposed.

2. The pH of the waste discharged shall be at all times within the range of 6 to 9 pH units.
3. The temperature of the waste discharged shall not exceed 100°F.
4. The discharge of an effluent with constituents in excess of the following limits is prohibited:

| <u>Constituents</u> | <u>Units</u> | <u>Discharge Limitations</u> | |
|------------------------------------|--------------|------------------------------|----------------------|
| | | <u>30-Day Average</u> | <u>Daily Maximum</u> |
| Total dissolved solids | mg/L | ---- | 3,000 |
| Sulfate | mg/L | ---- | 1,000 |
| Chloride | mg/L | ---- | 500 |
| BOD ₅ 20°C | mg/L | 20 | 30 |
| Oil and grease | mg/L | 10 | 15 |
| Sulfides | mg/L | ---- | 1.0 |
| Total suspended solids | mg/L | 20 | 30 |
| Total petroleum hydrocarbons | µg/L | ---- | 100 |
| Benzene | µg/L | ---- | 1 |
| Ethylbenzene | µg/L | ---- | 700 |
| Ethylene dibromide | µg/L | ---- | 0.05 |
| Methyl tertiary butyl ether (MTBE) | µg/L | ---- | 5 |
| Toluene | µg/L | ---- | 150 |
| Xylenes | µg/L | ---- | 1,750 |
| Lead | µg/L | ---- | 15 |


B. WASTE DISCHARGE REQUIREMENTS

1. The discharge of wastes to any point(s) other than specifically described in this Order is prohibited, and constitutes a violation thereof.
2. The discharge of untreated or inadequately treated waste at any time is prohibited.
3. Neither the treatment nor the discharge of waste shall create a condition of pollution, contamination, or nuisance.
4. The discharge of wastes shall not impart tastes, odors, colors, foaming, or other objectionable characteristics to the receiving groundwater.
5. Waste discharged shall at no time contain any substances in concentrations toxic to human, animal, or plant life.

C. PROVISIONS

1. This Order includes *Standard Provisions Applicable to Waste Discharge Requirements* (Standard Provisions). If there is any conflict between provisions stated herein and the Standard Provisions, the provisions stated herein will prevail.
2. This Order includes the attached Monitoring and Reporting Program (MRP). If there is any conflict between provisions stated in the MRP and the Standard Provisions, those provision stated in the former prevail.
3. This Order does not relieve the Discharger of the responsibility to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
4. The Discharger shall submit to the Regional Board, within 60 days of the adoption of this Order, procedures that will be, or have been, taken to ensure that no discharge of any untreated or partially-treated groundwater from the treatment facility, in the event of equipment failure, will result.
5. The Discharger shall notify this Regional Board by telephone within 24 hours of any adverse conditions resulting from this discharge; written confirmation shall follow within one week.
6. The Discharger must notify the Regional Board, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new Discharger. The notice must include a written agreement between the existing and new Discharger containing a specific date for the transfer of responsibility under this Order and compliance between the current and new Discharger.

I, Dennis A. Dickerson, 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 November 9, 2000.



Dennis A. Dickerson
Executive Officer

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 8173
for
USA GASOLINE CORPORATION
(Station No. 223)

I. REPORTING REQUIREMENTS

- A. The Discharger shall implement this monitoring program from the effective date of this order. Monitoring reports shall be submitted monthly and must be received by the Regional Board by the fifteenth day of the second month following each monthly sampling period.
- B. If there is no discharge, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.
- C. For every item where the requirements are not met, the Discharger shall submit a statement of the cause(s), and actions undertaken or proposed which will bring the discharge into full compliance with waste discharge requirements at the earliest possible time, including a timetable for implementation of these actions.
- D. By March 1 of each year, the Discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements.
- E. Any mitigation/remedial activity including any pre-discharge treatment conducted at the site must be reported in the monthly monitoring report.

II. EFFLUENT MONITORING REQUIREMENTS

- A. Before commencing any discharges of treated condensate water, a representative sample shall be taken and analyzed to determine compliance with the discharge limitations. The test results must meet all discharge limitations of Board Order No. 00-163.
- B. Sampling station(s) shall be established for the point of discharge and shall be located where representative samples of that effluent can be obtained. Provisions shall be made to enable visual inspection before discharge. If oil sheen, debris, and/or other objectionable materials or odors are present, the discharge shall not

be commenced until compliance with the requirements has been demonstrated. Any visual observations shall be included in the monitoring report.

This Regional Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

- C. Pollutants shall be analyzed using the methods described in 40 CFR 136.3, 136.4, and 136.5 (revised as of May 14, 1999); or where no methods are specified for a given pollutant, methods approved by Regional Board or State Board. Laboratories analyzing monitoring samples shall be certified by the California Department of Health Services and must include quality assurance/quality control (QA/QC) data with their report.

The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL) and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as the case may be:

1. An actual numerical value for sample results greater than or equal to the ML;
or
2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

The MLs are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, March 2, 2000.

- D. The MLs employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory quality assurance/quality control (QA/QC) procedures.
- E. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All QA/QC samples must be run on the same dates when samples were actually analyzed, and the results will be reported on the Regional Board format if available, and submitted with the laboratory reports.

Proper chain of custody procedures must be followed and a copy of the chain of custody shall be submitted with the report.

- F. Quarterly effluent analyses shall be performed during the months of February, May, August and November.
- G. Each monitoring report must affirm in writing that: "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current US EPA guideline procedures or as specified in this Monitoring Program."
- H. Each report shall contain the following completed declaration:

"I declare under penalty of law that I have personally examined, and am familiar with, the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]"

III. Effluent Monitoring Program

The following shall constitute the effluent monitoring program for the final effluent:

| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Minimum Frequency of Analysis</u> |
|------------------------------------|--------------|-----------------------|--------------------------------------|
| Total flow | gal/day | NA | weekly |
| Temperature | °F | grab | weekly |
| pH | pH units | grab | weekly |
| Total petroleum hydrocarbons | µg/L | grab | weekly ^{1/} |
| Benzene | µg/L | grab | weekly ^{1/} |
| Ethylbenzene | µg/L | grab | weekly ^{1/} |
| Ethylene dibromide | µg/L | grab | weekly ^{1/} |
| Methyl tertiary butyl ether (MTBE) | µg/L | grab | weekly ^{1/} |
| Toluene | µg/L | grab | weekly ^{1/} |
| Xylenes | µg/L | grab | weekly ^{1/} |
| Naphthalene | µg/L | grab | weekly ^{1/} |
| Tert-amyl methyl ether (TAME) | µg/L | grab | weekly ^{1/} |
| Tert-butyl alcohol (TBA) | µg/L | grab | weekly ^{1/} |


| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Minimum Frequency of Analysis</u> |
|---------------------------------------------------------------------------|--------------|-----------------------|--------------------------------------|
| 1,2,4-Trimethylbenzene | µg/L | grab | weekly ^{1/} |
| 1,3,5-Trimethylbenzene | µg/L | grab | weekly ^{1/} |
| Lead | µg/L | grab | weekly ^{1/} |
| Total dissolved solids | mg/L | grab | quarterly |
| Sulfate | mg/L | grab | quarterly |
| Chloride | mg/L | grab | quarterly |
| BOD ₅ | mg/L | grab | quarterly ^{2/} |
| Oil and grease | mg/L | grab | quarterly |
| Sulfides | mg/L | grab | quarterly |
| NO ₃ ⁻ + NO ₂ ⁻ (as Nitrogen) | mg/L | grab | quarterly |
| Boron | mg/L | grab | quarterly |
| Total suspended solids | mg/L | grab | quarterly ^{2/} |
| Priority pollutants (see attached list) | --- | grab | initial and annually thereafter |

^{1/} If the results of four consecutive samplings is nondetected, the monitoring frequency of a constituent may be reduced to monthly. However, if the result exceeds the effluent limit, the frequency for that constituent will revert back to weekly.

^{2/} For parameters/constituents where both monthly average and daily maximum limits are prescribed, but where monitoring frequency is less than four times a month, the following procedure shall apply:

If analysis of a sample yields a result greater than the monthly average limit for a parameter/constituent, the sampling frequency for that parameter/constituent shall increase to weekly within one week of receiving the laboratory result until at least four consecutive weekly samples are obtained and compliance with the monthly average has been demonstrated, and the discharger has submitted for Executive Officer approval a program that will ensure future compliance with the monthly average limit.

Ordered by:


 Dennis A. Dickerson
 Executive Officer

Date: November 9, 2000

PRIORITY POLLUTANTS

Metals

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Miscellaneous

Cyanide
Asbestos (only if specifically required)

Pesticides & PCBs

Aldrin
Chlordane
Dieldrin
4,4'-DDT
4,4'-DDE
4,4'-DDD
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
Toxaphene
PCB 1016
PCB 1221
PCB 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260

Base/Neutral Extractibles

Acenaphthene
Benzidine
1,2,4-trichlorobenzene
Hexachlorobenzene
Hexachloroethane
Bis(2-chloroethyl) ether
2-chloronaphthalene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
3,3'-dichlorobenzidine
2,4-dinitrotoluene
2,6-dinitrotoluene
1,2-diphenylhydrazine
Fluoranthene
4-chlorophenyl phenyl ether
4-bromophenyl phenyl ether
Bis(2-chloroisopropyl) ether
Bis(2-chloroethoxy) methane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
N-nitrosodimethylamine
N-nitrosodi-n-propylamine
N-nitrosodiphenylamine
Bis (2-ethylhexyl) phthalate
Butyl benzyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate
Benzo(a) anthracene
Benzo(a) pyrene
Benzo(b) fluoranthene
Benzo(k) fluoranthene
Chrysene
Acenaphthylene
Anthracene
1,12-benzoperylene
Fluorene
Phenanthrene
1,2,5,6-dibenzanthracene
Indeno (1,2,3-cd) pyrene
Pyrene
TCDD

Acid Extractibles

2,4,6-trichlorophenol
P-chloro-m-cresol
2-chlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
2-nitrophenol
4-nitrophenol
2,4-dinitrophenol
4,6-dinitro-o-cresol
Pentachlorophenol
Phenol

Volatile Organics

Acrolein
Acrylonitrile
Benzene
Carbon tetrachloride
Chlorobenzene
1,2-dichloroethane
1,1,1-trichloroethane
1,1-dichloroethane
1,1,2-trichloroethane
1,1,2,2-tetrachloroethane
Chloroethane
Chloroform
1,1-dichloroethylene
1,2-trans-dichloroethylene
1,2-dichloropropane
1,2-dichloropropylene
Ethylbenzene
Methylene chloride
Methyl chloride
Methyl bromide
Bromoform
Bromodichloromethane
Dibromochloromethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl chloride
2-chloroethyl vinyl ether
Xylene