

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to Nevada Administrative Code 445A.236)

Permittee Name: H₂O Environmental, Inc.
4035 Flossmoor Street, Suite A
Las Vegas, NV 89115

Permit Number: NEV2001508

Location: H₂O Environmental, Inc.
4035 Flossmoor Street
Las Vegas, NV 89115

Latitude: 36.23745 ° N

Longitude: 115.07269 ° W

Township 20 S, Range 62 E, Section 5,
Clark County, Nevada

Flow: 30-Day Average: 0.005 MGD
Daily Maximum: 0.029 MGD

Wellhead Protection

The storage location of the treatment equipment is not within a wellhead protection zone. Since the treated groundwater will be discharged only as a dust palliative, it is not expected that any discharge will impact any wellhead protection zones.

General

H₂O Environmental, Inc. is an emergency spill response, industrial cleaning and hazardous waste management company, based in Las Vegas Nevada, with offices in Reno and Las Vegas. The company owns, operates and maintains a large fleet of specialized equipment including vacuators, vacuum tankers, environmental roll-off bins, and excavation equipment. H₂O Environmental provides numerous environmental management services, including vacuum truck service, treatment of petroleum contaminated soils and wastewater, contaminated soil excavation, underground storage tank removal, transportation and disposal of hazardous waste, industrial and hazardous liquid waste hauling, sand/oil separator and grease trap pumping, tank cleaning, and oil, chemical, biological spill response.

H₂O Environmental, Inc. owns and has available for operation a trailer-mounted apparatus for the treatment of hydrocarbon contaminated water. The apparatus consists of a two (2)-5,000 gallon holding tanks, a 2,000 gallon air-strip water treatment tank, two (2) vapor phase activated carbon treatment vessels, two (2) liquid phase activated carbon treatment vessels, and associated pumps, compressors, pipes and other appurtenances. Water to be treated in the system is limited to hydrocarbon contaminated water, typically contaminated groundwater from remediation sites, monitoring wells or underground storage tank rinsings contaminated with total petroleum hydrocarbons, MTBE, BTEX and VOC. Water is accumulated in the holding tank(s) until an amount sufficient for

further treatment has been collected. The holding tank contents are then pumped into and circulated within the covered air stripping treatment tank, where air is diffused through the fluid to air strip certain volatile hydrocarbon compounds to the vapor phase. The vapor is collected in the space over the circulating fluid, evacuated from the treatment tank, and routed through the two vapor phase activated carbon vessels, configured in series, to remove the organic compounds before being vented to the atmosphere. Water treated in the air stripping tank is subsequently pumped through the two liquid phase activated carbon vessels, configured in series, to remove those hydrocarbons not removed by air stripping. Treated water is held in the holding tanks, and is sampled for analytical testing to ensure adequate treatment prior to discharge. In those instances in which contaminated water contains more than 200 ppb MTBE, the Permittee may inject a 35% hydrogen peroxide solution to the air strip treatment tank to aid in removal of the MTBE.

The treatment system is meant for operation under two different situations. The first is the treatment of contaminated water transported to the H₂O Environmental property at 4035 Flossmoor Street, Las Vegas, Clark County, Nevada. In this circumstance, contaminated water will be treated and stored in an on-site 20,000 gallon tank for use as a dust palliative and for tank rinsing. All water transferred to the storage tank will be treated to below permit limitations and tested to ensure compliance prior to storage. The treated water transferred to the on-site storage tank is denoted as Outfall 001. Use of any treated water for dust control is monitored as Outfall 002.

The second situation is the treatment of contaminated water at a remote client location. In this situation, no discharge to ground-or surface-water is allowed under this permit. Any discharge to ground-or surface water must be covered under a separate permit issued by NDEP to the client. In this case, operation of the system and use of the treated water for remote location dust control, tank rinsing and other industrial uses at the client remote location is monitored and limited as separate permit.

Discharge Characteristics

During the term of the permit ending in 2006, the permitted treatment system was not used.

Receiving Water Characteristics

Groundwater at the facility location is approximately 70 feet below ground surface. Because of the level of treatment and the small amount to be used as dust palliative, adverse effects to the groundwater are not anticipated.

Proposed Effluent Limitations and Special Conditions

NDEP proposes to limit and require monitoring of the facility according to the following table.

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	0.005	0.029	Continuous	Meter
Benzene (µg/l)	---	5	Each Batch	Discrete
Toluene (µg/l)	---	100	Each Batch	Discrete
Xylenes (µg/l)	---	200	Each Batch	Discrete
Ethylbenzene (µg/l)	---	100	Each Batch	Discrete
TPH (mg/l)	---	1	Each Batch	Discrete
MTBE (mg/l)	---	20	Each Batch	Discrete
Volatile Organics (µg/l)	Monitor and Report		Each Batch	Discrete
Priority Pollutant Metals* (µg/l)	Monitor and Report		Each Batch	Discrete
All Discharges Authorized Under Separate Client Permit <ul style="list-style-type: none"> o Date o Location of Discharge o Outfall # or Reuse Site o Source(s) of Water (site) o Contaminants Treated For o Quantity Discharged (gallons) 	Monitor and Report		Each Discharge	Discrete

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl Tertiary-Butyl Ether

* Priority Pollutant Metals = Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, Silver, Thallium, and Zinc.

Special Conditions: The following special conditions to operation of the treatment system shall apply:

- a. Treated water may be used for tank rinsing and other industrial uses, but waters used for these purposes will not be discharged under this permit. Treated water used for these purposes shall be collected and retreated, and either transported to the Permittee's facility location for onsite storage or shall be discharged as authorized under separate client discharge permits.
- b. All treated water shall meet discharge limitations prior to discharge. **Only waters contaminated by BTEX, TPH, and MTBE from petroleum hydrocarbons at Storage Tanks (USTs or ASTs), groundwater remediation sites and/or UST or AST rinsings shall be treated in this system. No metals- or solvent-contaminated waters are to be treated by this system. Treatment of other products that are mixed wastes or hazardous materials is prohibited.**

- c. On a site specific basis, the Permittee shall contact the Project Officer at the Bureau of Corrective Actions (702.486.2850) to determine the types of contaminants at each facility from where water is to be treated. The requirement for monitoring for these parameters is based on known source conditions, site contamination and water quality data for the site where the subject groundwater to be treated originates.
- d. **No fluids from tanks at facilities such as auto repair shops or similar businesses which may contain other hazardous pollutants, including but not limited to, antifreeze, used oil, metals or paint waste may be treated in this system**
- e. If the discharge from the H₂O Environmental Inc. treatment system is permitted under another NDEP discharge permit for a specific site discharging to a ground- or surface water, a log of all monitoring results for that site, the permit number, the permit holding entity, and the flow shall be compiled by the holder of this permit and submitted to NDEP quarterly with the Discharge Monitoring Reports (DMRs) required under this permit.

Schedule of Compliance

The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

Rationale for Permit Requirements

Monitoring and limitation of flow is required to ensure that the treatment capacity of the system is not exceeded. Monitoring and limitation of hydrocarbon concentration in water treated by the system is required to ensure proper operation and acceptable treatment levels.

Procedures for Public Comment

The Notice of the Division's intent to issue a permit authorizing the facility to discharge treated wastewater as a dust palliative to groundwaters of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review Journal** for publication. The notice is also being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. The deadline at the Division for the receipt of all comments pertaining to this public notice period is **5:00 PM, July 20, 2006, 2006.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period, and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with Nevada Administrative Code 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statute 445A.605.

Proposed Determination

The Division has made the tentative determination to renew the proposed permit for a period of five (5) years.

Prepared by: Janine O. Hartley
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Bureau of Water Pollution Control
May, 2006