

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(Pursuant to NAC 445A.148)

Permittee Name: Republic Environmental Technologies
770 E. Sahara Avenue
Las Vegas, Nevada 89104

Permit No. NEV93011

Facility: Apex Bioremediation Facility
Apex Landfill
13550 N. US Highway 93
Approximately 19 miles northeast of the City of Las Vegas
Las Vegas, Clark County, Nevada 89124
Township 18 South, Range 64 East, Sections 18

Latitude: 36° 23' 15" N

Longitude: 114° 52' 14" W

Drinking Water Protection and Wellhead Protection Areas: The facility is within the 3000' but outside the 1000' Drinking Water Protection Area (DWPA) around one public water supply well owned by Apex Regional Waste Management Center. A Wellhead Protection Area has not been established for this area.

Bureau of Corrective Actions: There are no Bureau of Corrective Actions sites with one mile of this facility.

General: Republic Environmental Technologies of Nevada's Apex Bioremediation Facility at Apex Landfill in Clark County accepts non-hazardous petroleum-contaminated soil and water for treatment via a biological "land farming" process in which the soil is spread, fertilized, watered, and "inoculated" with a bacteria mixture that consumes hydrocarbon content. The process is maintained by periodic watering and disking until the treatment goal is met. Contaminated water is treated in the same way after first mixing with clean soil or other absorbent. Treatment is optional in that some materials may be placed in the landfill directly, in accordance with governing county, state, and federal requirements. The treated material is disposed of or used as cover at the adjacent landfill. The facility extends over 8 acres and consists of (10) 100 ft by 400 ft treatment cells and a staging area, all underlain by a double HDPE liner with provision for detection of leaks and collection of leachate. A five (5) foot soil layer is maintained between the liners and the bottom of the treatment cells. This is a zero-discharge facility.

The facility has been permitted since 1995. Review of the Discharge Monitoring Reports (DMRs) submitted during the period from July 2005 through July 2010, the most recent permit term, indicate that this facility has been in compliance with all permit limits.

Receiving Water Characteristics: While this permit is for a zero-discharge facility, receiving water is considered to be groundwater of the State of Nevada. Depth to

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groundwater reported by the Permittee is 520 feet, at an elevation of 1655 feet above mean sea level (AMSL). The groundwater flow is to the northwest.

Permit Limitations and Monitoring Requirements: Permit limits and facility monitoring requirements are listed below:

Table I.A.1.

Parameter	Discharge Limitations	Monitoring Requirements		
		Sample Locations	Measurement Frequency	Sample Type
Maximum TPH concentration in treated soil and soil-water mixtures ¹ (mg/kg)	100	Treatment Cell	Each Batch	Composite
Maximum volume of material within each treatment cell ¹ (cubic yards)	2300	Treatment Cell	Each Batch	Estimate
Maximum weight of material within containment area ² (tons)	45,000	-	Each Load	Scale
Total weight of in-state waste accepted per month ³ (tons)	M&R	-	Each Load	Scale
Total weight of out-of-state waste accepted per month ³ (tons)	M&R	-	Each Load	Scale
Presence of liquid in leak detection system (Yes/No)	M&R	Leak Detection Pipe	Weekly	Inspection
Volume fluid removed from Leak Detection System ⁴ (gallons/acre/day)	M&R	Leak Detection Pipe	Weekly	Discrete
Containment area inspections ⁵	M&R	Containment Area	Weekly	Inspection

M&R: Monitor and Report

1. Beginning and ending total petroleum hydrocarbon (TPH) concentration, volume, and final disposition, shall be reported for each batch.
2. Maximum weight for each month shall be reported.
3. Monthly totals shall be reported.
4. Any liquid found in the leachate collection system shall be removed. Incidence of leakage, volumes removed, and final disposition, shall be reported.
5. Summary of inspections shall be reported. See Part I.A.1.c of the permit.

Groundwater is monitored in monitor well MW5 according to the following:

Table I.A.2.: Monitoring Requirements for Well MW5

Parameter	Sample Maximum	Frequency ¹	Sample Type
Depth to Groundwater (feet)	M&R	Annual	Field Measurement
Groundwater Elevation (Feet AMSL)	M&R	Annual	Calculate
TPH ² , mg/l	M&R	Annual	Discrete
Volatile Organics ³ , µg/l	M&R	Annual	Discrete

M&R: Monitor and Report

1. Samples shall be collected in the fourth quarter of each year.
2. EPA Method 8015B and EPA Method 8260B, full range, C6-C40.
3. EPA Method 8260B, to include MTBE.

Rationale for Permit Requirements: The limit for the maximum TPH concentration of treated soil is 100 mg/kg, which is the action level used by the Division's Bureau of Corrective Action. The 2300 cubic yard (cy) batch size limit is based on the size of the treatment cells and the need to operate earth moving equipment within the cells. The 45,000 ton limit for material within the containment area is based on the number of treatment cells and staging areas and the density of the material being treated. The amount of waste accepted is reported for tracking purposes. Weekly inspections of the leak collection system, and removal of any collected liquid, isolates the outer liner from liquid contact, thereby preventing leaks to the environment. No liquid has been found within the leak detection system to date. The nearby production well is tested annually for TPH and volatile organics. Out of state waste may be accepted only after approval by the Division's Bureau of Corrective Actions.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Division, including in said implementation and compliance, any additions or modifications which the Division may make in approving the schedule of compliance.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. **By MMM DD, 2010**, the Permittee shall submit a new Operations and Maintenance (O&M) Manual, prepared in accordance with appropriate sections of guidance document WTS-2, "*Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*", to the following addresses. The manual shall be submitted for review and approval to the following addresses:

Mr. Nadir Sous
Division of Environmental Protection
Bureau of Water Pollution Control - Las Vegas
2030 E. Flamingo Rd, Suite 230
Las Vegas, NV 89119-0837

**Department of Conservation and Natural Resources
Division of Environmental Protection
Bureau of Water Pollution Control
ATTN: Compliance Coordinator
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701**

Proposed Determination: The Division has made the tentative determination to issue the proposed discharge permit NEV93011 for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to issue the zero-discharge permit subject to the conditions contained within the permit is being sent to the **Las Vegas Review Journal** for publication. The notice is 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 thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **December 9, 2010 by 5:00 P.M.**

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 NAC 445A.238.

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

Prepared by: Janine O. Hartley, P.E.
Bureau of Water Pollution Control
Draft: October 2010
Final: