



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Brian Sandoval, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

October 15, 2018

Ms. Rose Pelino, P.E.
Corporate Facilities
Avis Budget Group, Inc.
World Headquarters
6 Sylvan Way
Parsippany, New Jersey 07054

**Subject: Addendum to Offsite Corrective Action Plan
For the Commingled MTBE Plume**

**Facility: Avis Rent a Car Facility
McCarran International Airport
5164 Rent-A-Car Road
Las Vegas, NV 89119
APN No. 162-27-201-005**

**Facility ID: 8-000217
Petroleum Fund ID: 2008000005**

Dear Ms. Pelino:

The Nevada Division of Environmental Protection (NDEP) has reviewed the *Addendum to Offsite Corrective Action Plan for the Commingled MTBE Plume* (CAP Addendum) dated September 27, 2018, and prepared by Jason Hoffman, Certified Environmental Manager (CEM), of Broadbent & Associates, Inc. (Broadbent) on behalf of Avis Budget Group, Inc. (Avis) for the above-referenced facility (Site). The CAP Addendum was received in our Las Vegas office on October 1, 2018 and proposes installation of remediation wells in the down-gradient portion of the Site and implementation of oxygen releasing compounds and nutrients to enhance natural biodegradation of methyl tertiary-butyl ether (MTBE) in groundwater at the Site.

The CAP Addendum notes that MTBE concentrations in groundwater monitoring wells in the down-gradient portion of the Site continue to exceed the site specific action level (SSAL) of 200 micrograms per liter ($\mu\text{g/L}$). As of December 2017, MTBE concentrations were as high as 1,400 $\mu\text{g/L}$ in monitoring wells near Wilbur Street and Lulu Avenue. Broadbent estimates that the average annual decrease in MTBE concentrations in four of the monitoring wells with the highest concentrations is 16% over the past four years.

The CAP Addendum includes a report from the California State University Chico Department of Chemistry and Biochemistry that indicates bacteria are present at the Site in sufficient numbers for degradation of MTBE. The bacteria can degrade petroleum hydrocarbons under both aerobic conditions and anaerobic conditions, with generally faster degradation rates for the aerobic pathway. Site data suggest that low concentrations of dissolved oxygen (DO), and to a lesser extent slightly lower concentrations of nutrients, may be limiting aerobic degradation.

In the CAP Addendum, Broadbent proposes to install 15 remediation wells along Wilbur Street and near the intersection of Lulu Avenue and Young Street. Broadbent proposes to suspend Oxygen Release

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Substrate™ (ORS) sleeves in each remediation well in an attempt to raise the concentrations of DO and nutrients down-gradient from the remediation wells. If successful, rates of MTBE degradation would be expected to increase as a result. Broadbent proposes to implement the ORS sleeves for a period of one year, with replacements at approximately 3-6 months, depending on dissolution rate. Regular monitoring of DO concentrations would be conducted.

NDEP has the following comments regarding the information and proposed actions presented in the CAP Addendum:

- NDEP does not concur with the recommended actions in the CAP Addendum.
- NDEP notes that previous corrective actions addressing up-gradient source areas have successfully reduced concentrations of MTBE and other petroleum hydrocarbons significantly and that remaining concentrations of MTBE are sufficiently decreasing due to natural attenuation (biodegradation). Based on data provided to date, the MTBE plume is not expected to reach any known receptors and the plume does not pose an unacceptable risk to human health and the environment.
- As such, NDEP believes that no remediation of the down-gradient area is necessary at this time, and that the Site is a good candidate for evaluating a groundwater exemption closure.
- Please continue groundwater monitoring and sampling while preparing the following documents in support of an exemption closure:
 - Fate and transport model (BIOSCREEN) and final conceptual site model (CSM) for the commingled plume;
 - BIOSCREEN and final CSM for the Avis source area; and
 - No further action request and presentation for the Site.
- NDEP expects all of the documents listed above to be submitted by **June 30, 2019**.
- NDEP is reviewing several other documents recently submitted on behalf of Avis, and will respond under separate cover. In those response letters, NDEP will provide a revised groundwater sampling plan and due dates for various outstanding submittals.

Please contact the undersigned in our Las Vegas office by telephone at (702) 486-2850, ext. 240 or via e-mail at bmoan@ndep.nv.gov if you have any questions or comments regarding the content of this letter.

Sincerely,



Ben Moan
Environmental Scientist III
Remediation and Leaking UST Branch
Bureau of Corrective Actions
NDEP Las Vegas Office

BLM:blm

cc: Jeff Collins, Bureau Chief, NDEP Bureau Corrective Actions, 901 South Stewart Street, Suite 4001, Carson City, NV 89701 jcollins@ndep.nv.gov
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Adjoining Property Owners

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