

# Memorandum

City of Las Vegas  
Department of Public Works  
City Engineer Division

To: Betsy Fretwell

From: Charlie Kajkowski

CC: Steve Houchens

Date: July 29, 2005

Re: Review of recent HDR/CH2MHILL report on odor, plant expansion, hazardous conditions and flood protection

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On July 21, 2005, we had asked the firm of Carollo Engineers to review the recent July 13, 2005 Memorandum titled, "City of Las Vegas WPCF – Assessment of Odor Control Improvements and the associated cover letter (no date) prepared by of CH2MHILL and HDR respectively. The purpose of the review was to address the validity and relevance of four issues mentioned in the memorandum and cover letter. Carollo Engineers has completed their review and their comments are in attached letter, dated July 28, 2005.

Essentially Carollo Engineers have validated all four concerns or issues regarding the reduction of the buffer zone around the Water Pollution Control Facility (WPCF) and they are summarized below:

**Odors**- the existing buffer zones are identified as an element of odor control and that changes to these zones could impact the odor control program.

**Plant Expansion** – future plant expansion would be located at the northwest corner of the existing WPCF site that is adjacent to the existing buffer area. Reducing the buffer zone adjacent to the proposed plant expansion site would impact the odor control program for the expanded facility.

**Hazardous Conditions** – Federal EPA regulations require an assessment of hazardous chemical storage and use on the site. The city currently has a Risk Management Plan but it needs to be updated taking in account any changes to the buffer zone.

**Flood Control** - Federal EPA regulations require flood protection for wastewater treatment facilities and any changes to the buffer zone should be reviewed to insure that the WPCF is protected.

Lastly Carollo Engineers concur with the recommendations contained in the memorandum and cover letter which is:

*Further studies are recommended to more rigorously evaluate the potential of off-site odors.*

- *More extensive odor emission sampling to better define the effectiveness on the plant's existing odor abatement equipment and to characterize ambient odor levels at the property line.*

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- *Additional air dispersion modeling at lower odor thresholds to evaluate how odors might be dispersed without the surrounding buffer zones and to determine off site impacts with a higher level of control at the WPCF.*
- *Evaluation of the effectiveness of additional odor control that could be added to the existing odor control treatment trains.*
- *Development of detailed cost for additional odor control.*