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March 31, 2015

Mr. Craig Woolard, PhD, P.E.  
City of Bozeman  
PO Box 1230  
Bozeman, MT 59771-1230

**RE: CITY OF BOZEMAN LANDFILL – GALLATIN COUNTY – LICENSE #196  
MARCH 3, 2015 DRAFT CORRECTIVE MEASURES ASSESSMENT APPROVAL AND RESPONSE TO  
DEFICIENCY**

Dear Mr. Woolard:

The Solid Waste Program (SWP) has completed the review of the March 3, 2015, response to deficiencies in the Draft Revised Corrective Measures Assessment, herein referred to as the Corrective Measures Assessment (CMA), dated September 4, 2014. In a letter dated September 15, 2014, the SWP determined that the CMA met the requirements of Administrative Rule of Montana (ARM) 17.50.1308(3). Subsequently, a public meeting was held on October 15, 2014, to receive comments on the results of the CMA from interested and affected persons to satisfy the requirements of ARM 17.50.1308(4). As a result of comments received during the public comment period, the SWP issued a Notice of Deficiency (NOD) to the City in a letter dated December 8, 2014, requesting additional information to support the selected remedy (Alternative F) as noted in the CMA. The SWP has determined that the March 3, 2015 response adequately addresses the items outlined in the December 8, 2014, NOD.

The CMA is approved by the SWP with the following additional requirements:

1. Within 90 days of receipt of this letter, the City must submit a selected remedy report that outlines how the selected remedy will be implemented, includes the required construction quality control and construction quality assurance plans according to the requirements of ARM17.50.1205, and provides a schedule for initiating and completing remedial activities according to ARM17.50.1309 (4).
2. Because ARM 17.50.1309(3)(vii)and (viii) requires facilities assess the “long term reliability of the engineering and institutional controls; and potential need for replacement of the remedy” when selecting the preferred corrective measures remedy, the SWP requires the submittal of an annual performance monitoring report. In addition, after two full years of operation, the SWP requires the submittal of a full analysis of the effectiveness of the remedy that includes the following elements, at a minimum:

- a. The effectiveness of the remedy to control the source.
  - b. The effectiveness of the remedy in reducing contaminant concentrations.
  - c. A statistical analysis, using statistical procedures and performance standards outlined in ARM 17.50.1305 (7) and (8), to show the concentrations of constituents in the Appendix II list compared to groundwater protections standards.
  - d. A summary of operations for the system and calculations showing the estimated mass of volatile organic compounds (VOC's) removed by the soil vapor extraction system.
3. Over the last two years, the City has installed, operated, maintained, and monitored soil gas mitigation systems in 27 residences in Phase 3 of the Bridger Creek subdivision. The mitigation systems were installed as an immediate response to address VOC's which were found in the area during the latter part of 2012. As part of the performance monitoring of the remediation system, the operational and analytical data for those mitigation systems must also be submitted to the SWP as an additional evaluation of the remedial system.

The SWP reserves the right to require the immediate implementation of additional mitigation measures identified in the approved CMA if the selected remedy proves ineffective.

If you have any questions regarding the SWP review, please do not hesitate to contact me directly by phone, fax or email.

Sincerely,



John Collins

Hydrogeologist

Solid Waste Program

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cc: Mr. Kirk Miller, Tetra Tech, Inc., 303 Irene St., Helena, MT 59601

File: Gallatin Co.\City of Bozeman Class II\License #196\Groundwater Corrective Measures