Fields of Opportunities

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

February 23, 2017

Manuel W. Barrett
Sr. Environmental Remediation Specialist
Magellan Midstream Partners, LP
One Williams Center, MD-27
Tulsa, OK 74172

SUBJECT: New Data from Phase II Environmental Site Assessment at Diamond Animal Health, Inc. Pertinent to Southern Remediation Area
Magellan Midstream Partners, LP, Des Moines Terminal at 2503 SE 43rd Street in Pleasant Hill, Iowa

Dear Mr. Barrett:

On February 3, 2017 we received a letter from Keith Piontek with TRC Solutions regarding new groundwater data related to the Southern Remediation Area at the Magellan Midstream Partners, LP, Des Moines Terminal (referenced above in the subject area).

This Southern Remediation Area had received a letter from Iowa DNR Field Office 5 dated August 22, 2011 stating the following: "After evaluating the information provided in the Semi-Annual Monitoring Reports since the shut down of all remediation systems in the Southern Remediation Area it is determined that no further action in the Southern Remediation Area will be required at this time. All remediation systems in the Southern Remediation Area can remain shut down and no further monitoring is required."

The criteria used to determine no further action would be required was based on a two-year monitoring program after total shut down of the remediation system to insure contaminant levels did not rebound significantly to the level where additional remediation would be needed. It was required that all of the monitoring reports (submitted semi-annually) include plume maps from the Iowa DNR Tier II Risk Based Corrective Action Model for any parameter (benzene, toluene, ethylbenzene, and xylenes) that exceeded the agreed to groundwater clean up goals. The plumes generated by the model were used to show whether the agreed to groundwater clean up goals would be exceeded at the point of compliance, the Des Moines River Levee. Methyl tertiary butyl ether (MTBE) was also one of the required parameters and if the agreed to groundwater clean up goal for MTBE was exceeded an alternative modeling program would have been needed. The agreed to groundwater clean up goals were as follows: benzene (3.88 mg/L), tolueue (1.9 mg/L), ethylbenzene (1.3 mg/L), xylene (1.65 mg/L), and methyl tertiary butyl ether (13.0 mg/L).

The two years of post-shut down monitoring were completed with the final sampling event taking place in March 2011. During that time the agreed to groundwater clean up goals were exceeded as follows: Benzene (MW-26): 9/22/09 – 4.98 mg/L; Ethylbenzene (MW-30): 12/1/09 – 1.19 mg/L, 3/17/10 – 1.58 mg/L, 6/23/10 – 1.65 mg/L; Xylenes (MW-30): 9/23/09 – 1.98 mg/L, 12/1/09 – 1.88 mg/L, 3/17/10 – 2.31 mg/L, 6/23/10 – 2.10 mg/L, 12/22/10 – 1.82 mg/L, 3/22/11 – 1.78 mg/L. Tier II modeling was done for all of the exceedences (listed above) and plume maps were included in the Semi Annual Monitoring Reports. The Tier II modeled plumes showed that the agreed to groundwater clean up goals at the Des Moines River Levee were not exceeded.

Monitoring results for MTBE were all below the agreed to groundwater clean up goal (13.0 mg/L). In general the monitoring reports showed a stable or downward trend in contaminant concentrations for BTEX and MTBE since the shut down of all remediation systems in the Southern Remediation Area.

The new data received on February 3, 2017 was from a Phase II Environmental Site Assessment at Diamond Animal Health, Inc. (2538 SE 43rd Street, Pleasant Hill, IA 50327) which is directly across the street from the terminal (west of the terminal). Two of the monitoring wells used in post-shut down monitoring MW-29 and MW-30 are on the east side of the Diamond Animal Health Property. Five test borings were drilled on November 7, 2016 and soil and groundwater samples were collected and analyzed for benzene, toluene, ethylbenzene and xylenes using Iowa Method OA-1, and for total extractable hydrocarbons using Iowa Method OA-2. There was no laboratory analysis for MTBE. These boreholes were placed in a rectangular pattern approximately 180 feet west of MW-29 and MW-30 on the south and west side of an L-shaped building. Two of the boreholes had parameters exceeding the agreed to groundwater clean up goals. Borehole DAH-4W exceeded ethylbenzene (3.35 mg/L) and borehole DAH-5W exceeded ethylbenzene (8.47 mg/L) and xylenes (13.8 mg/L). These were the two east-most boreholes. The three other boreholes were approximately 70 feet west of DAH-4W and DAH-5W and did not have any parameters exceeding the agreed to groundwater clean up goals. In light of the exceedances and to meet the criteria established for no further action (stated above) Bill Gibbons with Iowa DNR Field Office 5 asked Keith Piontek if they could put the new data in the Iowa DNR Tier II Risk Based Corrective Action Model which had been done with previous exceedances during the two-year post-shut down monitoring program.

On February 14, 2017 Bill Gibbons received a report from Apex Companies, Inc. who had been retained by TRC Solutions to put the new groundwater data into the Iowa DNR Tier II Risk Based Corrective Action Model. Apex Companies had previously run the model during the two-year post-shut down monitoring program. Groundwater contamination plumes were developed for benzene, toluene, ethylbenzene and xylenes using the new data and including previous data from the last data set used in the program (March 22, 2011). The new Tier II modeled plumes showed the agreed to groundwater clean up goals at the Des Moines River Levee were not exceeded.

Based on the results from the Iowa DNR Tier II Risk Based Corrective Action Model showing the agreed to groundwater clean up goals at the Des Moines River Levee are not exceeded using the new data, there is no reason at this time to require additional investigation or remediation for the Southern Remediation Area. However, this does not preclude Magellan Midstream Partners, LC from responsibility for additional environmental remediation in the Southern Remediation Area (or any other areas at the Des Moines Terminal) due to the release incidents which led to the now completed remediation project(s), new releases, or other historical releases, should it be determined that it is necessary to do so.

You may contact Bill Gibbons (515-725-0335; bill.gibbons@dnr.iowa.gov) or this office with any questions or comments.

Sincerely,

Ted Petersen
Supervisor
Iowa DNR Field Office 5

c: Keith Piontek, TRC Companies, Inc., 13 East Second Street, Suite B, Eureka, MO 63025
Dave Hruby, Apex Companies, LLC, 10052 Justin Drive, Urbandale, IA 50322
Tristan Grover, Magellan Midstream Partners, LC, 2650 106th Street, Suite 105, Urbandale, IA 50322
Matt Culp, Iowa DNR Contaminated Sites Section (via E-mail)