



CHEMICAL COMPANY

May 19, 2017

Richard Healey
Enforcement Branch Manager
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

RE: Annual Progress Report – El Dorado Chemical Company NPDES No. AR0000752

Dear Mr. Healey

Although no longer required under Part IB, Section B of the referenced NPDES permit, this letter serves as our Annual Progress Report for 2016.

As stated in previous annual reports, during the past year El Dorado Chemical Company (EDCC) has continued its efforts to ensure continued compliance with current permit limitations. The following paragraphs present the details.

1. Hydrologic Study

As related in previous reports, EDCC submitted a hydrologic study plan for the storm water outfalls. This plan was approved by ADEQ and then subsequently revised to modify the location of the background monitor for Outfalls 006 and 007. During the 3rd quarter of 2006 the hydrologic study was completed and the final report submitted to the ADEQ. During the 1st quarter of 2007, EDCC received comments dated January 5, 2007 and met with ADEQ to discuss those comments. Subsequent to that meeting, GBMc received a permitting options letter for which EDCC responded. During the 1st quarter of 2008, EDCC had discussions with NPDES permitting staff regarding the utilization of the hydrologic study in the permit renewal process. As of the date of this report, ADEQ and EDCC are discussing the finalization of the draft NPDES renewal which utilizes the results of the hydrologic study to establish effluent

limitations for outfalls 006 and 007. The draft permit was issued by ADEQ in February of 2017. We expect a final permit in the third quarter of 2017.

2. Retention Basin Temperature Study

As documented in previous annual reports, pursuant to the requirements of the final NPDES permit, EDCC submitted a temperature study plan for the purpose of determining the influence of ambient conditions on the temperature regime of the retention basin at EDCC. The study report was completed and submitted to the ADEQ during the 4th quarter of 2005. EDCC received approval of the temperature study in a letter dated January 5, 2007 and the temperature limit will be removed from the permit upon renewal permit. As stated in the previous section, we expect a final NPDES renewal permit in the third quarter of 2017.

3. Storm Water Outfall Compliance

As stated in last year's Annual Report, there are complex regulatory issues involved in the renewal of the NPDES permit and the modification of the TMDL, both of which address compliance issues at Outfalls 006 and 007. As stated in the previous two sections, we anticipate that the final renewal permit will be issued by ADEQ in the third quarter of 2017. As discussed in more detail in paragraph 8, we have initiated the fieldwork required to modify the TMDL.

4. Source Reduction and Wastewater Treatment

During the reporting period, source reduction activities have continued to be implemented to reduce waste loading to the wastewater system. These efforts have resulted in major reductions in the ammonia and nitrate concentrations measured in our stabilization basin (Lake Lee). For 2016 Lake Lee ammonia concentrations averaged 17.24 mg/L and nitrate averaged 27.17 mg/L. These source reduction efforts along with continued efficient operation of our wastewater treatment are shown in the Outfall 010 effluent characteristics.

The discharge from our wastewater treatment plant is now discharged through Outfall 010 to the Joint Pipeline. During this reporting period, there were no violations of Outfall 010 for Ammonia-N or Nitrate-N.

The charts attached show the source reduction and treatment effectiveness the plant accomplished through 2016.

5. Wastewater System

During the reporting period, EDCC continued use of the AquaMats in Lake Lee and Lake Kildeer. AquaMats are membranes for sustaining colonies of nitrifying and denitrifying bacteria.

6. Wastewater Treatment Bio-augmentation

As discussed in previous reports, during 2016 reporting period, EDCC continued implementation of the alternative wastewater treatment technology. We continue the collection of performance data to determine the efficacy of the organisms in our wastewater treatment system. The data that EDCC has collected so far indicates that the addition of various microbes continues to have a positive impact on the wastewater treatment system.

7. Joint Pipeline Activities

Construction of the joint pipeline began in July of 2012 and was completed on August 29, 2013. EDCC began utilizing the pipeline on September 9, 2013 through routing Outfall 001 to Outfall 010. There has not been a discharge through Outfall 001 since that time.

8. Water Quality (4g) Study for Dissolved Minerals

EDCC has suspended its efforts to get full USEPA approval of the amended State of Arkansas Water Quality Standards as approved by the Arkansas Pollution Control and Ecology Commission. It should be noted that USEPA did approve the removal of the drinking water uses from the waterbodies (Outfall 001 tributary through Flat Creek).

However, in 2016 EDCC continued its efforts to revise the TMDL for its receiving streams in an effort to correct technical errors and update the TMDL to reflect current discharge and watershed conditions. The fieldwork for the TMDL revision was initiated in the first quarter of 2017 as ADEQ Water Quality Planning staff completed its review of the workplan and notified GBMc that it had no further comments.

9. Outfall 002 Discharge Minimization Project

EDCC completed the installation of a 7000 gpm pump system to the gravity line to the final treatment unit in 2015. This project has functioned as planned and minimizes the possibility of discharge through Outfall 002. This system remains in place and is operational. There were no discharges through Outfall 002 in 2016.

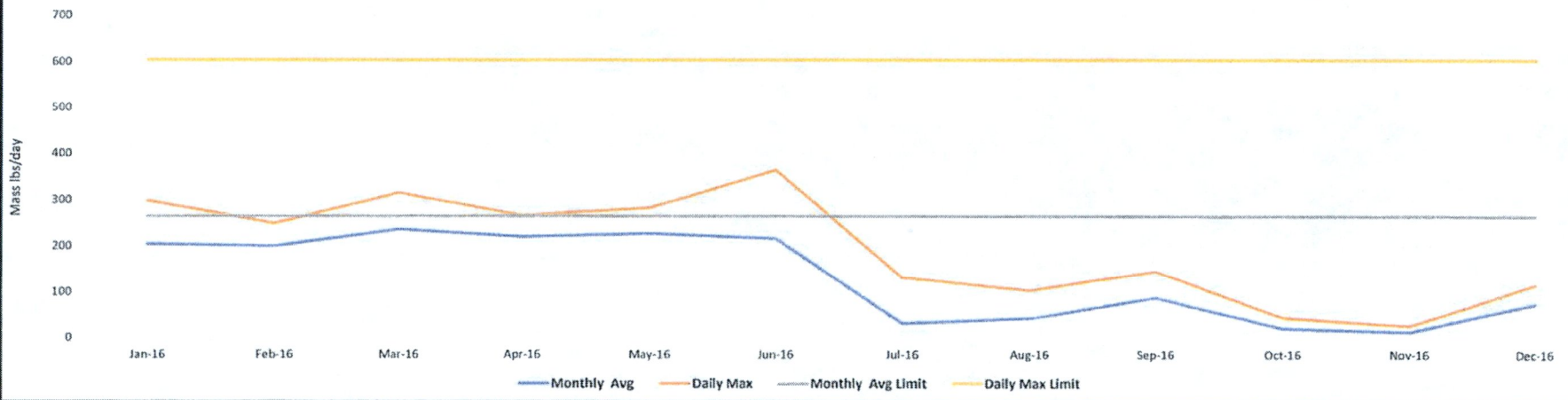
Hopefully, this letter has adequately explained the status of our NPDES efforts over the last year. Should you have any questions, please feel free to call me at (870) 863-1400.

Sincerely,

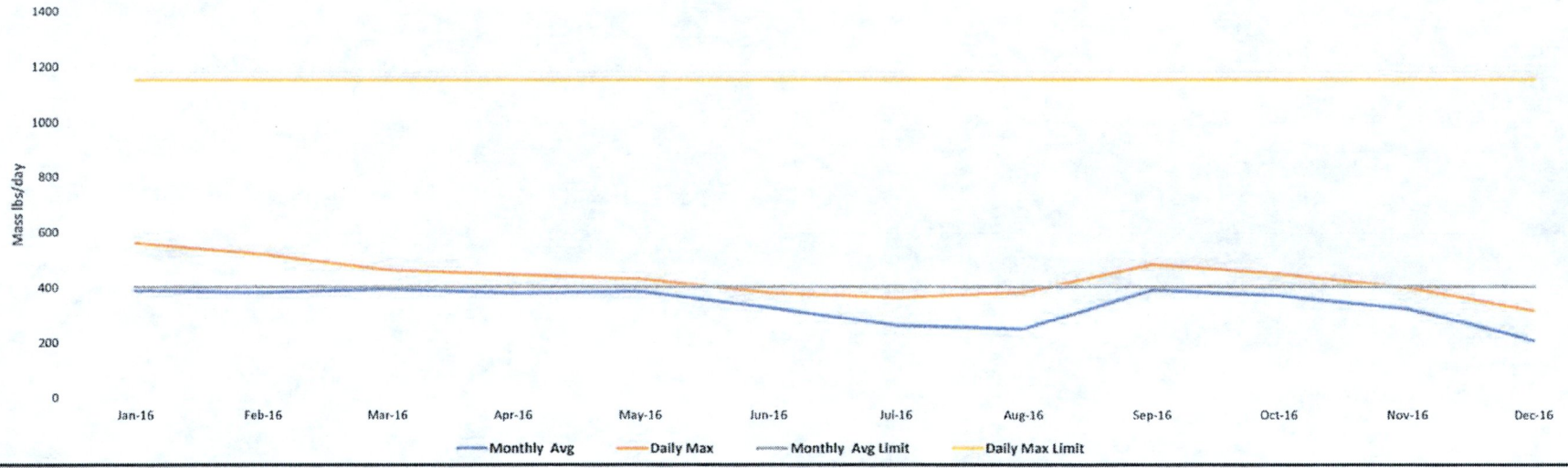
A handwritten signature in black ink that reads "Greg Withrow". The signature is written in a cursive, flowing style.

Greg Withrow
General Manager

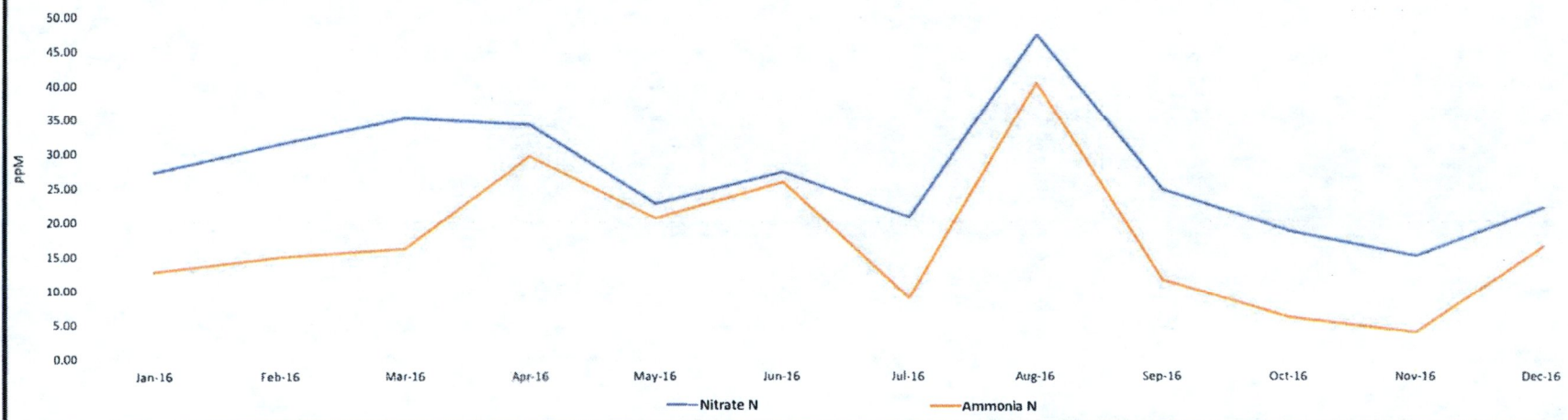
El Dorado Chemical Company
Outfall 010
Ammonia-N



El Dorado Chemical Company
Outfall 010
Nitrate-N



El Dorado Chemical Company
Lake Lee



ORIGIN ID:ELDA (870) 863-1403
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SHIP DATE: 19MAY17
ACTWGT: 0.50 LB
CAD: 5887030/NET3850

BILL SENDER

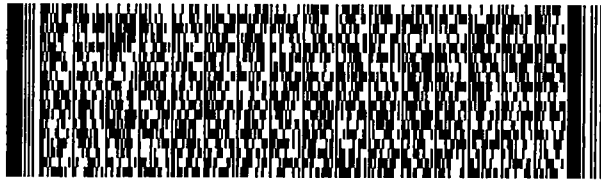
TO RICHARD HEALEY
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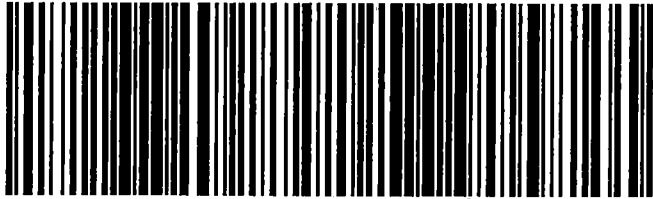
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