UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

January 8, 2018

Ms. Joyce Matthews
Roedel Parsons Koch Blache
Balhoff & McCollister
8440 Jefferson Highway, Suite 301
Baton Rouge, LA 70809

Re: Comments Provided for Attachment 3: Brine Diffuser Benthic Monitoring Plan of Supplemental Information Provided Dec. 19, 2017.

Dear Ms. Matthews:

We thank you for the submittal of the requested supplemental information regarding the brine discharge at LOOP. EPA offers the following comments to Attachment 3, as LOOP continues to develop a Study Plan for the assessment of the impacts to benthic communities resulting from the brine discharge at Outfall 004.

Project Objectives:

- The objectives state that hydrography and macroinfaunal assemblages will be assessed after known periods of brine release. The Study Plan should include additional details surrounding the design of the sampling event with regards to the timing of the discharge. Detention time from the point of discharge to exposure at the sampling stations should be considered as part of the sampling design. The study should include pre-discharge assessment and a post-discharge assessment. Sampling should be conducted immediately prior to discharge from Outfall 004, as well as after the discharge occurs, allowing for exposure at each station.

Site Description:

- Two control stations (471 and 471) have been selected as controls. The plan states they are located 1000 meters south and east of the diffuser. EPA is requesting the control stations be moved at least 20 kilometers in each direction (east, west, and south) from the diffuser, in order to adequately assess communities that are outside the area of potential impact from LOOP's brine discharge. Previous modeling conducted by the EPA shows this distance to be the point where there is no effluent exposure to the ambient receiving water.

Project Description:

- The hydrographic profile made at each station to characterize the water column currently includes measurements of salinity and dissolved oxygen. Temperature, pH, and alkalinity should also be included to better characterize the conditions of each site.
- The frequency of sampling events depends on the frequency of brine discharges. The draft

Study Plan indicates this may be up to twice per year, however, data submitted with monthly DMRs and page 2 of the December 19, 2017 letter from Timothy W. Hardy to Stacey B. Dwyer indicates that LOOP has been discharging an average of up to five times per year. The design of the sampling events should include a frequency that is representative of actual discharge frequency at Outfall 004.

- Data for other parameters (sediment texture and total organic carbon) may be available and used in statistical treatments of the benthic macroinfauna data. EPA requests that sediment composition monitoring be incorporated into the benthic study as a key component to the study.

Data Reduction and Reporting

- EPA requests that a tolerance index to salinity be calculated for the identified organisms in the study.

Data Interpretation Reports

- The focus of each annual report includes an analysis on whether any differences to the benthic communities in the study could be attributed to the discharge of brine at the diffuser. EPA requests that secondary impacts such as low dissolved oxygen, must be evaluated and correlated to primary sources.

We look forward to your continuing development of a study plan that will incorporate these key components and will yield in valuable information over the next few years.