EPA offers the following comments as LOOP continues to develop a Study Plan for the assessment of the impacts to benthic communities as a result of the brine discharge from Outfall 004.

(Attachment 3)

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.

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 a community that is 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 discharges an average of five times per year. The design of the sampling event should include a frequency that is representative of actual discharge frequency at Outfall 004.