Supplemental Expert Report, VPSB vs. LL&E et al., East White Lake Field, Vermilion Parish, Louisiana

Mary L. Barrett, Ph.D. February 16, 2015

INTRODUCTION

I have given my expert opinions in three different reports dated 6/14/2010, 7/18/2010, and 7/19/2010. Below I discuss and expand some opinions in response to additional reports issued by plaintiffs' experts, specifically the reports dated January 15th, 2015, by Norman, Templet and ICON. As in the previous reports, I reviewed all document productions to formulate my opinions.

Below I cover four areas of opinions given by plaintiffs in their January 2015 reports: 1) the saltwater disposal history as reflected in documents of 1953, 1965, and the early 1970s; 2) pit terminology as used in old documents before and after 1980s regulatory defining of pit names; 3) the LA Office of Conservation's (OOC) office preservation of spill report records prior to the 1980s; and 4) the general canal-maintenance permits granted to Unocal in 1985 and 1991.

PRODUCED SALTWATER DISPOSAL HISTORY

Plaintiffs' experts reference a series of documents and claim these documents indicate that Unocal was not properly handling produced water generated at the EWL Field. They further imply that Unocal was violating LA laws and regulations through improper handling, including the discharge of produced water. I disagree with these opinions based on my current review of these documents, including the 1953 and 1965 letters/AFEs, and based on my previous review of historic regulations as stated in my earlier report of 6/14/2010. I disagree that these new documents demonstrate non-compliance with Louisiana laws and regulations. Also, my review of the LA Stream Control Commission records and minutes, and the records of the OOC, found no records of violations by Unocal during this period, nor have I discovered any concerns by third parties.

PIT TERMINOLOGY AND USAGE

I gave my opinions about pit usage and related terminology in my previous reports. Plaintiffs experts have additionally discussed pit terms of production pits, emergency pits and burning pits as applies to the tank battery pits. It was not until 1986 in Louisiana that pits and their usage were given regulatory definition; other states did so in similar timeframes. Prior to that time, it was general usage terminology that appeared in oilfield records and/or public documents (Barrett 2010; EWL_Barrett 019703).

OIL SPILL REPORT FORMS

Additional produced documents included Unocal oil spill regulatory report forms to the OOC, when these forms became a standard form for reporting to the OOC. While many historic documents concerning waste occurrence and management are present in the main office and district offices of the OOC, the regulatory spill forms found in the produced documents of all of 1970s and some of 1980s spills are not preserved in the OOC records at the different offices (SONRIS records do not include many available paper collections about oilfield waste management). It is not possible to judge whether a company reported a spill or not solely based on the absence of these old forms in OOC records.

This standard OOC reporting form was developed for operator spill reporting in the early 1970s (C207 28041). Prior to that, reporting regulations required any fires, breaks, or leaks where oil or gas were escaping to be reported by telegraph or telephone and by letter (Dart, 1939). Neither these early letters nor the later 1970s spill reporting forms, which exist in company files, have been found as an OOC collection or in individual well files.

The records and correspondence of the SCC can be an additional source for oil spill reporting; no old spill records were found for EWL Field. Additionally, there is no record of EWL Field being reviewed for issues at a SCC meeting (in minutes). I have produced all my found oil spill public records in my earlier reliance documents.

CANAL MAINTENANCE PERMITS, 1985 AND 1991

Plaintiffs discussed canal maintenance permits and obligations to plug unused canals. They refer to two 5-year general maintenance permits, one in 1985 and the other in 1991, with agreements of what to do with the spoils if maintenance dredging was done under the specific permit. There does not appear to have been any maintenance dredging conducted under the two permits.

The 1985 USCOE dredging permit LMNOD-SE (Vermillion Parish wetlands)218 dated 10/30/85 states "that spoil shall be used to plug and/or backfill any currently unused canals or slips that are adjacent to the canals being deepened" (C407 068772); Unocal agreed to this (C407 086794). My review of these records do not indicate any dredging was performed under this permit, and a letter written 10/5/89 by Unocal concerning this same permit states that the "last dredging done here was right at five years ago" (C407 068791). They give the permit as LM NOD (IWFM) 44; that was a 10/1984 permit for the VPSB A-40 well (EWL_Barrett 018628).

The 1991 USCOE permit does not have the same statement about plugging or backfilling with any spoil; it just gives several choices of what to do with the spoil (EWL_Barrett 015190). Nor does the DNR Coastal permit granted 3/8/91; it too gives several choices of what to do with spoil (EWL_Barrett 015134). A May 1995 inspection was made by the DNR coastal division to observe if any maintenance dredging had been conducted under this 1991 permit. The cover letter stated that the only recent dredging and spoil deposition was north of the Intracoastal Waterway (EWL_Barrett 015115).

I reserve the right to supplement my opinions if new information becomes available.

Submitted by:

Mary L. Barrett, Ph.D.

PUBLIC DOCUMENTS CITED

Barrett, M. L., 2010, Earthen pits in U. S. petroleum fields: a history of nomenclature and related usage; Oil-Industry History, v. 11, p. 43-59.

Dart, B. W., 1939, General Statutes of the State of Louisiana; v. 3, Title 38, Minerals, oil, and gas.

Louisiana Stream Control Commission minutes:

Oct. 3, 1940 (LDEQ EDMS # 2990709)

Nov. 19, 1940 (LDEQ EDMS # 2990717)

July 29, 1941 (LDEQ EDMS # 2990627)

Sept. 23, 1942 (LDEQ EDMS #2990703)

APPENDIX A.

Additional Produced Documents for Barrett Reliance Documents

C2074021 series

028041-049; 35094-115

C3074021 series

003185-95; 004026-29

C4074021 series

005538; 009110-116; 013911-913; 015462-467; 017441-512; 017523-599; 017702-710; 018470-473; 018561; 018596; 018600-602; 025152-160; 025161-163; 025195-235; 025317-320; 030606-610; 030614-628; 031344-562; 031605-681; 031641-675; 036158-160; 037487-501; 037596-614; 037609-614; 037620-621; 038461-466; 038533-536; 038714-728; 038778-780; 039594; 039668-670; 039693-696; 039703-706; 039710-711; 039764; 039765-767; 039769-772; 039774-775; 039789-792; 040468-469; 040581-583; 040587-589; 040591; 045128; 045158; 046370; 046382; 046393; 046475-477; 046478-

484; 049117-159; 049912-917; 051538-582; 052306-334; 052354-358; 052620-683; 057482; 057564-565; 057584-594; 057754; 057755-756; 057812-838; 064189; 035115-116; 068573-576; 068584-588; 068630; 068662; 068718; 068772-777; 068791-793; 068794-817; 069158-162; 069164-165; 069168; 069180; 069195; 069197; 069791-794; 070402; 071263-265; 071280; 071287-288; 071471-472; 072637