

Errata to Captain Mark VanHaverbeke September 12, 2014 Expert Report

After becoming aware of an error concerning certain calculations related to a paragraph on page 5 of my September 12, 2014 Expert Report, I updated the calculations. In performing this update, I used the values found on page 5 of the United States' Third Supplemental Response to Defendants' First Set of Discovery Requests to the United States of America Relating to the Clean Water Act Penalty Phase. Below, I have reproduced the relevant paragraph from my report and produced a table showing the correct values. This update does not alter any of the opinions or conclusions offered in my report.

Text of the relevant Paragraph from my September 21, 2014 Expert Report:

Third, measuring against "Oil Available for Recovery" ignores the 67 percent of the oil discharged and deemed unrecoverable. In situ burning and chemically dispersing oil accounted for thirteen percent of the total oil discharged, while direct recovery (skimming) only amounted to an unremarkable three percent of the 4.9 million barrels of oil discharged. This rate is on par or below rates Captain Paskewich cites for other spills in Figure 7 of his report. During the Exxon Valdez response, during which responders' use of dispersants and in situ burning was severely limited, Captain Paskewich shows an eight percent recovery rate.

Listed in the table below are the correct values based on my updated calculation. To obtain the percentage shares of oil dispersed, burned and skimmed, I began by subtracting 810,000 barrels (RITT and Top Hat Recovery) from 5,000,000 barrels (cumulative discharge based on US estimate). Then, I calculated the percentage share for each category based on the amount discharged into the environment and rounded my results to the nearest decimal point:

Oil deemed unrecoverable	43.9%
Share of oil chemically dispersed	18.4%
Share of oil burned	6.2%
Share of oil skimmed	3.8%



Mark G. VanHaverbeke