

MEMORANDUM

DATE: December 4, 2013

TO: Peter Maher

FROM: John Sevee

SUBJECT: Potential for Sediment Contamination in the Royal River

From the Mckin Superfund Site

You have asked me to comment about the potential contamination of sediments in the Royal River due to the presence of the Mckin Superfund Site which is located in East Gray, Maine. I have been working on the Mckin Site since 1985 and I am very familiar with the type and nature of contaminants associated with the site.

The former Mckin facility is located about three-quarters of a mile from the Royal River. The site operated in the 1970's and processed oil debris, solvents and other waste products. The facility was closed in 1979 and \$30 million dollars was spent to clean the soils and groundwater from 1979 through 1995.

Contamination, mostly in the form of solvents seeped into the groundwater. Some seepage from the site reaches the river via the groundwater system. The concentration of solvents in the groundwater that has entered the River over the years has been over one thousand times less than the ecological fresh water contamination standards. Because of the volatile nature of the solvents, those which may have entered the River through the groundwater tend to volatilize into the atmosphere. Some of the solvents may have entered the sediments in the river (as a point of reference the groundwater from the Mckin Site enters the River approximately ten miles upstream from the Town of Yarmouth), however, they would be degraded and transformed to water, carbon dioxide and chloride by bacteria and are no longer present.