



November 19, 2010

Reference No. 050681

ATTN: Document Control Desk Deputy Director  
Decommissioning and Uranium Recovery Licensing Directorate  
Division of Waste Management and Environmental Protection  
Office of Federal and State Materials and Environmental Management Programs  
Mailstop T8-F5  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

DEC 1 1 2010

Dear Sir:

Re: 3rd Quarter 2010 NRC Groundwater Sampling Results  
Stepan Company, 100 West Hunter Ave.  
Maywood, New Jersey  
NRC License STC-1333

This letter provides a summary of the 3rd quarter 2010 NRC groundwater analytical results for the above-referenced Site. The attached table presents a summary of the results. The NRC license at the Stepan Company site is suspended for Burial Pits #2 and #3, and USACE is responsible for radiation control and the protection of the public health and safety consistent with the requirements of 10 CFR Part 20. Wells #1 through #4 and #7 through #9 were sampled during the 3rd quarter 2010 routine groundwater sampling event. Well #5 was not accessible at the time of sampling. The results for these wells were below 15 pCi/L for gross alpha, with the exception of Well #9, which was found to have a concentration of 23.3 pCi/L in September 2010. In accordance with the sampling protocol, well #9 was re-sampled in October 2010 and the result was below 15 pCi/L for gross alpha.

If you have any questions, please do not hesitate to call.

Sincerely,

Mark Stanek  
Stepan Company

JAG/smk/5

Attachment

cc: Regional Administrator, Region I, NRC  
Yolande Norman, NRC



Printed on Recycled Paper

DEC 1 1 2010

November 19, 2010

2

Reference No. 050681

Judith Joustra, NRC  
Lydia W. Chang, NRC  
Mark Roberts, NRC  
Ed Troskowski, NJDEP  
Allen Roos, USACE  
Bill Kollar, Shaw  
Christina King Loundy, Stepan Company  
Jeff Nelson, Stepan Company  
Mark Stanek, Stepan Company  
John McGahren, Patton Boggs LLP  
Laurie Matthews, Patton Boggs LLP  
John Garges, CRA



**Table 1**  
Analytical Results of Third Quarter 2010 NRC Well Sampling  
Stepan Company  
100 West Hunter Avenue  
Maywood, New Jersey

Sample Identification	NRC Permit Criteria	Well 1	Well 2	Well 3	Well 4	Well 5	Well 7	Well 8	Well 9	Well 9
Sample Date	(pCi/L)	9/27/2010	9/27/2010	9/27/2010	9/27/2010	9/27/2010	9/27/2010	9/27/2010	9/27/2010	10/29/2010
<i>(all results in pCi/L)</i>										
Gross Alpha	15	5.39	2.7	0.0	4.21	NS	2.55	8.65	<b>23.3</b>	6.97

**Notes:**

pCi/L = pico Curies per Liter.

**Bold/Box** = Analyte detected above Permit Criteria.

NS = Not Sampled