Tracerco
Providing Insight Onsite

February 22, 2016

Materials Safety Licensing Branch
U.S. Nuclear Regulatory Commission
Office of NMSS
Mail Stop: T8E18
11545 Rockville,
Rockville. MD 20852

USPS Certified Mail/RRR
7014 3490 0002 1000 9314

Attn: Shirley S. Xu

Re: Tracerco Exempt Distribution License Application Follow-up
Docket No. 030-38897, Mail Control No. 589675

Dear Ms. Xu:

Referencing your e-mail dated February 8, 2016 regarding our E-Distribution license application follow-up response letter dated January 29, 2016, we are providing the additional information you requested. Our responses correspond with each item of e-mail and are as follows:

1. Tracerco utilizes MicroShield modeling software to calculate dose rates for the different isotopes at various distances, taking into account the containment shielding. The calculation will provide a mR/hr/mCi dose rate for a particular isotope at specified distances. A Tracerco Model T202 radiation monitor, or equivalent, is used to obtain the actual dose rate at a particular distance. The actual dose rate divided by the calculated dose rate/mCi will indicate the amount of activity available for the tracer study.

2. An open system tracer study involves introducing a nuclear substance into a process stream that will result in the isotope being released into the environment by way of air, water, or sewer. Release into the environment is only permissible if the isotope is dispersed in a concentration less than the effluent and release concentrations specified in the regulations. The effluent and release concentrations for isotopes dispersed from an open system are specified in the following regulations:

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THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2009

Non-Agreement States	10 CFR Part 20-Appendix B (Tables 2 & 3)
California	10 CFR Part 20-Appendix B (Tables 2 & 3)
Louisiana	LAC 33:XV, Chapter 4-Appendix B (Tables II& III)
Texas	25 TAC 289.202(ggg)(2) (Tables II & III)
Utah	10 CFR Part 20-Appendix B (Tables 2 & 3)

For both closed and open system tracer studies, pre-job calculations are performed to ensure regulatory effluent release limits are not exceeded. Calculations are based on proprietary information provided by the customer. The method of radioisotope introduction into an open system will be the same as a closed system, via a pressure differential injection method, which may include nitrogen or ambient pressure backing, pneumatic pump, or hydraulic hand pump. For both closed and open systems, the initial concentration of the radioisotope will be determined on a job-by-job basis, subsequent to pre-job calculations based on intermediate process stream information provided by the customer. The use of radioisotopes in open system tracer studies are the same as for closed system tracer studies, except for the final disposition of the radioisotope introduced into the intermediate process system.

Please contact me at 281-291-7769 or at norman.lanier@tracerco.com if additional information or clarification is required

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Best regards,

Norman P. Lanier
Corporate Radiation Safety Officer