**Bladder and Lung Cancer Dose-Response Programs**

1. Files Included

Expo\_Bootstrap\_20160331 V2.r = exposure modeling (used to estimate exposure distribution from exposure (water concentration) ranges, generate exposure input files for dose-response bootstrap)

Dich\_20160127\_Bladder\_NR.r and Dich\_20160721\_Lung\_R1\_ Kan.r = bootstrap dose-response models for bladder, lung cancer

Dich\_functions.r = auxiliary file called by both bladder and lung cancer programs

bootstrap\_bladder\_case\_num\_adj.csv and bootstrap\_lung\_cases.csv input files containing 1000 bootstrap estimates of adjusted numbers of cases of bladder and lung cancer for each of the five exposure groups labeled V1, V2, V3, V4 and V5.

bootstrap\_mean\_expo\_march2016big.csv = exposure input file for bootstrap dose-response (same for both bladder and lung cancer) for each of the five exposure groups labeled V1, V2, V3, V4 and V5.

1. Notes when running files:

In the bladder cancer model, “beta” coefficients are not restricted (“NR”); in the lung cancer model the coefficients are restricted to be >1.0 (“R1”.) Modifications to the code to implement or relax constraints are obvious.

Input file names (numbers of cases, exposures) are different from those specified in the code; they need to be corrected before the models will run.