Corrigendum

Analytical modeling of diffusion-limited contamination and decontamination in a two-layer porous medium [Advances in Water Resources 21 (1998) 297–313]*

C. Liu *,1, W.P. Ball

Department of Geography and Environmental Science, Johns Hopkins University, Baltimore, MD 21218, USA

In the above paper, Eqs. (11a), (11b), (B11a), and (C10b) have minor errors. All calculations and subsequent work were based on correct equations and are not affected. The correct formulations should be read as follows:

\[ W_1(x, t) = \frac{1 + \theta}{2} \sqrt{\frac{R_2}{D_2 \pi t}} \sum_{n=0}^{+\infty} \theta^n \int_{L}^{+\infty} \varphi_2(\xi) \exp \left( -\frac{(\xi - L + \sqrt{\frac{D_2 R_1}{4D_2 t/R_2}} (2n + 1) L - x)^2}{4D_2 t/R_2} \right) d\xi \]
\[ \times \int_{L}^{+\infty} \varphi_2(\xi) \exp \left( -\frac{(\xi - L + \sqrt{\frac{D_2 R_1}{4D_2 t/R_2}} (2n + 1) L + x)^2}{4D_2 t/R_2} \right) d\xi, \]  
(11a)

\[ W_2(x, t) = \frac{\theta^2 - 1}{2} \sqrt{\frac{R_2}{D_2 \pi t}} \sum_{n=0}^{+\infty} \theta^n \int_{L}^{+\infty} \varphi_2(\xi) \exp \left( -\frac{(x + \xi - 2L)^2}{4D_2 t/R_2} \right) d\xi \]
\[ + \frac{\theta}{2} \sqrt{\frac{R_2}{D_2 \pi t}} \int_{L}^{+\infty} \varphi_2(\xi) \exp \left( -\frac{(x + \xi - 2L)^2}{4D_2 t/R_2} \right) d\xi + \frac{1}{2} \sqrt{\frac{R_2}{D_2 \pi t}} \int_{L}^{+\infty} \varphi_2(\xi) \exp \left( -\frac{(x - \xi)^2}{4D_2 t/R_2} \right) d\xi, \]
(11b)

\[ V_1(x, t) = \frac{1}{2} \sqrt{\frac{R_1}{D_1 \pi t}} \sum_{n=1}^{+\infty} \theta^n \int_{0}^{L} \varphi_1(\xi) \exp \left( -\frac{(2nL - x + \xi)^2}{4D_1 t/R_1} \right) - \exp \left( -\frac{(2nL - x - \xi)^2}{4D_1 t/R_1} \right) d\xi \]
\[ + \frac{1}{2} \sqrt{\frac{R_1}{D_1 \pi t}} \int_{0}^{L} \varphi_1(\xi) \exp \left( -\frac{(2nL + x - \xi)^2}{4D_1 t/R_1} \right) - \exp \left( -\frac{(2nL + x + \xi)^2}{4D_1 t/R_1} \right) d\xi \]
\[ + \frac{1}{2} \sqrt{\frac{R_1}{D_1 \pi t}} \int_{0}^{L} \varphi_1(\xi) \exp \left( -\frac{(x - \xi)^2}{4D_1 t/R_1} \right) - \exp \left( -\frac{(x + \xi)^2}{4D_1 t/R_1} \right) d\xi. \]  
(B11a)

Eq. (C10b) has the same formulation as Eq. (11b). We thank Dr. Gerald Eyrkolt at the University of Wisconsin-Madison, Department of Civil and Environmental Engineering, for bringing these errors to our attention.

* Corresponding author. Tel.: +1-509-376-0129; fax: +1-509-376-3650.

E-mail address: chongxuan.liu@pnl.gov (C. Liu).

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1 Present address: Environmental Dynamics and Simulation, EMSL, Pacific Northwest National Laboratory, P.O. Box 999, K8-96, Richland, WA 99352, USA.

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