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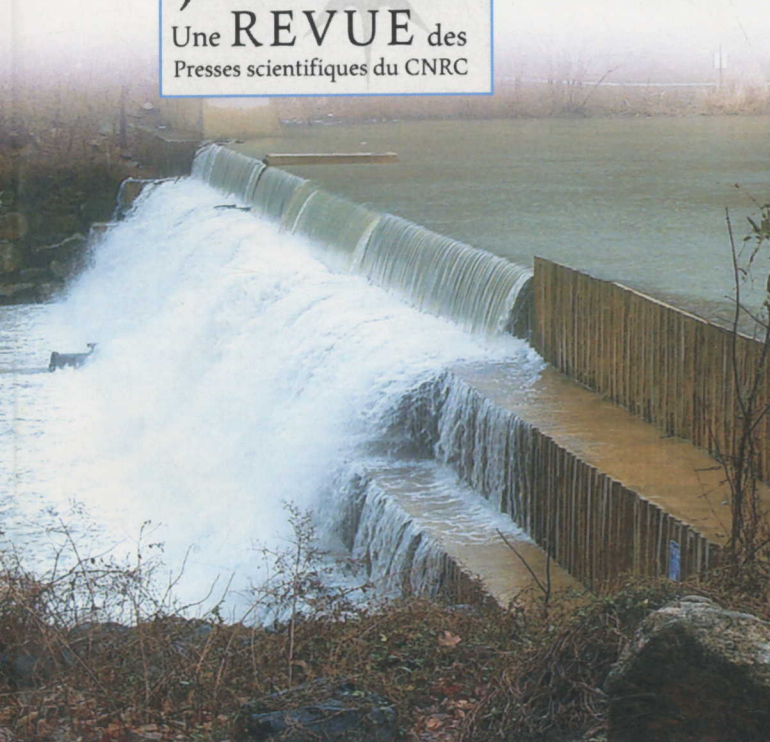
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**LA REVUE DU GÉNIE ET DE LA SCIENCE DE L'ENVIRONNEMENT**



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**Papers submitted to the Journal of Environmental Engineering and Science**

**Thuy Duong Pham, Reena Amatyia Shrestha, Jurate Virkutyte, and Mika Sillanpää** 1849-1858

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Spatial distribution of ammonia-oxidizing bacteria in the biofilm and suspended growth biomass of the full- and partial-bed biological aerated filters

NOTE TECHNIQUE

*Bacillus* spore uptake onto heavily corroded iron pipe in a drinking water distribution system simulator

**Conclusions**

Bulk phase disappearance suggests that *B. globigii* spores quickly attached to heavily corroded iron scale in the DSS under low velocity flow conditions. Pipe surface scrapings showed that spores can survive decalcification in some areas of the pipe. These results support previous bench-scale studies in biofilm upflow reactors that show that spores persisted for weeks on corroded iron while continuously exposed to free chlorine at 10-75 mg/L (Szabo et al. 2007). Results from this study and past work demonstrate that decontamination or removal methods focused on removing non-indigenous bacterial spores from drinking water infrastructure deserve further study.

**Disclaimer**

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**Front cover:** *top left*, stepped spillway in operation at Wilde Lake in Columbia, Maryland, on 23 March 2005 after a 1-year storm event (photo courtesy of Christopher Goodell; see Chanson in the August 2007 issue, pp. 946–951); *top right*, aerial photo (taken July 1999) of the Annacis Island Wastewater Treatment Plant showing the completed secondary treatment facilities designed to treat wastewater from about one million people, with an average dry weather flow of 480 million litres per day (photo courtesy of Colin Jewall, when under assignment to the Greater Vancouver Regional District); *bottom left*, oil tank damaged due to fire during the Kocaeli, Turkey, earthquake, 17 August 1999 (photo courtesy of Dr. Kenneth Elwood, The University of British Columbia); *bottom right*, diagonally divided concrete cubes placed as an erosion protection at diversion tunnel No. 1 of the Seymareh Dam in Iran (see Emami and Schleiss in the January 2006 issue, pp. 81–92).

**Page couverture :** *gauche supérieure*, passage de la crue dans l'évacuateur de crues en marches d'escalier au Wilde Lake, à Columbia (Maryland), le 23 mars 2005 après un événement pluvio-hydrologique de 1 an (photo courtoisie de Christopher Goodell; voir Chanson, numéro d'août 2007, p. 946–951); *droite supérieure*, photo aérienne (juillet 1999) de la station d'épuration des eaux usées de l'île Annacis qui montre les installations d'épuration secondaire conçues pour traiter les eaux usées d'environ un million de personnes, avec un débit moyen par temps sec de 480 millions de litres par jour (photo courtoisie de Colin Jewall, lors de son affectation au district régional du Grand Vancouver); *gauche inférieure*, réservoir d'huile endommagé par le feu durant le séisme de Kocaeli en Turquie, le 17 août 1999 (photo courtoisie de Kenneth Elwood, The University of British Columbia); *droite inférieure*, cubes de béton séparés en diagonale et utilisés comme mesure de protection contre l'érosion à la sortie de la galerie de dérivation n° 1 du barrage de Seymareh en Iran (voir Emami and Schleiss, numéro de juin 2006, p. 81–92).

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