Environmental Toxicology and Chemistry, Vol. 24, No. 2, pp. 457–463, 2005
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Table 2. Total number of male and female ducklings that survived the 33-d exposure[a]

lated to growth. Therefore, prefledging ducklings reared on oil-sands based wetlands, given their smaller size, may be less likely to survive compared to ducklings reared on wetlands not receiving oil-sands effluent.

Currently, part of the mine closeout procedure incorporates the use of wetlands based on CTE. Furthermore, because current mine closeout plans do not include removal of the huge sand dykes used to enclose the fine-tails slurry, dyke seepage will continue for many years (estimated as 100 years or longer past mine closeout) [1–3]. The findings of the present study suggest that these oil-sands based wetlands are poor-quality habitats, as indicated by the reduced growth in ducklings inhabiting the wetland. Reduced duckling growth has been linked to poorer survival and, thereby, to reduced recruitment into the population as a whole [7–10]. Hence, larger-scale studies at the population level are needed to determine what impact current mining activities could have on bird populations within the region. Once the impact is assessed, appropriate reclamation strategies can be put in place to prevent further adverse effects on the avian communities within this region of northern Alberta, Canada.

Acknowledgement—Funding for the present study was provided by the Environmental Science and Technology Alliance of Canada, with matching funds from a National Science of Engineering Research Council of Canada in the form of an Industrial Orientated Research Grant to L. Bendell-Young. We thank Kim St. Onge and P. Sing for help with running the metabolite assays. The support and advise of Don Sheeran also is gratefully acknowledged.

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