



ESPC 2016 - Montreal (Québec)



Chloe Reitlo

Can Coagulants Reduce Heavy Metals in Leachate?

Défi: Environnement

Catégorie: Junior

Région: Northern Manitoba **Ville:** Flin Flon, MB

École: École McIsaac School

Sommaire: Leachate was collected from the Flin Flon Waste Disposal Grounds and

treated using the coagulation, flocculation, and filtration process.

Coagulants compared were Cleartech CE5050 Polymer and Aluminum

Chloride Hydroxide CTI4900. Tests done for comparison were total heavy
metals, turbidity, COD, conductivity, phosphorus, nitrate, ammonia,

hardness, pH, alkalinity, and sulfate. Could this process reduce dangerous pollutants like heavy metals before they are released into water systems?

Biographie

My name is Chloe. I'm in grade 8 at École McIsaac School in Flin Flon, Manitoba. I like to play sports, hang out with my friends and walk my dog, Weston. My favorite sports are badminton, golf, curling, and volleyball. I play the piano and oboe. My favorite subjects are Math, Science, and Band. This year, I tested to see if heavy metals could be removed from leachate using coagulants. Heavy metals are testing high in water systems where I live. We need a method of safely removing them before these dangerous levels, affecting our water system and aquatic life, start affecting our health. I'm really looking forward to participating in CWSF again this year. It was so much fun last year!

Prix	Valeur
Prix d'excellence - Junior - Médaille de bronze	
Commanditaire: Sciences jeunesse Canada	
Bourse d'études de Western University	1 000,00 \$
Médaillé de bronze - Bourse d'admission de 1 000 \$	
Commanditaire: Université Western	
Total	1 000,00 \$



