

## **Cresol: A Possible Cause of Dementia**

**Paul TE Cusack\***

*Independent Researcher, BSc E, DULE, Saint John, NB, Canada*

**\*Corresponding Author:** Paul TE Cusack, Independent Researcher, BSc E, DULE, Saint John, NB, Canada.

**Received:** March 29, 2018; **Published:** June 21, 2018

### **Abstract**

In this paper, I build on the concept that Dementia is caused by chlorine, or in this case, cresol found in the exhaust from an oil fired generating station. It was found that there were several cases of Alzheimer's within the effective smoke stack. It is suggested that tests should be undertaken to determine if cresol indeed does lead to Alzheimer's and Dementia.

**Keywords:** *Alzheimer's; Dementia; Cresol; Chlorine; Health Effects*

### **Introduction**

In a previous paper by the same author, "Chlorine, Creosote and Dementia?" this author postulated that chlorine was a possible source or agent that may lead eventually to Dementia. It could be possible that there is a link between Dementia and Chlorine and Cresol. Anecdotal, there are four individuals who had Alzheimer's who are immediate neighbours (and in two cases siblings) who would have had long term (20 years plus) exposure to Electrical Power Plant Exhaust and Oil Refinery Exhaust. All four were neighbours who developed Alzheimer's while living immediately downwind of these Plants for more than 20 years. Cresol, or chlorine, is postulated as a potential cause of Alzheimer's Disease cresol is known to be in the exhaust of Oil Fired Power Plants as well as that of Oil Refineries. is known to be exhausted at Oil Refineries. We show here the calculation for the effective height of the exhaust chimneys for Courtney Bay Power generation station operated the Province. The Refinery is privately owned. No calculation is made for the refinery but is the vicinity of the power plant.

### **Calculations**

Refer to map at the end.

$$\begin{aligned} w_s &< 1.5u \\ &= 1.5 (5.14) \\ &= 7.71 \end{aligned}$$

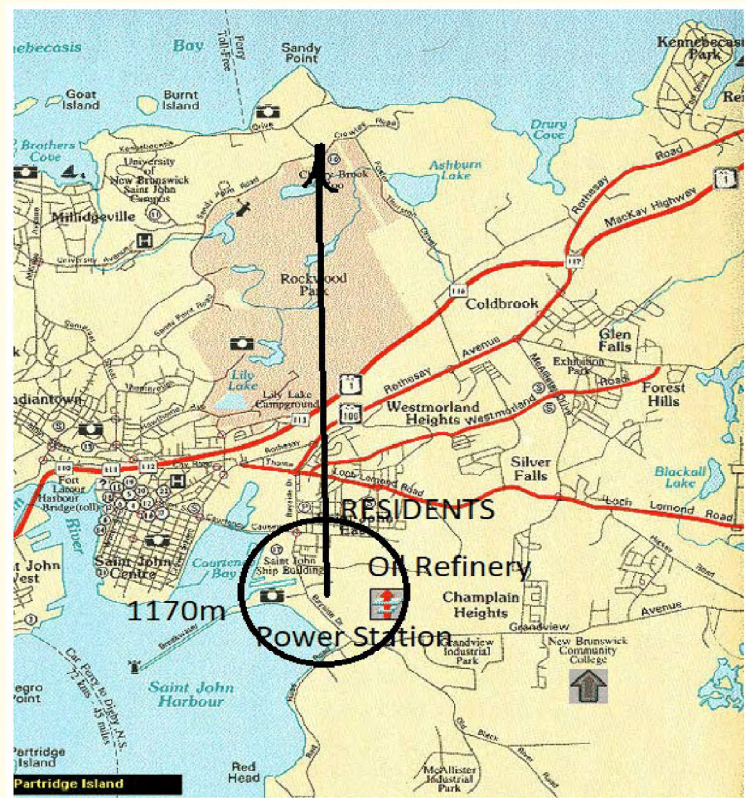
$$\begin{aligned} F &= grw_s(1-T_u/T_s) \\ &= 9.806(2)^2(7.71)(1-0) \\ &= 302 \end{aligned}$$

$$\begin{aligned} \chi f &= 119 F^{2/5} \\ &= 119(302)^{0.4} \\ &= 1168 \\ &= 1.17 \text{ km} \end{aligned}$$

Courtney Bay Generating Station is 1.170 km from Park Ave, East Saint John. This is exactly where the particles would drop out of the plume coming out of the smoke stacks at the Power Plant to the meter.

$$\begin{aligned} \Delta h_b &= 1.6F^1/3\chi f^{2/3} \\ &= 1.6 (302^{0.333})(1168^{0.666}) \\ &= 230.1\text{m} \end{aligned}$$

$$\begin{aligned} H &= h + \Delta h_b - h_d \\ &= 150 + 230 - 7.71 \\ &= 372.29\text{m} \end{aligned}$$



**Figure 1:** Map of Saint John B showing location of the Power Plant; the Oil Refinery, and the On shore winds. The houses of the Alz. Patients are in line with the onshore wind in East Saint John.

**Discussion**

I suggest that an investigation of the long-term effect of patients’ inhalation of Cresol on people who have developed Alzheimer’s disease. We should see a plot of neighbourhoods near refinery exhausting Cresol or other types of Chlorines. We should see higher than average rates of Alzheimer’s among refinery neighbourhoods. We should investigate the long term effects of chlorine and Cresol’s effect on animals in laboratory [1-4].

**Conclusion**

There is an abundance of Alzheimer’s today. It is postulated that cresols may be the culprit. More study is needed to determine if cresols, or other exhaust from power plants and oil refineries cause Dementia.

**Bibliography**

1. <https://www.webmd.com/drugs/2/drug-149078/creomulsion-adult-formula-oral/details>
2. <https://www.epa.gov/sites/production/files/2016-09/documents/cresol-cresylic-acid.pdf>
3. Paul TE Cusack. “Chlorine, Creosote, and Dementia”. *EC Psychology and Psychiatry* 7.1 (2018): 11-12.
4. <https://thayer.dartmouth.edu/~d30345d/courses/engs43/smokestacks.pdf>

**Volume 7 Issue 7 July 2018**

**©All rights reserved by Paul TE Cusack.**