Council of Graduate Students (COGS), University of Minnesota
Date: November 29, 2007
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Topic: Graduate students and residents oppose use of potentially harmful pesticides at Commonwealth Terrace Cooperative

Whereas Facilities Management (U of M Landcare) has a landcare contract with Commonwealth Terrace Cooperative (CTC), which is on University-owned land;

Whereas CTC houses students and families in 464 housing units, with a large number of residents who have small children, are mothers nursing children, are pregnant, or may become pregnant;

Whereas 2,4-dichlorophenoxyacetic acid (2,4-D) has been applied by Landcare to CTC (Momentum herbicide, applied May 2007);

Whereas 2,4-D is banned in 4 countries and application of this and other pesticides for cosmetic purposes is prohibited in numerous municipalities[1];

Whereas 2,4-D has been linked to neurological disorders, reproductive problems, kidney/liver damage, non-Hodgkin's lymphoma and other cancers, and endocrine system disruption[2,3,4,5];

Whereas Children and infants can be exposed to 2,4-D through breastmilk and from contact with household members who have been exposed[6,7];

Whereas The breakdown product of 2,4-D, 2,4-dichlorophenol (2,4-DCP), is a volatile compound listed by the Pesticide Action Network (PAN) as a "Possible Carcinogen" and a "Suspected Endocrine Disruptor"[5];

Whereas To address CTC residents' concerns about the safety of 2,4-D, U of M Landcare applied Eliminate herbicide in the Fall of 2007;

Whereas Eliminate herbicide contains Dicamba, listed by the PAN as a "Developmental or Reproductive Toxin"[5];

Whereas To address CTC residents' concerns about the safety of Eliminate herbicide, U of M Landcare is considering application of Speed Zone herbicide in the future;

Whereas In addition to Dicamba, Speed Zone herbicide contains 2,4-D 2-ethylhexyl ester, which is listed by the PAN as a "Developmental or Reproductive Toxin" and a "Possible Carcinogen", and Mecoprop-P, which is listed by the PAN as a "Possible Carcinogen"[5];

Whereas Children generally are more susceptible than adults to pesticides because they ingest more chemicals relative to their body weight than adults, they have developing

neurological and organ systems that are more vulnerable to toxic chemicals, and they have a "longer lifetime over which disease initiated early in life can develop"[8,9];

Whereas Children are especially at risk for increased exposure to herbicides since they play on lawns for extended periods of time and put their hands and other objects into their mouths[8,10];

Whereas Residents who speak no or limited English and children have been seen walking and playing on treated areas at CTC within hours of herbicide application, even though posted signs indicate a 2-day re-entry interval;

Whereas full occupancy and a waiting list to move into CTC indicate that the presence of weeds is not a hindrance to occupancy;

Whereas the Pesticide Action Network compiles data from multiple publicly available independent or governmental sources to classify PAN "Bad Actor Chemicals" as those that are "one or more of the following: highly acutely toxic, cholinesterase inhibitor, known/probable carcinogen, known groundwater pollutant or known reproductive or developmental toxicant"[5];

Be it resolved that Facilities Management should eliminate and the University should prohibit the use of products containing 2,4-D, suspected endocrine disruptors (as defined by the PAN), and PAN "Bad Actor Chemicals" on the lawns at Commonwealth Terrace Cooperative.

[1]2,4-D is banned in Denmark, Norway, Sweden, and Kuwait, and severely restricted in Belize (source:http://www.pesticideinfo.org/Detail_ChemReg.jsp?Rec_Id=PC33440). Ornamental pesticide use is restricted in over 100 Canadian municipalities [sources: http://www.niagarathisweek.com/opinions/article/125533;
Green, K. 2005. Ornamental Pesticide Bans Spreading. Fraser Forum (Fraser Institute, BC, Canada), p. 2-5].

[2]Extension Toxicology Network (ETN). 1996. Pesticide Information Profiles for 2,4-D. http://extoxnet.orst.edu/pips/24-D.htm.

[3]Beyond Pesticides. 2004. 2,4-D ChemWatch factsheet. http://www.beyondpesticides.org/pesticides/factsheets/24D_Jul04.pdf.

[4]Cox, C. 1999. Herbicide Factsheet: 2,4-D:Toxicology, Part 2. *Journal of Pesticide Reform* 19(2): 14–19.

[5]Pesticide Action Network (PAN). http://www.pesticideinfo.org/Index.html.

[6]Ferri, A., Duffard, R., and de Duffard, A.M. 2007. Selective Oxidative Stress in Brain Areas of Neonate Rats Exposed to 2,4-Dichlorophenoxyacetic Acid through Mother's Milk. *Drug Chem Toxicology*, 30(1):17–30.

[7] Alexander, B.H., Mandel, J.S., Baker, B.A., Burns, C.J., Bartels, M.J., Acquavella, J.F., and Justin, C. 2007. Biomonitoring of 2,4-Dichlorophenoxyacetic Acid Exposure and Dose in Farm Families. *Environmental Health Perspectives*, 115(3):370–376.

[8]US EPA, Office of the Administrator. 1996. *Environmental Health Threats to Children*, EPA 175-F-96-001.

[9]National Environmental Justice Advisory Council. 2004. Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risks/Impacts. Report to the US EPA. p. I-2

[10]National Research Council, National Academy of Sciences. 1993. *Pesticides in the Diets of Infants and Children.* Washington, DC: National Academy Press p. 184–185.