Environmental Legacies and Social Challenges in Toronto
Today’s Purpose

• To illustrate the role of environmental justice issues in Toronto
  – Examples of specific neighbourhoods

• I argue that social factors largely drive environmental injustice in Toronto
Urban Areas

- Urban areas consume energy, nutrients, materials, generate wastes
- Tend to create a legacy of accumulated wastes, toxins
- People compete for space, resources, amenities in urban space
- People try to avoid disamenities (if they can)
Urban Areas

• Urban places become socially and economically ordered, uneven, unequal
  – Those with high social status try to occupy better-favoured places
  – Those with lower social status may be faced with unpleasant land uses, toxic legacies.

• Environmental injustice a by-product of the nature of cities
Edwin Ave area

- In Toronto’s Junction Triangle
- North of Dupont, east of CNR, S of CPR
Investigating a Toxic Legacy

• We need historical documents
  – Maps, plans
  – City and industrial directories
  – Municipal documents
  – Historic newspapers

• Soil sampling would be useful
  – Costly, requires land-owners’ permission
  – Requires disclosure
St Rita’s

- Attended by heavyweight boxer George Chuvalo in the 1940s
- Works with a population in deep social need:
  - Since 2004 the Grade 3s EQAO test results have been well below board and provincial averages in reading, writing and math
- St Rita: patroness of impossible causes
Soil Contamination

• Comes in various forms:
  – Polluted surface and ground waters
  – Dumped solid wastes
  – Deposited air pollution

• A legacy of the district’s urban and industrial history
Two Major Kinds of Air Pollution

• Affect the area:
  – The legacy of coal smoke
  – The legacy of industrial activity
Coal Smoke

- The district had thick bitumenous coal smoke 1890-1960
- Leaves quite a toxic legacy:
  - PAHs (polycyclic aromatic hydrocarbons)
  - Several Kg per square metre
Automotive Exhaust

- Lead added to motor fuel c. 1930-1980 as an anti-knocking agent
- Leaves behind approx. 500 ppm lead in inner city soil
Industrial Activity

• Several contaminating industries nearby
  – Paints & varnishes north of the CPR
  – Metals processing, finishing, coating

• Major rail lines nearby
  – CN and CPR lines carry lots of freight, hazardous materials
  – Noise and safety issues for local people
190 Edwin Ave c 1910

- Rail sidings and factories served
  - Dewar & Son mining engineers & chemists
  - Toronto Wire Nail & Tack Co
- Zinc dust
190 Edwin Ave 1920s

- Premises continued to make metal fastenings
  - P L Robertson Manufacturing Co Ltd
  - Toronto Wire & Nail Co
- Zinc & non-ferrous metal coatings
190 Edwin Ave 1930s

- Factory acquired by the Wagman family
  - Zelig Wagman & Sons (scrap metals and ingots)
  - Toronto Cadmium Tinning & Plating Co Ltd
- Zinc, cadmium, copper, bismuth, antimony, tin, lead
Cadmium

• Wonder metal of the 1930s
• Mined in Canada, applied as an electroplated coating to reduce rust
  – Radio parts, tools, consumer goods, auto parts
Cadmium

- Inhaling cadmium fumes can be fatal to those working in plating, cutting steel
  - First two Ontario fatalities in March 1937
- Cadmium relatively harmless to plants but causes major organ damage to humans
  - Kidneys, reproductive system. Nervous system, immune system
  - Suspected role in DNA damage, cancer
190 Edwin Ave 1930s

- Cadmium plating & tinning, smelting, refining
  - Vats of acid, degreasers to clean metals
  - Tinning & annealing furnaces
  - Hot-dip galvanizing plant
  - Crucibles, reverbratory furnaces
  - Sweating furnaces
  - Major truck traffic, scrap piles, noise
190 Edwin 1930s-1940s

- Small site but 100+ workers
- Toronto Cadmium fielded several successful sports teams
  - Softball, fastball, 5-pin bowling
  - Industrial league
- Factory very busy in World War Two and afterwards
  - Heavy demand for plated motor parts, metals
190 Edwin 1930s-1940s

- Wagman’s/Toronto Cadmium allowed to store scrap metals on Edwin Ave road allowance and even in the park during WW2
Pollution Control

• Residents complain of smoke from 1946
• 1946 City persuaded Wagman to catch the dust from their brass furnace in a bag-house
• 1949 company adds a 110 foot smokestack to disperse pollutants
  – Over the neighbourhood
• Several tons of dust and smoke emitted each day
Accidents

• 1942 - worker nearly electrocuted
• 1942 – pan of oil explodes
• 1946 – worker asphyxiated by chlorine fumes from degreasing chemicals
Pollution Control

• Late 1940s Wagman’s regularly emitting choking blue smoke from its galvanizing plant
• Smoke constantly filling St Ritas
• 24-hour noise of truck movements, scrap dumping, scrap being dropped into furnaces
• Health, smoke, police officials unable to end the problems
Easter Sunday 1949

- Two-alarm fire in Wagman’s furnaces spreads to Toronto Cadmium
- 100 firefighters
- Fire nearly jumps the lane to Osler Street
- St Rita’s schoolyard flooded with thousands of gallons of water
- 190 Edwin closed for months
190 Edwin Ave 1950s

- Residents intensify complaints about the factory
- Noisy, 24-hour operation, even Sundays
- Smoke & dust invades St Rita’s school
City Response

- City health inspectors make 134 visits 1949-55
  - Find smoke violations on only 13 occasions
- Although the company handles poisonous metals
  - Health inspectors find no health problems
- City’s smoke bylaws not designed to control toxic dusts and smoke
City Response

• Province exempts plants like Wagman’s from civic smoke regulation.
City Response

- City persuades Wagman’s to send more furnace emissions through the bag-house
- Wagman’s add a 75 foot stack on the aluminum furnace
- Unpleasant fumes and smells continue
- Residents continue to complain
Spring 1955

- St Rita’s school being regularly filled with fumes, blue hazes
- Fumes cause frequent vomiting among the children
  - Vomiting a recognized symptom of acute Cadmium fume exposure
- City reluctantly agrees to bring 190 Edwin under tougher smoke control
September 1956

- Another two-alarm blaze at 190 Edwin Ave
- Cadmium plant gutted, cluttered premises hamper firefighting
- Crews from 3 fire stations, 13 trucks attend
1956-1970

- Metal operations gradually reduced at 190 Edwin Ave
  - Wagman’s relocates to Agincourt
  - Toronto Cadmium relocates to Etobicoke
- Circa 1970-71 site is cleared and absorbed into a re-built St Rita’s
What happened to the air pollutants?

- 70 years of dense coal smoke
- 70 years of non-ferrous plating and scrap recovery
- 190 Edwin tidied up 1970-72
- Legal concept of contaminated soil created only in 1985
- The cadmium and PAHs are probably still there
The Edwin Ave District

- Blue-collar traditions
- Portuguese and other immigrants
- A fair amount of deep social need
- Gentrification in process
- Contaminated soil
  - Threatens human health
  - Threatens property values
Edwin Ave District

- Faces other environmental issues besides soil contamination
- Heavy road traffic
- Heavy rail traffic
Edwin Ave District

- A low-status Toronto neighbourhood with a toxic legacy
  - One of several
- A victim of historic civic neglect
  - Powerless community gets ignored?
Other examples:

- Toronto has no shortage of environmental injustices
  - Postcode M6N
  - Porter Avenue
  - Weston Rd & Black Creek area
Weston & Gunns 1924
Weston Rd & Black Creek

- Early C20th: flood-liable creek and quarries
- Some waste disposal, landfilling, cheap housing
- Hurricane Hazel 1954: extensive flooding
- Black Creek placed in concrete channel
- Metro and York Township landfill the quarries
Weston Rd & Black Creek

- York Township plans a civic stadium, school, apartments on Porter Ave landfill area
- Needs to expropriate many Porter Ave homes in 1965
- People object, want more compensation
  – Frank Vukovic
Frank Vukovic

- Former Yugoslav air force mechanic
- Objects to eviction, low compensation
- Is building a flying saucer in his garage
The Vukovic Case

- York Township offers $8,000 for Vukovic’s house
- He wants $16,000
- Appeals to OMB
  - OMB confirms the $8,000
  - OMB refuse to consider the flying saucer
- Vukovic vows to appeal to the Supreme Court of Canada
The Vukovic Case

- Vukovic’s eviction on 14 Feb 1966 makes the front page of the Toronto Star
- 4 bailiffs, 12 policemen and a dog catcher
The Vukovic Case

• Immediately after being evicted, Vukovic snuck back in and started up the saucer.

• Press, opposition MPPs, United Church take up his cause
Avon Ave
Weston Rd & Black Creek

- Feb 1965: Landfill-methane explosion on Avon Ave
  - garage explodes, man becomes human torch
- 1969: same garage explodes again
  - different man becomes human torch
- Litigation: Gertson vs Borough of York 1973
  - Gertson won
• Avon Ave methane vent
Weston Rd & Black Creek

- One of the poorest urban areas in Canada
- The second poorest parliamentary riding
- Still has a legacy of buried wastes, methane leakage
- Still suffers civic neglect
- You wouldn’t get away with this in Rosedale, Forest Hill
  – Environmental injustice?
Now for some contrast

• Edwin Ave and other old industrial neighbourhoods
  – Low social status came with a poor-quality environment

• High social-status neighbourhoods
  – Forest Hill, Bridle Path perhaps
  – Have privileged environments
Toronto: Bridle Path

• Very affluent low-density area with very high levels of car ownership
• Yet it still has an all-day bus route
• Why?
Forest Hill

- Similar situation in Forest Hill
Forest Hill

• An exclusive Toronto suburb
• Was originally (1910s) mixed in incomes and uses
  – Some upscale residential, some cheaper
  – Some farms, industrial businesses
Forest Hill: early 1920s

- Suburb is beyond city limits
- Its wealthy residents want
  - High quality services (paving, lighting, water, hydro etc.,)
  - Protection from encroaching industry, poor people
- Solution:
  - Incorporate as a village
Incorporation

• Incorporates as Spadina Heights police village in 1923
  – Within York Township
  – Begins to fund services, but can’t make the village exclusive upscale residential

• Incorporates as a village 1925
  – Gains control over servicing, planning
  – Immediately restricts land uses to upscale residential
Forest Hill 1925-1939

• Wealthy residents exclude industrial land uses
  – Removing existing ones, preventing new ones
  – Controls machinery, excludes billboards
  – Requires expensive architect-designed single-family homes
  – Effectively excludes Jews (except the wealthy)
Residents of Forest Hill village! You moved out here to escape the noise and din, the dust and dirt of the city, to enjoy pure air and sunshine, and healthful and restful conditions of living generally. And now comes a proposal to establish an industrial zone to the north "with blowing of whistles and shunting of cars, with its belching forth of smoke and dirt" Forest Hill would become factory hill or smokestack hill (Toronto Star 10 Nov 1925 p. 19).
Resident H F Ritchie: “When the village was formed it was said it would be a Westmount. Let us remember our promises. There has been too much real estate development in the village. The north can also be a residential area, but we must grow up with it.” “We came here and spent a lot of money in a home and now we don’t want a lot of smoke stacks to look at.” (Toronto Star 17 Feb 1928 p. 26).
• “The industrial area is a menace. It is a blot on an otherwise beautiful landscape, and the mere handful of asphalt plants, cement mixers and the like, now located there, is simply a foretaste of what might be expected if allowed”: James B Allen president of the Mashquoteh Residents Association ([Toronto] Globe 29 Oct 1930 p. 13).
Forest Hill

- Residents successful in excluding industry, poorer people, Jews (for a while)
  - But still consumed industrial products
  - And still required low-income labour
- Expected other areas to house, accommodate workers, industry
  - Exported the disamenities of industry
- Declined to share their tax base with the city
Forest Hill and the Junction

• The industrial contamination on Edwin Avenue would not have been tolerated in Forest Hill

• City and Village politicians felt that poor neighbourhoods were suited to messy industry

• Environmental and social injustice?
Toronto

• We can find correlations between environmental disamenities and the social landscape
• Low social status urban communities historically faced contamination
• Richer folks fled the contamination and excluded it