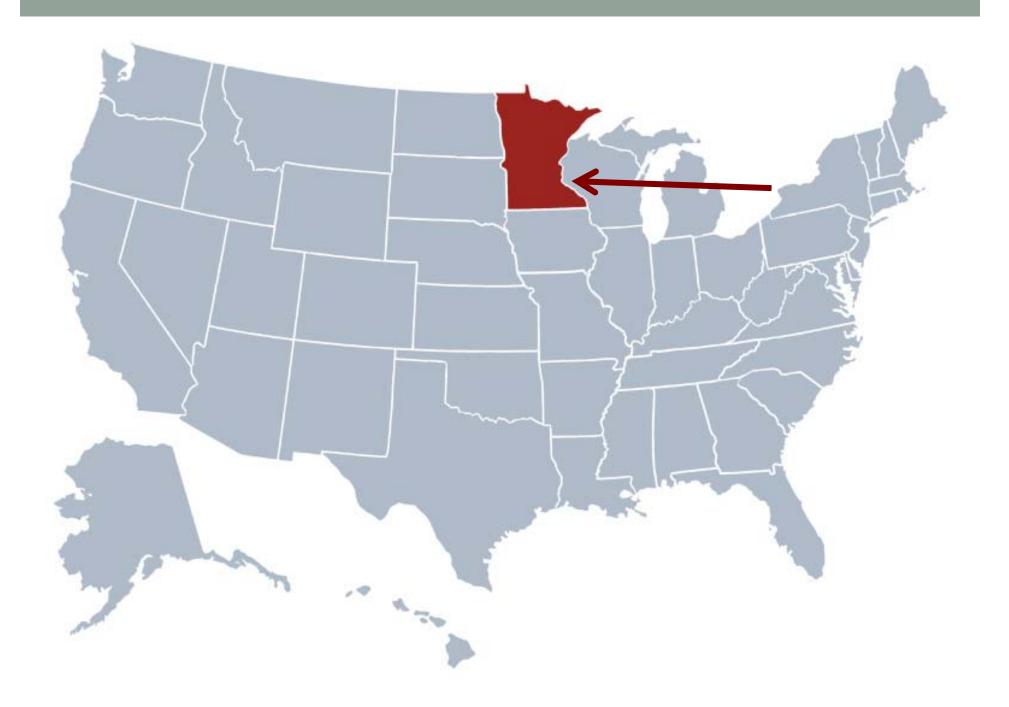
Community nuisance odour case study

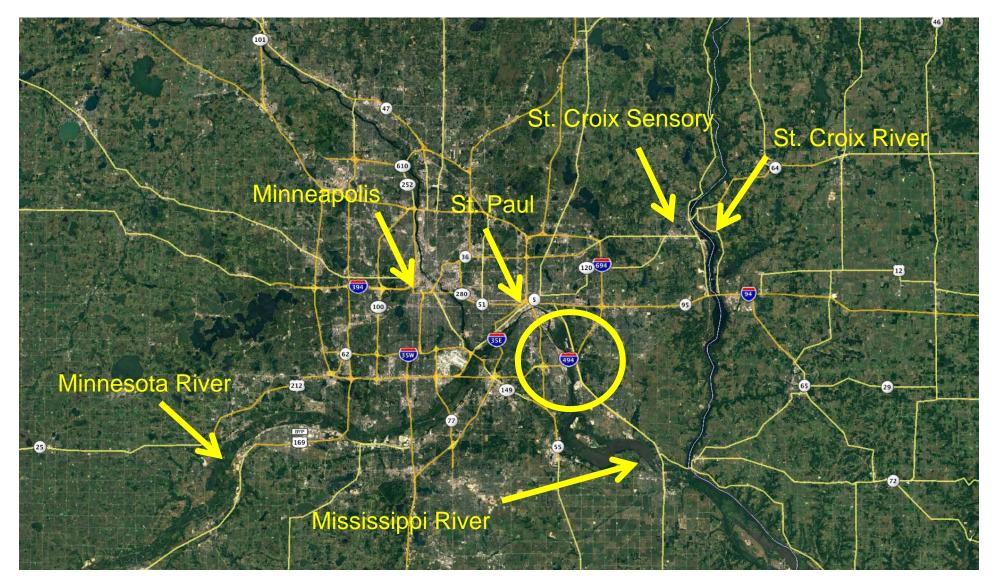
Michael A. McGinley, P.E.

www.fivesenses.com

@ J @ 7 0

St. Croix Sensory, Inc.





The Twin Cities



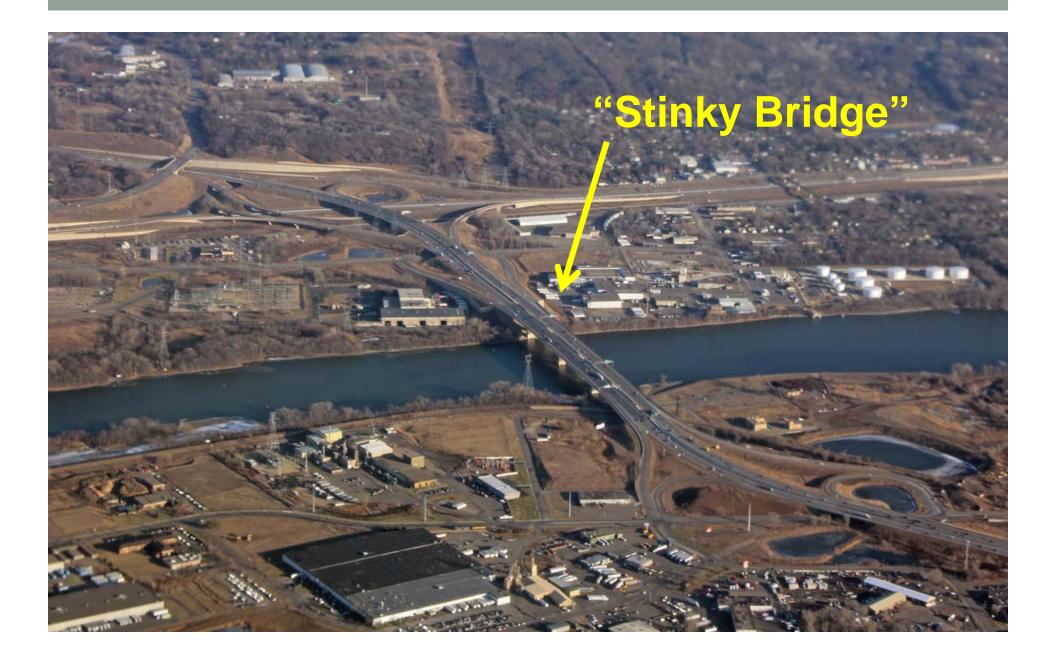
★ Primary Sources

- ★Rendering Plant
- ★ Hide
- ★Tanning
- ★ Food Mfg from Animal Proc.

★Secondary Sources

- ★Waste / Recycle Center
- ★Pet Crematorium
- ★Waste Oil Processing
- ★Lift Station
- ★Compost Site





Regulation of Facilities



• EPA - Does not regulate odour



• Facilities meeting State permitting

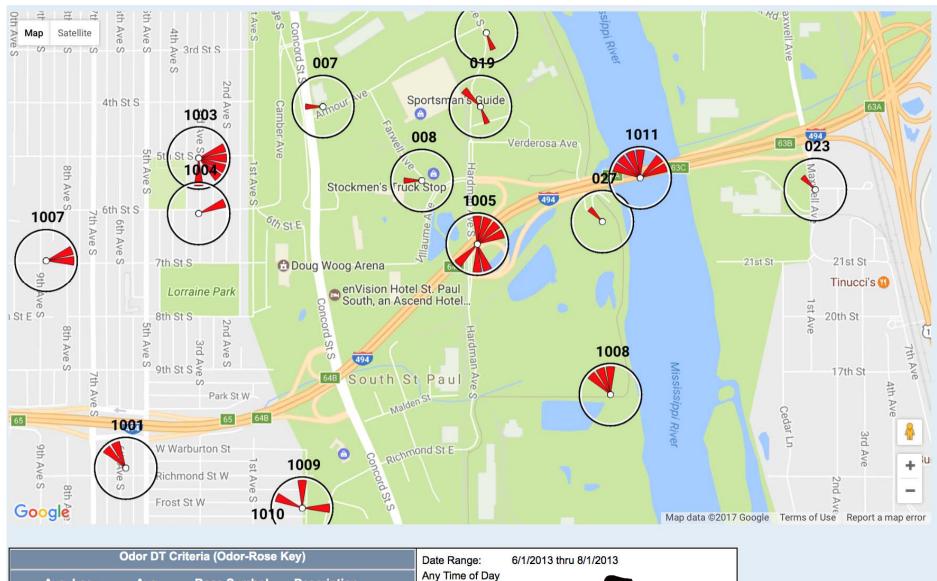


City needed to address odour

2012 – The "Odor Consortium"

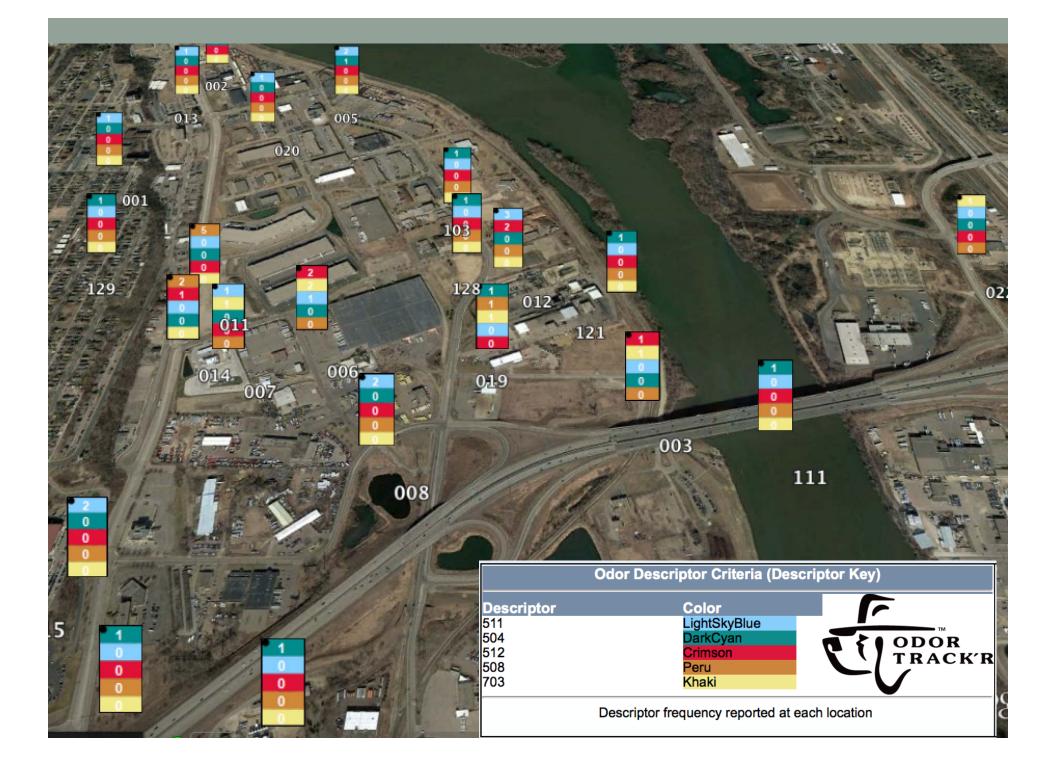
- > Voluntary participation
- Main odor generators
- > Multiple secondary sources
- Study odors in community Nasal Ranger
- Consider control options





ODOR TRACK'R

					Bate Hange. Of hEero an
Avg. Log		Avg.	Rose Symbol	Description	Any Time of Day Assessment Type: Inspection (DT)
0.000	=	ND	0	Non Detect	
0.001-0.845	<	7		Weak Odor	EXCLUDE Non-Detect
0.845-1.477	>=	7		Moderate Odor	
1.478-	>=	30		Stronger Odor	



2013 – "Welcome to the 'Smell Zone"

- > Odors continued
- > Development efforts increasing
- Park & Ride concerns
- County Commissioner quoted criticizing

2014 – City Ordinance

- Complaint management system
- > >6 complaints in 6 months = "significant odor generator"
- > Required to develop Odor Management Plan
- > BMPs and BCTs
- > Timeline for improvement

2014 – City Ordinance

- Complaint received
- > Inspectors responded to verify complaints
- > Ordinance did not specify verification methods
- > However, the City did have a defined process

2015 – Violations

- > Rendering facility issued violations
- "offensive and obnoxious smells"
- > "malodorous malefactors"
- > 2016 Odor Studies

2017 – Court Case

- Rendering facility sued the city
- > no "objective odor verification standards"
- dependent on "vagaries of the human response to smells"
- Ruling: "unconstitutionally vague" violates right to due process

2017 – What next...

- > City continues monitoring
- City preparing new ordinance
- inclusion of verification methods EPA Scentometer Protocol (circa 1973, Copley Studies)
- inclusion of specific 7-D/T rule with Nasal Ranger
- > Facilities preparing expansion including controls

St. Croix Sensory fivesenses.com



mike@fivesenses.com @mcginleymike