



# **Environmental Risk Communication and the Public**

West Michigan Air and Waste Management Association  
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# Today's Topics

- What are some of the most important goals of risk communication?
- How can we do it well?
- How can we best handle controversial issues?
- What are some common mistakes?
- How do non-agency groups communicate about air quality?

# **Why do we need to be good at risk communication?**

- Share relevant and unbiased info
- Improve feedback to the agency to better accomplish our mission
- Develop better relationships
- Build public trust
- Improve the public perception of the agency
- Improve public and political support of the agency

# **What are some of the most important aspects of good risk communication?**

- Show people you are human.
- Listen. Show that you care.
- Always show respect.
- Tell the truth.
- Have a communications plan.
- Try to understand what is at the root of what the public wants.
- Don't take public outrage personally.

# **Did the public meeting seem like a failure?**

Environmental health risks can result in a lot of public outrage and lashing out at staff.

**But:**

Did we show that we care?

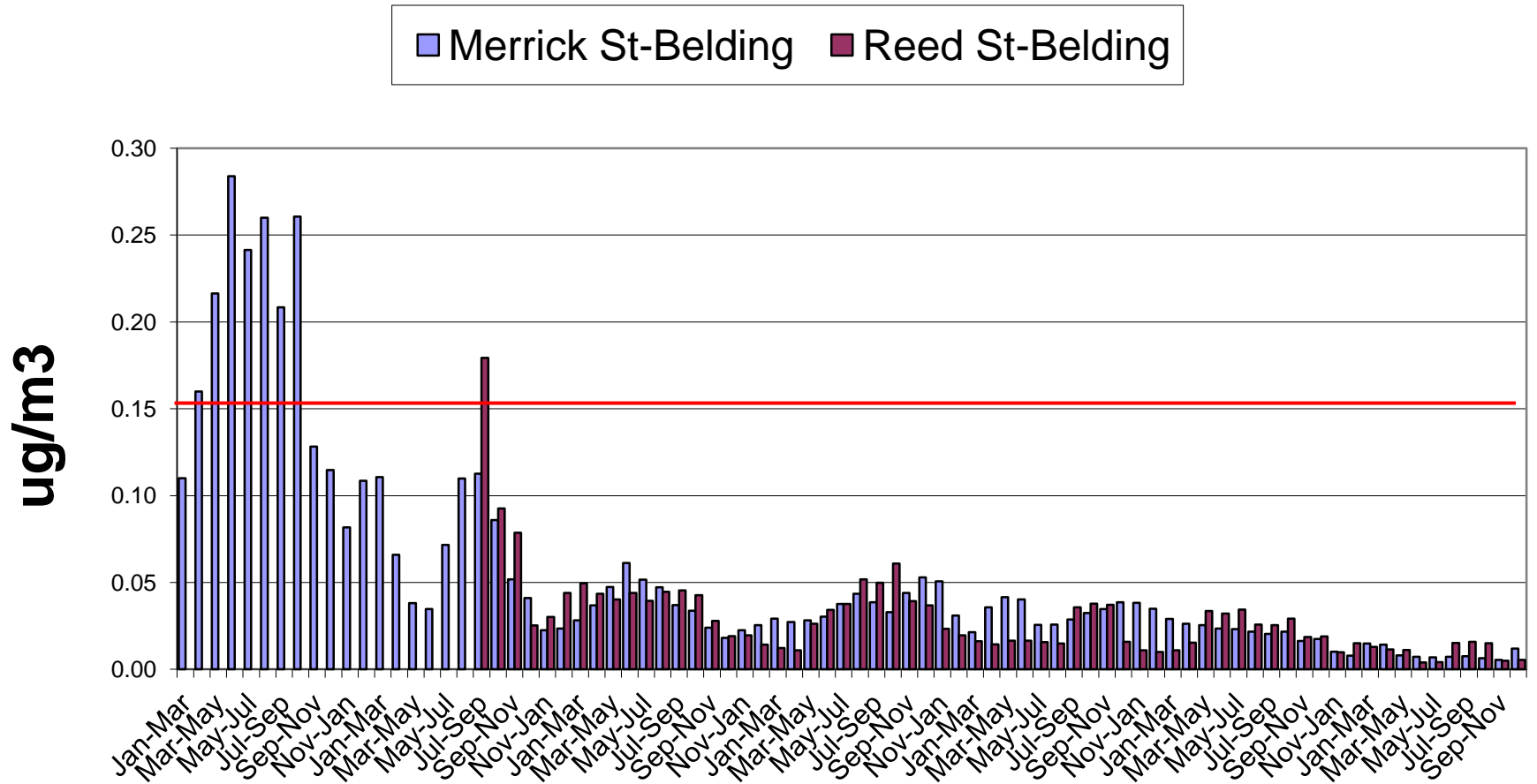
Did we share relevant info without talking too much or getting too technical?

Were we respectful, transparent, and honest?

Did we share our plan to address the concerns?

If “yes”, then it was not a “failure”.

### 3 Month Average for Lead 2010-2016



## **Belding Lead Issue: Communications Plan**

- Shared info and coordinated with the company, DEQ Remediation Division, and health agencies
- Held a series of public meetings
- Had a great facilitator and panel of experts
- Established a website with all relevant info



## **Belding Lead Issue: What is at the root of what the public wanted?**

- Info on what is going on in their community.
- Do agency people care?
- Can we get answers?
- Are agencies and the company being responsive?
- How can we get more information, and future updates?



# **Greenville Daily News Editorial, 10/19/2011**

“...the DEQ has been very forthcoming with information about the lead contamination, its effects so far and the ongoing cleanup efforts.”

“Everyone who has sought information has received an answer to their question. That’s very important with such a potentially serious situation.”

Is it safe?



# Lead in the environment: Is It Safe?

- Lead is naturally occurring; always present
- But: Lead causes permanent brain damage, and has “no safe dose”
- How to reconcile the above?
- Ex: Yes, it is safe. We know this because it has been tested and it meets the health protective standards.
- Confusing messaging: “No child should ever be exposed to lead.” *Nov. 2017 MI Lead Poisoning Elimination Board*

# What does “safe” mean?

- “Safe” is a relative term.
- “Safe” should not be a term applied as an absolute (a guarantee of zero risk).
- “Safe” means it meets health protective standards.
- “Safe” is plain-language; a vital word for risk communication.
- If it’s not safe? be prepared with a plan to address it.

# What are some common mistakes?

- Not showing that we care; not enough compassion.
- Talking too much, not listening enough. Presenting too-technical information.
- Pushing back. Giving an impression of arrogance.
- Not developing and implementing a communications plan.

# **We have a lot to say...but are we talking too much?**

Example: Air pollutant emissions and air pollutant levels are greatly reduced since the 1970s In Detroit.

- Detroit: lead 99% ↓ SO<sub>2</sub> 90% ↓

Does this give relief to the concerned audience of Detroiters?

Does this mean the air is safe?

What are we doing about Detroit's air quality issues?



# **Detroit Riverfront Petcoke Storage Proposal**

- In 2014 DEQ received and was reviewing an air permit application for petcoke storage (uncovered)
- We elected to hold an early public information meeting to provide several PowerPoint presentations on our permit review process
- My part: discuss our health risk assessment process



# Our Agenda

- Five 20-minute presentations on: our regulations, our permit review process, risk assessment; air monitoring, and water concerns.
- Afterward, answer questions at various tables around the room.
- The audience: 300 very concerned local residents.

# **I wish my message had been....**

- What this picture shows is NOT safe, NOT acceptable. We will prevent this from happening.



# Flint drinking water crisis

- **“Flint’s ongoing water woes are now associated with an immediate and irreversible danger — possible lead poisoning of some of the city’s children, according to a review of blood test results by a Hurley Children’s Hospital pediatrician.”**

- *Detroit Free Press, 9/24/15*

# Flint drinking water crisis

Did we:

- Show that we care?
- Listen and show respect?
- Share relevant health risk info about lead?
- Account for the emotional aspects of the issue, not just the technical aspects?
- Accept criticism well?

# Flint drinking water crisis

- **“...when confronted with evidence of its failures, MDEQ responded publicly through formal communications with a degree of intransigence and belligerence that has no place in government.”**
- **“Callous and dismissive responses to citizen’s expressed concerns.”**

*- March 2016 Flint Water Advisory Task Force Final Report; p. 29; p.2.*

# **Macomb Co. Incident near Selfridge AFB**

- 2016 appearance of local atmospheric deposition material in one neighborhood
- Many citizen complaints to DEQ; concern that it came from aircraft
- A scientist (Dr. Herndon) was consulted by a resident
- DEQ took samples for microscopic analysis, and consulted with DNR wildlife biologists



# Macomb Co. Incident near Selfridge Air Force Base



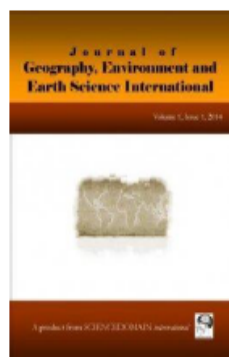
**Fig. 3. Low magnification images of air-drop material**



# **Macomb Co. Incident near Selfridge Air Force Base**

- ABC News, Fire Chief: "...ash type of substance...oily consistency"
- Dr. Herndon's conclusion: aircraft were the source; evidence of a worldwide conspiracy of covert geoengineering to alter the planet's climate and hasten global warming
- DEQ/DNR conclusion: bird poo
- We respectively disagree.

# DEQ did not publish its findings but the scientist did:



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## An Indication of Intentional Efforts to Cause Global Warming and Glacier Melting

J. Marvin Herndon<sup>1\*</sup>

# Contrails vs. Chemtrails?

- Contrails = condensation trails
- Chemtrails = theory of deliberate attempts to release chemical or biological agents
- EPA website, debunking “chemtrails”
- Another website:



# **How is DEQ affected by how other groups communicate about air quality?**

- They use different approaches than DEQ
- What are they advocating for?
- Their ends may justify their means
- Rhetoric about air pollutants can be powerful
- DEQ must be careful if / how we react / respond



# **“Detroit Makes You Sick.**

**People All Over The Motor City Are Being  
Poisoned While Officials Look Away”**

*Newsweek cover story headline, April 8, 2016*

**Newsweek**

**TECH & SCIENCE**

## **CHOKING TO DEATH IN DETROIT: FLINT ISN'T MICHIGAN'S ONLY DISASTER**

BY **ZOË SCHLANGER** ON 3/30/16 AT 6:11 AM



# **“Journalistic license”; rhetorical flourishes and powerful rhetoric**

## **Some Observations about the Newsweek article:**

- Has testimonials of desperation, agony
- Has selective reporting of facts
- Implies: outdoor air → all asthma in Detroit
- Rhetoric is powerful, e.g. “acrid stench”; imply a sinister or uncaring intent
- Selective use of quotes from DEQ
- Author relates personal feelings: “I could feel the air in the back of my throat like a fine spray of gravel.”



# Risk Communication: Words Matter

<b>“DEQ-AQD talk”</b>	<b>But others may say....</b>
Air emission	Belch and spew poisons
Air pollutant mixture	Toxic cocktail
Air concentrations show improving trends over time	Tonnage of poisons spewed into the air
Protective air quality standards	Health hazards include death, malformations...
Dispersion reduces public exposures	Poison spreads far, to the most vulnerable
Permitting decisions constrained by the law	AQD enables polluters



# **“Poor air quality is killing Detroiters, but now there’s a plan to fix it”**

Michigan Radio, NPR Apr 18, 2017

- A UM study with community stakeholders, incl. DEQ-Air Quality
  - “Poor air quality in Detroit is putting people into the hospital, and even killing some. It's making them sick and unable to go to work or school.”
  - “That's not opinion. That's a fact with scientific data to back it up.”



## Our Health At Risk

Why Are Millions of Americans  
Still Breathing Unhealthy Air?



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# Environment Michigan

## April 6, 2017 report on 2015 air quality

- Used the EPA's Air Quality Index system: good / moderate / unhealthy for sensitive groups / unhealthy / very unhealthy
- They reported for Grand Rapids: 38 unhealthy days (ozone ; smog) and 32 unhealthy days (PM ; soot) (they included moderate days)
- Actually unhealthy: 2 days (ozone); 1 day (soot)



## April 5, 2016 press clips

### DEQ Backs Off Air Toxics Changes

“Michigan officials are backing off plans to deregulate about 500 toxic air chemicals.”

“The Michigan Environmental Council, which had opposed the rules as they were sent to public comment, hailed the changes.”

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"We hope this is a sign that the department is putting its focus back where it belongs, on protecting Michigan's environment and the health of people who live here."

- *James Clift, MEC policy director*

# Final Thoughts....

DEQ and businesses can build trust with everything we say and do in our risk communications.

- Listening carefully
- Being respectful
- Providing plain-language information
- Developing and implementing communication plans

Environmental groups have different missions and agendas, and will craft their communications accordingly to generate support and sway policies/actions.



# Questions?