Incident has occurred

- LARGE dry powder spill event (15 tons) occurred on the road outside our plant's loading dock
- There is potential for air-borne spreading, and off-site release if it gets wet
- It is a load of an EPA approved nano-Copper pesticide
- This is a controllable event, but immediate risks do exist with nearby school children

What are doing right (now)

- Immediately implemented our emergency response plan
- Employees are asked to stay inside, and do not attempt to clean up spill
- Immediately Called first responders
- Closed off road/walking traffic – because of upcoming rush hour
- Emergency response team from the city is informing school and other neighbors
- Make Company spokesperson be the point contact, and present in an incident command center; have CEO on speed-dial
- Call insurance agency

Next steps (hours)

- Be sure to block off storm drains to prevent water releases (to collect water/foam) – but who does this? (employees/first responders?)
- Understand weather patterns (collect met data for future exposure modeling law suites)
- Hired outside company for emergency clean-up and air monitoring
- Be sure emergency response organization should be informing local neighbors to keep windows closed (and could be sealed)

Our Existing Plan/Protocol is Progressive

- Design to protect our employees and neighbors
- We follow all OSHA and EPA protocols
- We have an emergency response plan in place
- We have a medical surveillance program for any employees in contact with nanomaterials already
- We already have air monitors on perimeter of site, and partnered with local school for an urban air monitoring station

Biggest expert “nano” concerns

- Mobilization into air is our primary initial risk
  - Localized exposures (< 1 mile)
  - Potential eye and skin irritants; visible and take photos and report immediately to doctor
  - Acute inhalation exposure can lead to sensitization (allergy) over long term (copper, silica)
  - Precipitated silica is less of a concern than fumed silica (good news)
  - Full-face HEPA respirators are our lowest line of precaution when our employees leave building; follow trained professionals
  - This was a “low energy emission” scenario (not an explosion), and can be controlled now by minimizing emissions (foams/wetting)
- Secondary risk is mobilization into stormwater because of the eco-tox sensititivity of many organisms

Human versus environmental concerns

- Human skin/eye irritation (high)
- Human inhalation (med-high)
- Aquatic environment (med) if water is not controlled
- Soil pollution could be long-term

Prepare for lawsuite

- Interview employees associated with spill, and don't them talk to public. Were we following all approved handling/shipping protocols
- If unionized employees – call union representatives ASAP
- Take photographs by someone ?
- Prepare to do atmospheric modeling