

# Emissions Enforcement and Water Treatment



EEMT Consultants

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# Overview

- Odor Sources
- Water Sources
- Environmental Compliance
- BJ's Role
- Recommendations
- Public Relations



# The Problem

- Advise BJ's Chop-It-Up on odor sources, BJ's role, public relations, environmental compliance, and possible recommendations to mitigate odor and water contamination.



# BJ's Chop-It-Up in the Present

- Components of Facility:
  - Concrete Receiving Pad
  - Crusher
  - Cooker (Installed 1961)
  - Open Receiving Basin (Grease)
  - Heat Treatment Tank (Grease)
  - Centrifuge (Installed 1961)
  - Boiler (1963 Diesel)
  - Wet Scrubber (Installed 2003)



# Odor Sources

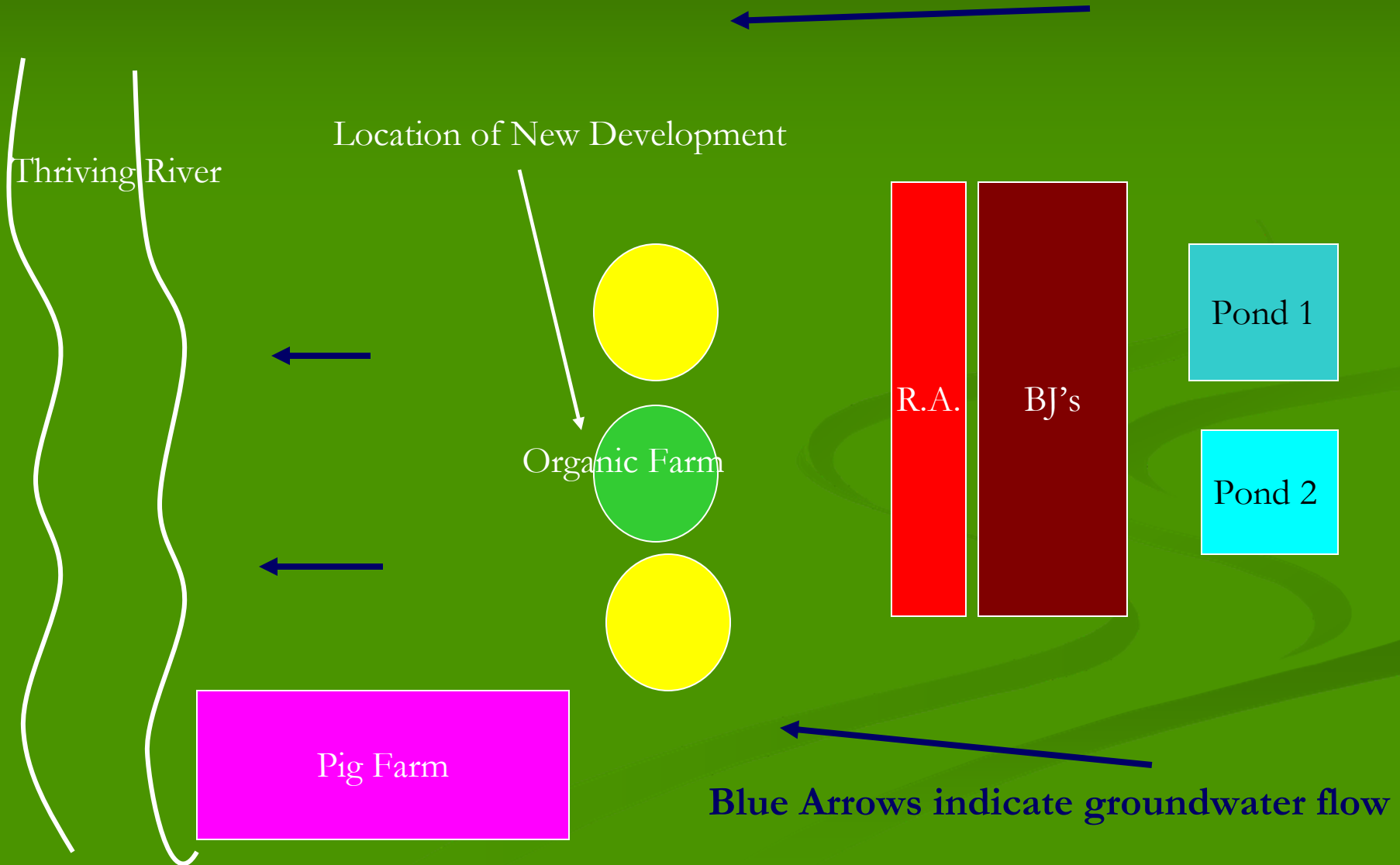
- BJ's
  - Particulate and VOC emissions from equipment.
  - Bacteria growing in cracks of receiving pad.
  - Lag in production due to increased volumes.
  - Temperature effect on exposed materials.
  - Stagnant pond water
- Surrounding Areas
  - Pig and Chicken farms: methane, ammonia and nitrous oxide emissions.
  - Pig slop donated by BJ

# Possible Water Contamination Sources

- BJ's Facility
  - Nitrates
  - Bacteria
- Organic, Pig and Chicken Farms
  - Nitrates
  - Ammonia
  - Bacteria



# Groundwater Flow



Blue Arrows indicate groundwater flow

# Environmental Compliance

- Idaho State Department of Agriculture
  - Licensing
  - Annual Inspections
  - Setting the Standards
- Idaho Department of Environmental Quality
  - Responds to odor complaints
  - Environmental Impact
  - Permitting

# BJ's Role

- Sole rendering plant within a 300 mile radius
- Provides jobs for people in the surrounding community
- Community figure
  - Provides resources for surrounding farmers
- Starting to turn “Green”
  - Grease
  - Running off of biodiesel



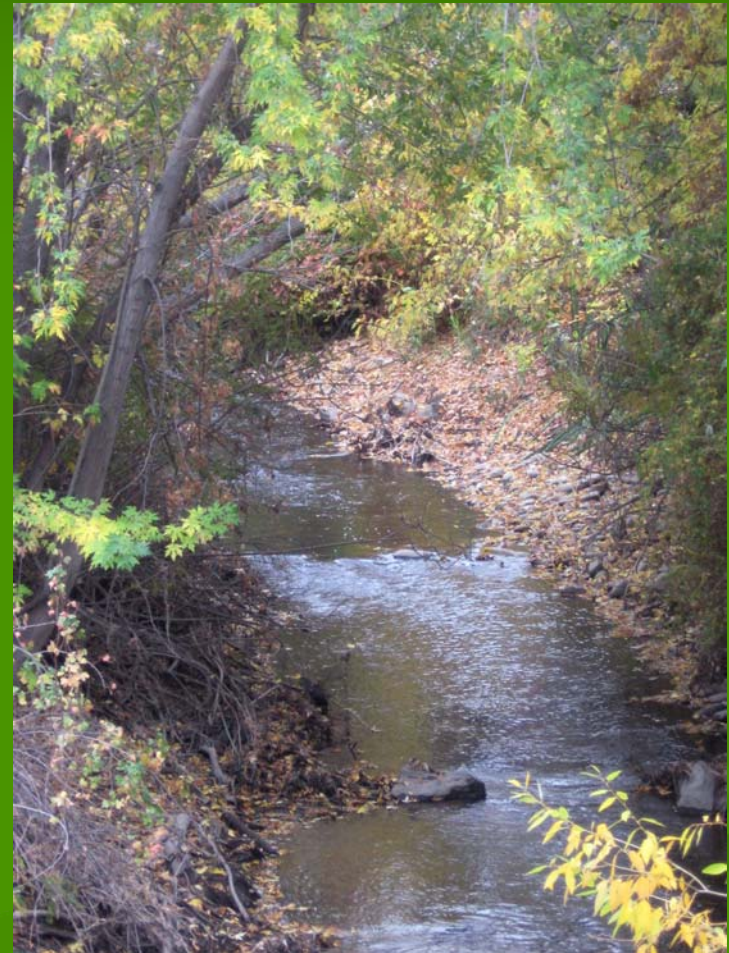
# Recommendations

- Odor Treatment
  - Air Monitoring PM emissions on facility
  - Upgrade equipment such as 1960's cooker and boiler
  - Ventilation System (ducting)
  - Sealant on concrete
  - Pond water circulation
  - Cover grease receiving basin
  - Pig Farm inspection

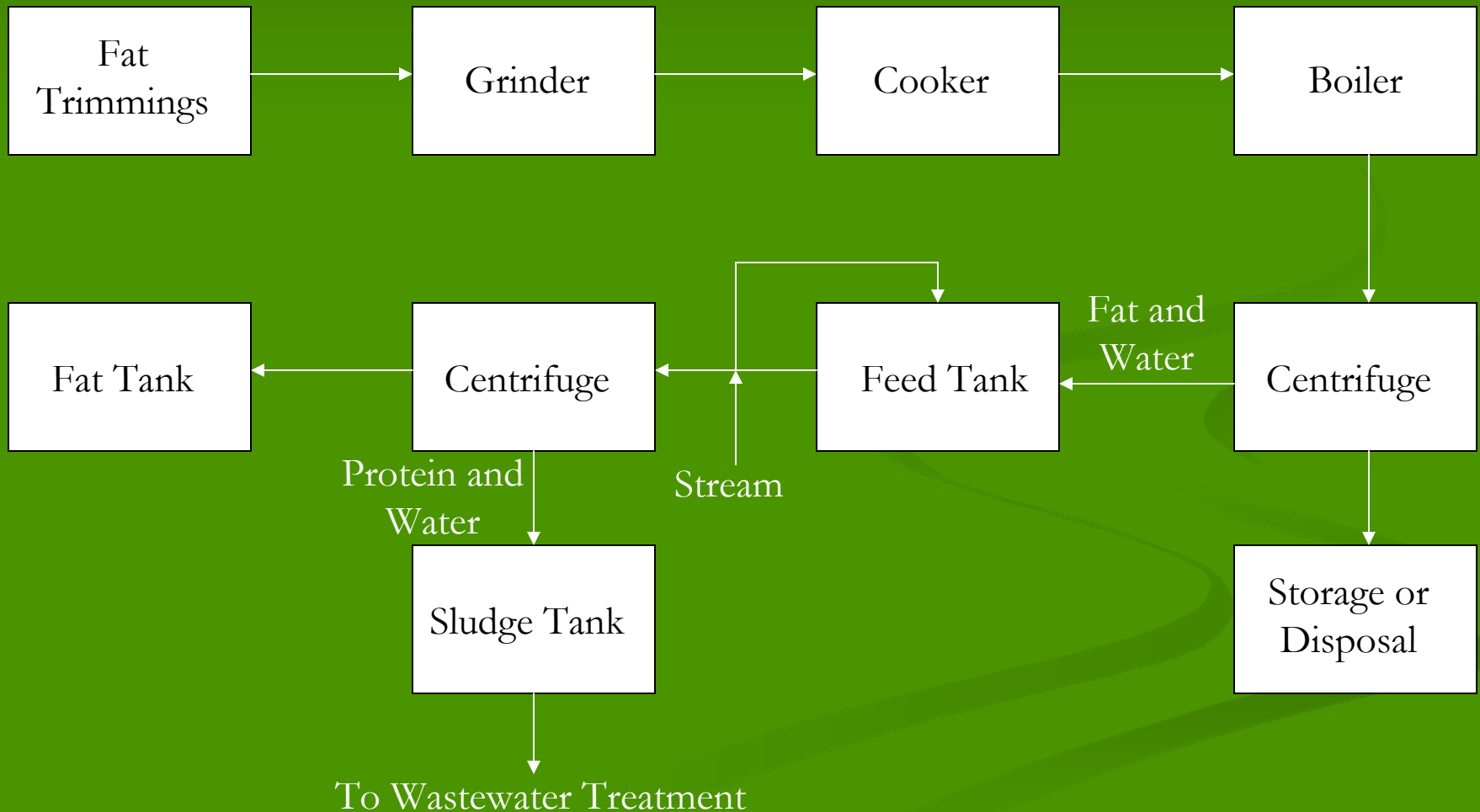


# Recommendations

- Water Treatment
  - Grease filtration followed by water treatment using carbon nanotubes
  - Sump
  - Alfalfa
  - Pig farm
    - Needs inspection by DEQ and corrective actions if needed



# BJ's after Remodeling

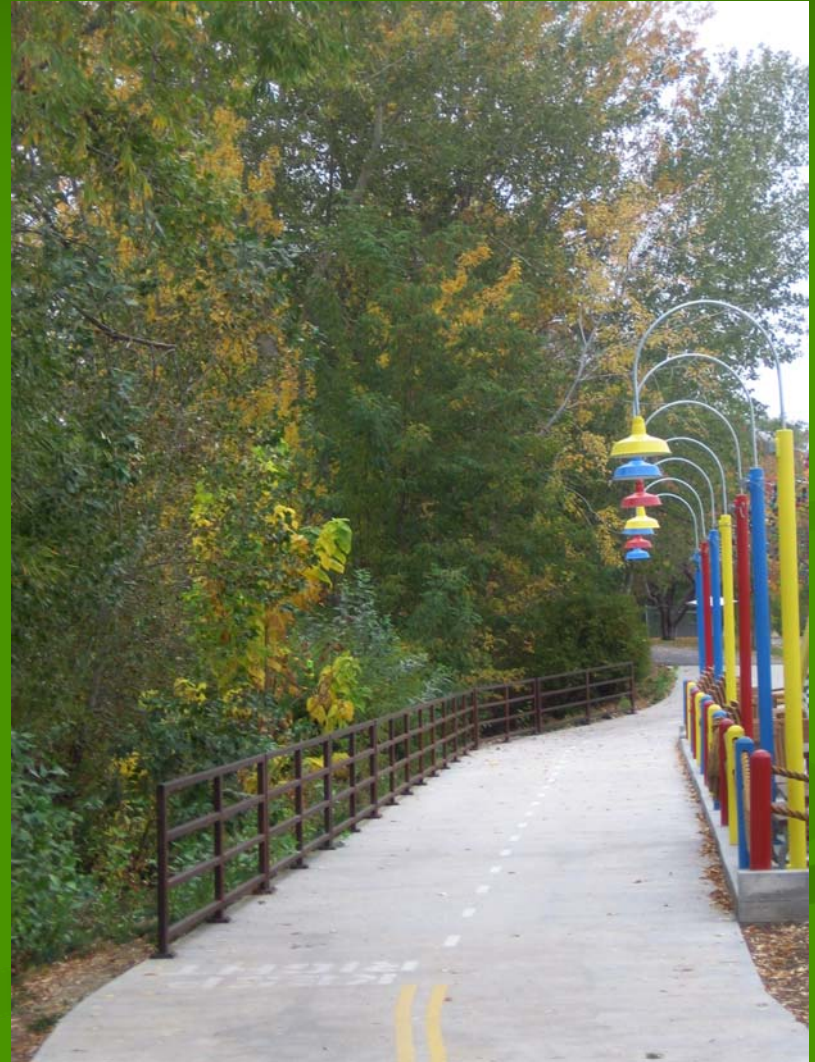


# Public Relations

- Monthly meetings to establish contact with the community
- Bimonthly flyers for “Hot Zones”
- Open session for comments on new permits
- At holidays send out certificates for meat selection at one of our vendors
- Community BBQ’s held semiannually

# References

- [www.epa.gov](http://www.epa.gov)
- [www.deq.idaho.gov](http://www.deq.idaho.gov)
- [www.agri.state.id.us](http://www.agri.state.id.us)



# Thanks

- Kumar Ganesan
- Role Players
- Chris Ramsdell
- Bill Rogers
- John Cannon



It's not just a hat rack my friend.

