#### Rockets, Fireworks, and Flares (RFF) Superfund Site

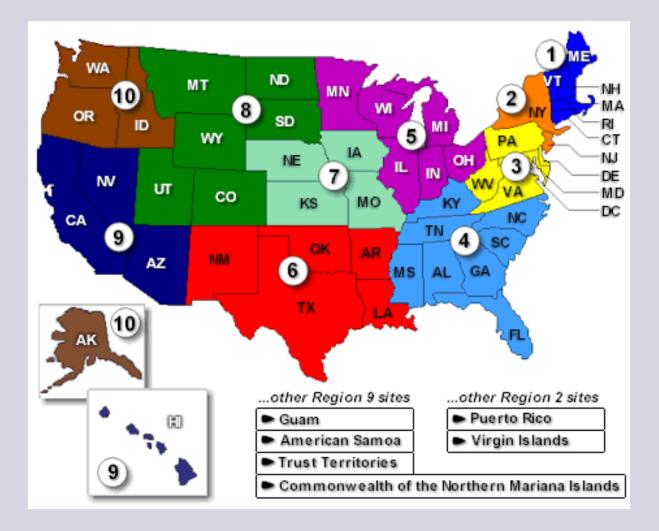
# Chino Basin Water Quality Colloquium





# **U.S. EPA**





#### What is Superfund?



- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Gives EPA authority to clean up contaminated sites
- Includes liability provisions
- Currently, 1,337 sites in the U.S.

Love Canal, New York (1978)



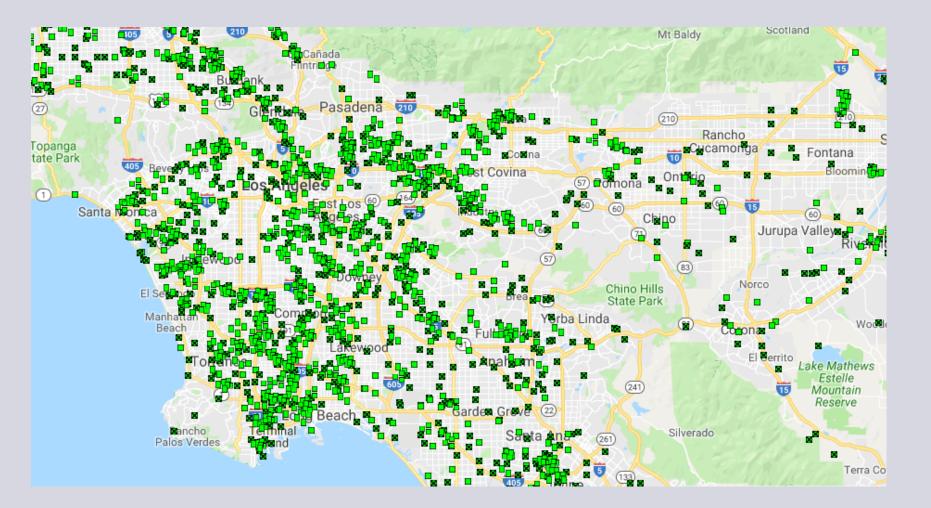
#### **EPA Superfund Sites in So. Cal**



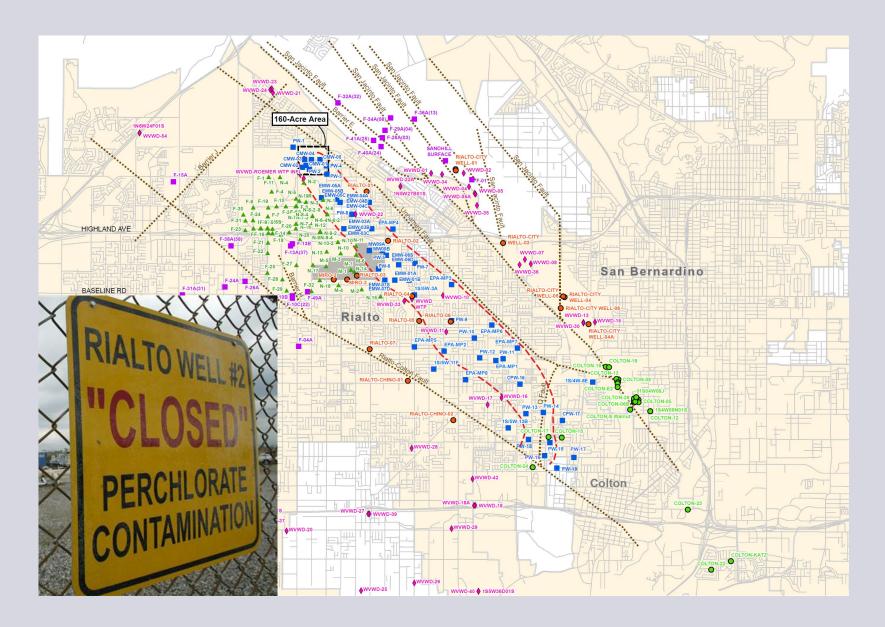


# **Waterboard Cleanup Sites**



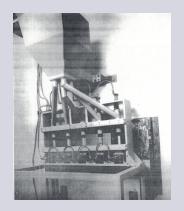


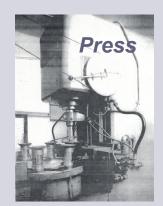
#### **Rockets, Fireworks, and Flares (RFF) Site**



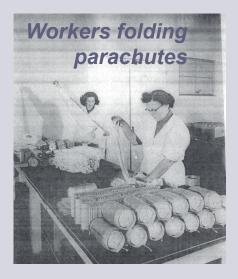


#### Pyrotechnic Manufacturing 1950s









#### Rocket Manufacturing late 1950s – early 1960s





# Fireworks Manufacturing and Distribution, 1960s - present



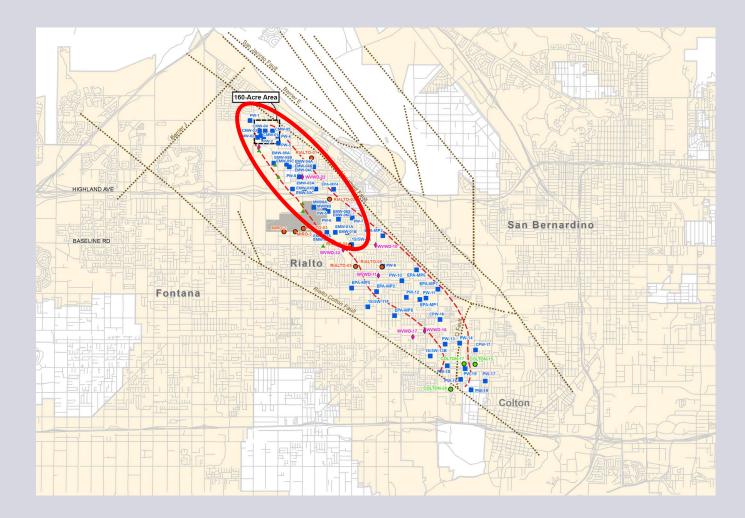


#### **RFF Site - Getting to Cleanup**



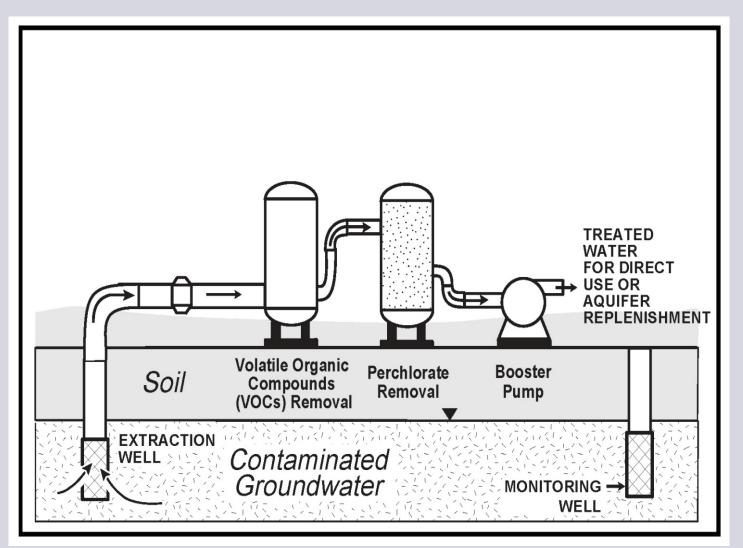


#### **First Groundwater Cleanup Project Constructed**



#### **Remedy is "Pump and Treat"**





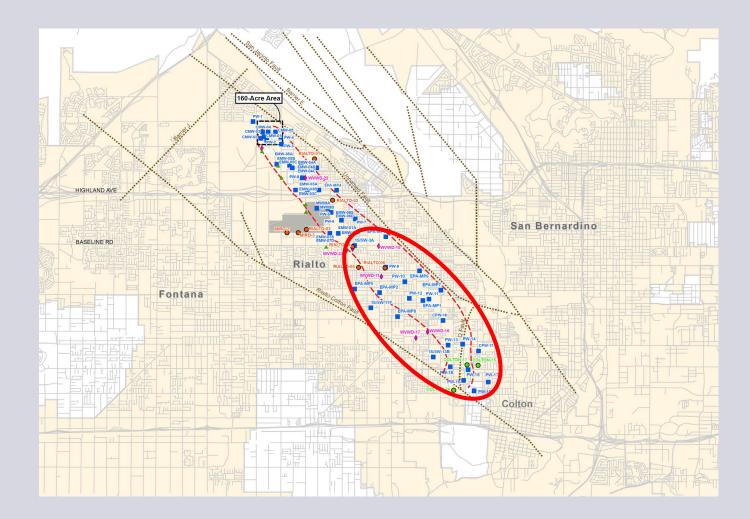
#### **RFF Groundwater Treatment Plant**





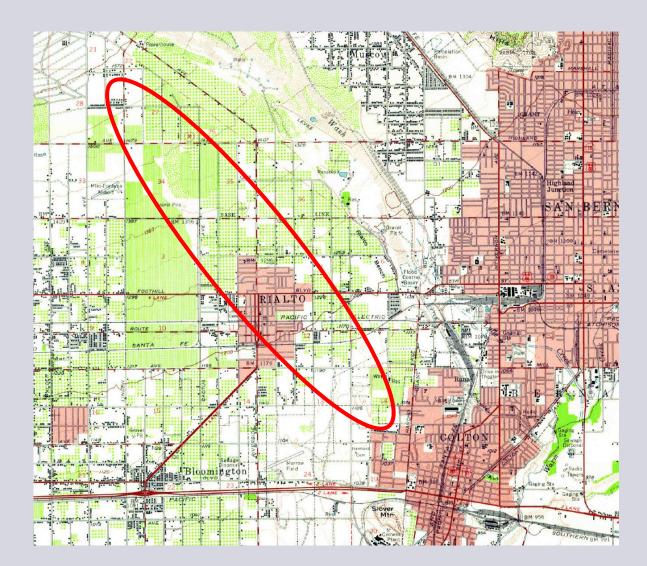
#### **Second Cleanup Project Planned**





### **Sources of Perchlorate**





## Who Pays?

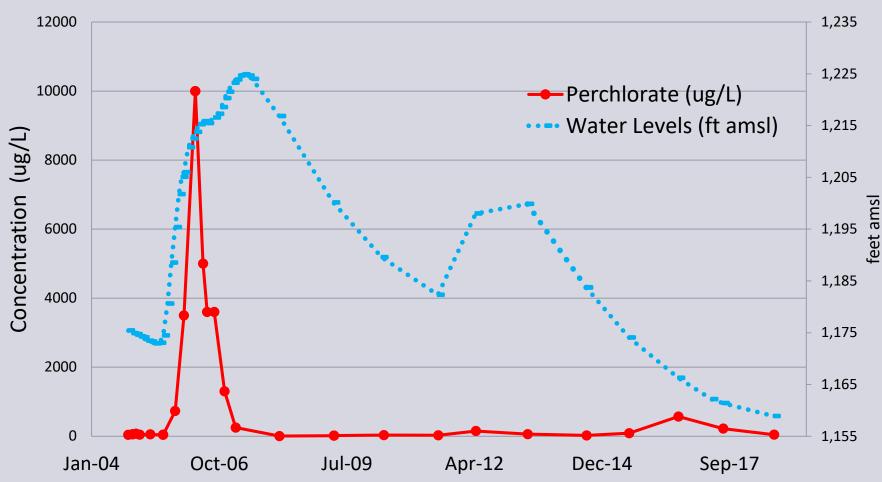


- Federal Consent Decrees require Goodrich Corporation and Emhart Industries to design, construct, and operate groundwater extraction and treatment systems
- Other PRPs contributing to cleanup costs through additional Consent Decrees

# **How Long to Clean Up?**

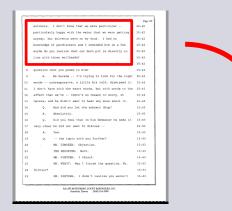


#### Well PW2 - Perchlorate and TCE



# Who Knew?





"we were having a friendly conversation ... about the new wellheads going in for the water company.... at the time I was very concerned about solvents... do you realize that our burn pit is directly in line with those wellheads?" (former B.F. Goodrich employee, ~1962)



#### **For More Information**

# www.epa.gov/superfund/rff

# praskins.wayne@epa.gov