

# **Status of Decommissioning and Storage of Spent Fuel San Onofre Nuclear Generating Station (SONGS)**

**Item #8**

**Ben Neill, P.E.**  
Water Resources Control Engineer  
Source Control Regulation Unit





Dana Point

San Clemente

**San Clemente**

Deluz

De Luz Heights

San Onofre Nuclear Power Plant

Fallbrook

Winterwarm

Agra

Camp Pendleton North

Bonsall

**SONGS**

Camp Pendleton South

SAN LUIS REY

IVEY RANCH / RANCHO DEL ORO

**Oceanside**

Oceanside

TRI-CITY

Vista



**2001  
ISFSI**

San Onofre - Central  
Processing Facility

San Diego Fwy

El Camino Real



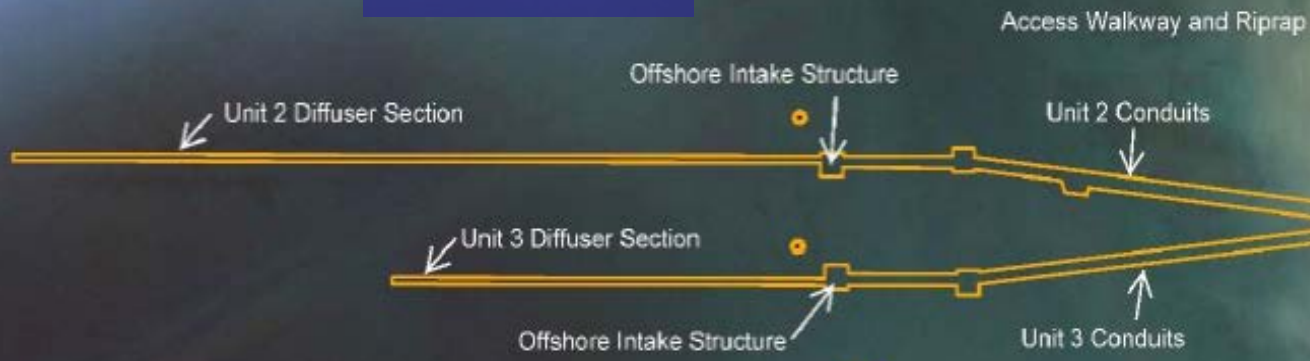
San Onofre Nuclear  
Power Plant

**New  
ISFSI**





# Unit 2 Outfall



# Unit 3 Outfall

# Nuclear Waste Regulation

- Atomic Energy Act (AEA)
  - Exclusive authority to U.S. Nuclear Regulatory Commission (NRC)
- Code of Federal Regulations (CFR)
  - Excludes nuclear materials regulated by AEA



# Nuclear Waste Future Storage Options

- Interim Storage
  - Texas
  - New Mexico
- Permanent Storage
  - Yucca Mountain, Nevada



# Comment Letters

- George and Karen Courser
- Nina Babiarz, Public Watchdogs

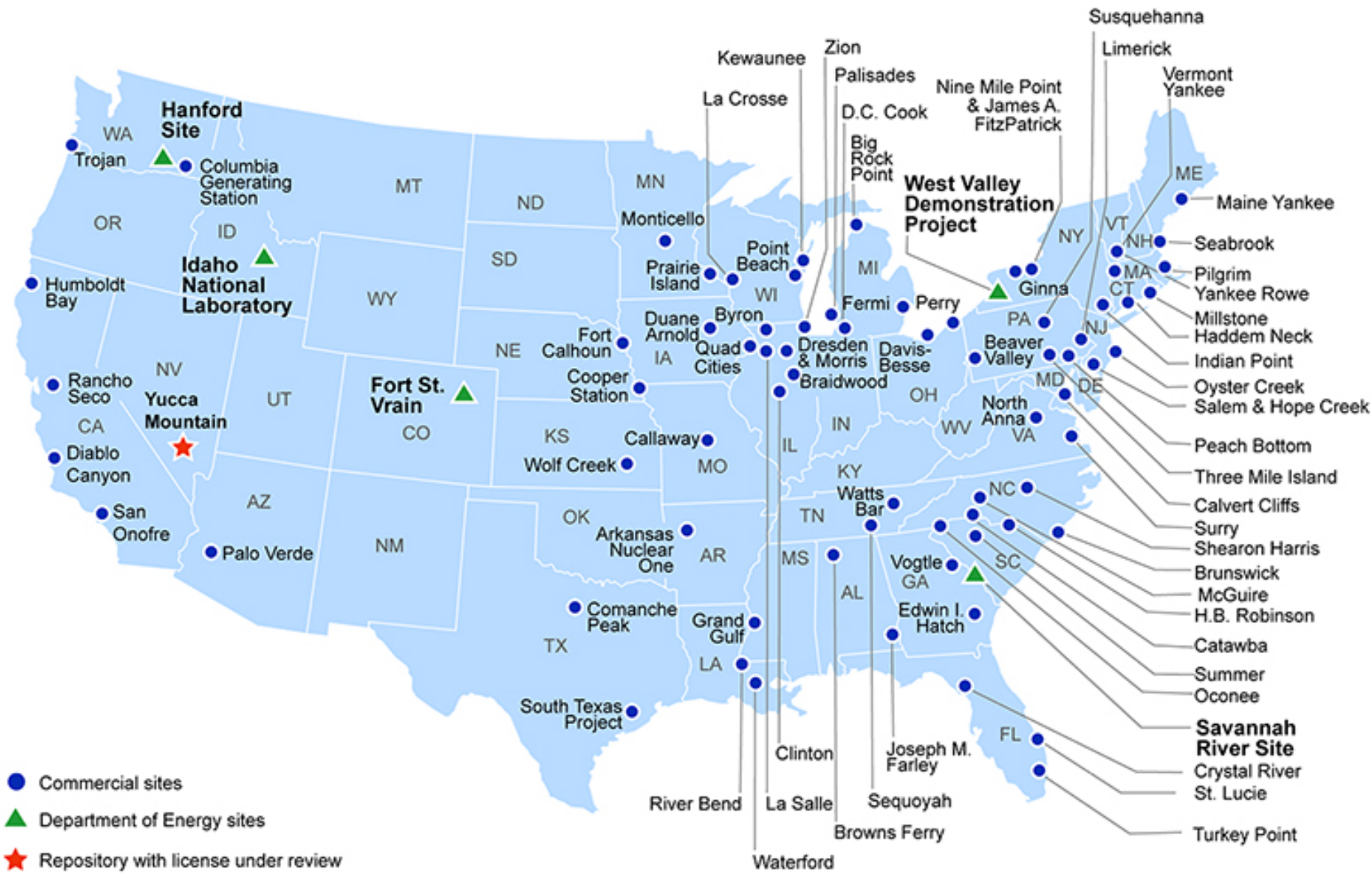






# BULLPEN





*1. Are there existing monitoring wells on the SONGS site?*

- NRC requires SONGS to have monitoring wells onsite
- NPDES permit requires monitoring of any discharge from the wells

*2. Are there sufficient monitoring wells to alert a concerned public of an unauthorized discharge of hazardous or nuclear waste?*

- The monitoring wells meet NRC's requirements
- SONGS is required to report unauthorized discharges to San Diego Water Board



*3. How much tritium has been produced on site in the history of Unit One, Two and Three?*

*4. Of the tritium produced to date, how much has been captured and contained on or off site in storage?*

*5. What quantity of the tritium produced to date has been flushed through the outfall pipes of Unit One, Two and Three?*

- Refer to NRC reports



*6. Is the Regional Board staff and Board aware of documented tritium releases?*

- The San Diego Water Board staff are notified of any tritium releases

*7. What are the actual quantities of waste material being released into the Pacific through the outfall pipes on a daily, weekly and yearly basis?*

- The NPDES permit includes flowrate limitations and mass loading limitations for wastewater on a per day basis
- NRC has the discharge records for nuclear material

*8. Do we have discharge release records and where are they available?*

- NRC has the discharge records for nuclear material
- San Diego Water Board has discharge records for wastewater available online or through a public records request

*9. Are fish caught in the Pacific off of Oceanside and San Clemente safe to consume?*

- No health advisories have been issued for fish or shellfish consumption off San Onofre

*10. Are surfers and swimmers off of San Onofre safe to do so?*

- No health advisories have been issued for recreational activities off San Onofre



# Decommissioning

Previous 2 Permits:

1,287 MGD

x 2 Outfalls

**2,574 MGD**

or

**~2.5 Billion gallons**

One Current Permit:

**56.3 MGD**

**Reduction of ~96%**

