

# County of San Diego Field Survey

## Discussion

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### Background:

The County of San Diego (County) learned of reports about a member of the public who alleged that radiation levels at the Independent Spent Fuel Storage Installation (ISFSI) at San Onofre Nuclear Generating Station (SONGS) are very high and unsafe. The County Office of Emergency Services contacted SCE and in a discussion with representatives from SONGS, SCE offered to allow the County of San Diego's Senior Health Physicist (SHP) to conduct an independent analysis of radiological readings at SONGS ISFSI.

Although the Nuclear Regulatory Agency (NRC) is the regulatory agency for SONGS, it was decided, in the interest of public safety, to independently verify the radiation levels at the publicly accessible locations near the SONGS site to determine if a public health threat existed in addition to the verification at the ISFSI location. Therefore an independent analysis by the County's SHP was performed. The SHP is an expert in radiological monitoring and assessment, and performed his analysis using independent radiological monitoring equipment. The County's SHP performed his survey in the same locations as the reported member of the public survey to include readings along the perimeters of both the ISFSI site and SONGS property. These readings were done to provide context to the readings of both the ISFSI site and the areas potentially accessible by the public. To be clear, the area alleged to have unsafe radiation areas (ISFSI area) is not accessible to members of the public.

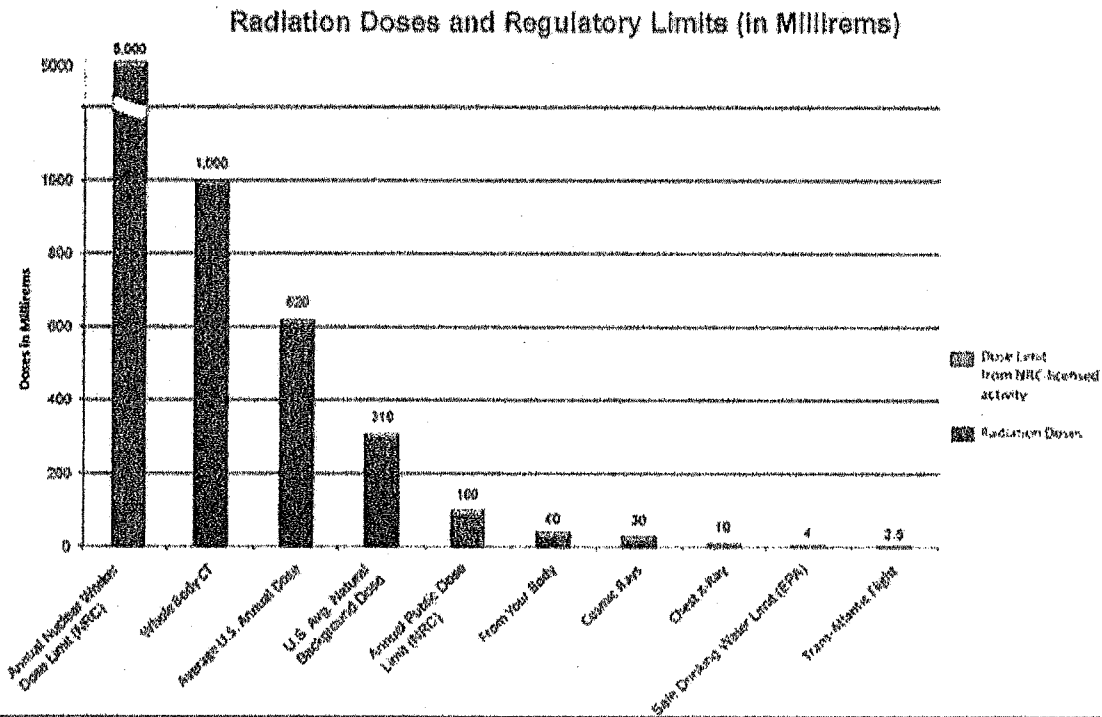
### The County of San Diego Findings:

- The County's Department of Environmental Health results confirmed radiation readings at SONGS ISFSI **did not show evidence of risk to public health or the environment.** Levels of radiation detected are within NRC regulatory limits.
- The radiation readings within the boundaries of the ISFSI site are what would be expected for this type of storage area.
- The County of San Diego SHP's independent radiological assessment concluded that the radiation levels are consistent with the radiation levels measured and documented by the utility, SCE/SONGS.

### Technical Information:

- The County of San Diego SHP's background radiation readings at the ISFSI were 0.01 mR/h, and the highest levels (0.4 mR/h) were measured directly touching the dry cask storage module vent. The 0.4 mR/h is considered very low for the proximity at this site location.
- Radiation levels at the SONGS site property boundary were 0.01 mR/h, which is normal background radiation.
- Although members of the public do not have access to the ISFSI area, the following illustrates a comparison of the radiation levels at the SONGS ISFSI area compared to radiation levels that people are exposed to the natural environment:

- A person would have to stand in contact with the dry cask vent containing the highest radiation reading of 0.4 mR/h for 250 continuous hours for ~10 days to reach the NRC dose limit of 100 mR/year for a member of the public.
- A person standing in contact with the dry cask vent containing the highest radiation reading of 0.4 mR/h for 6 continuous hours would receive the same exposure from a US coast to coast airline flight of 2.5 mR. (See dose bar graph below)
- A person receives 10 mR for a chest x-ray.
- A person would have to stand in contact with the dry cask vent containing the highest radiation reading of 0.4 mR/h for 25 hours to receive the same exposure of a chest x-ray.



Source: <https://www.nrc.gov/about-nrc/radiation/around-us/doses-daily-lives.html>

# CONFIRMATORY SURVEY BY COUNTY OF SAN DIEGO

DATE: 24 SEP 2018

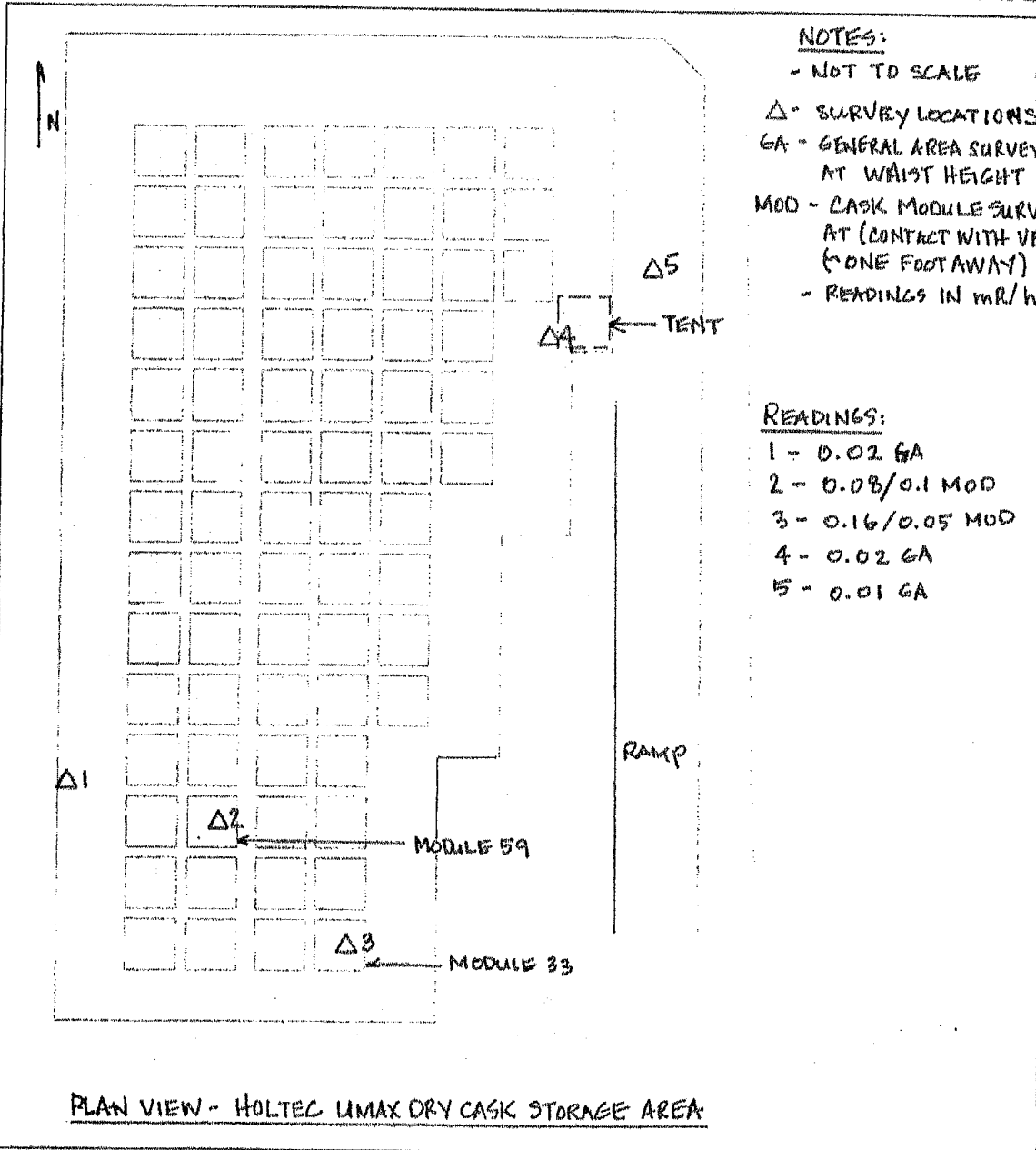
COMPLETED BY: Ron Yonemitsu

LICENSEE: SONGS ISPSI AREA

RML # NA

INSTRUMENTS USED: VICTOREEN 451B SN 1011, CALIBRATED 8/23/2018

BACKGROUND AT SECURITY OFFICE 0.01 mR/h



NOTES:

- NOT TO SCALE
- Δ - SURVEY LOCATIONS
- GA - GENERAL AREA SURVEY AT WAIST HEIGHT
- MOD - CASK MODULE SURVEY AT (CONTACT WITH VENT) (ONE FOOT AWAY)
- READINGS IN mR/h.

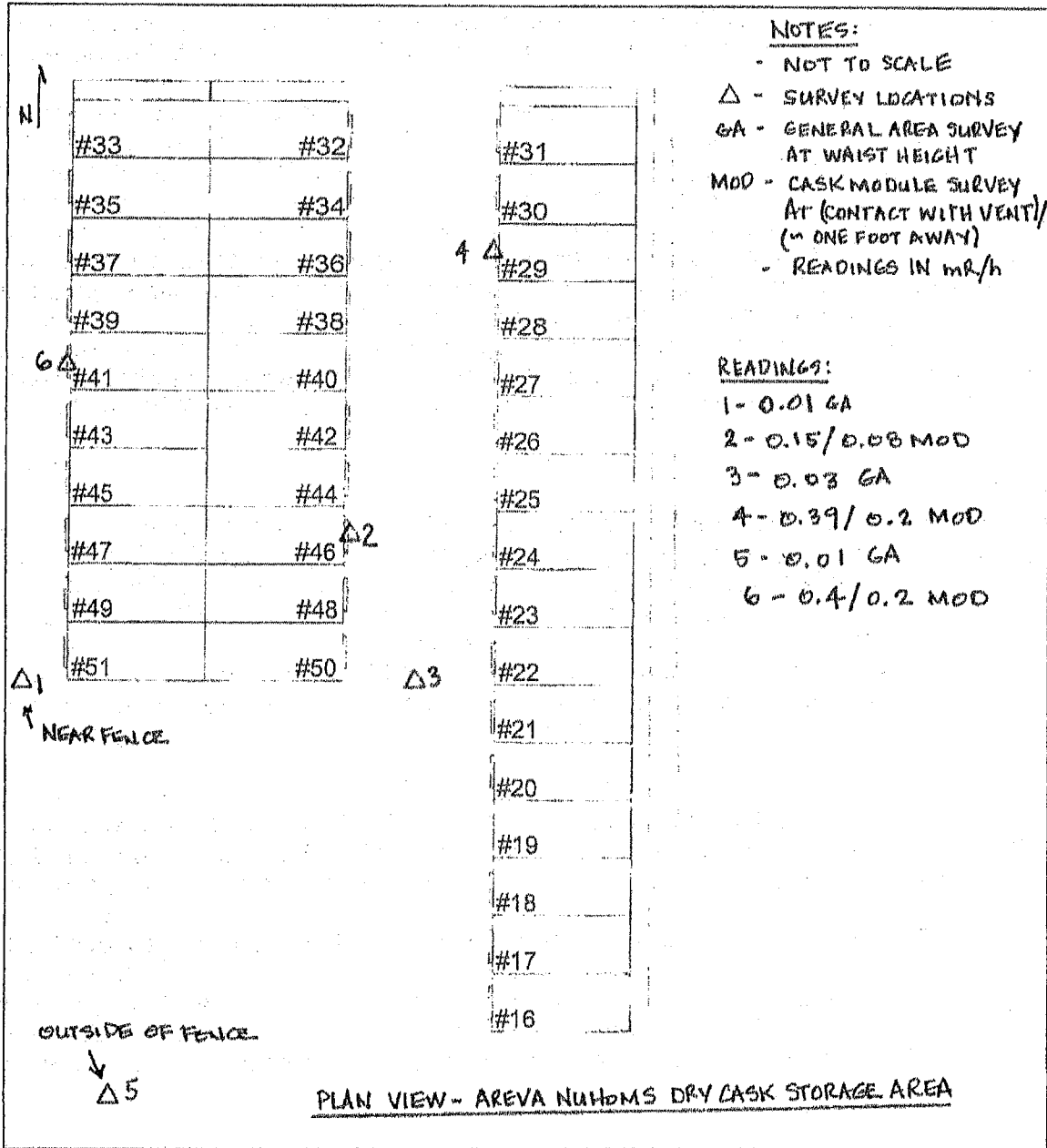
READINGS:

- 1 - 0.02 GA
- 2 - 0.08/0.1 MOD
- 3 - 0.16/0.05 MOD
- 4 - 0.02 GA
- 5 - 0.01 GA

ATTACHMENT (1)

# CONFIRMATORY SURVEY BY COUNTY OF SAN DIEGO

DATE: <u>24 SEP 2018</u>	COMPLETED BY: <u>Ron Yonemitsu</u>
LICENSEE: <u>SONGS ISFSI AREA</u>	RML # <u>NA</u>
INSTRUMENTS USED: <u>VICTOREEN 451B SN 1011, CALIBRATED 8/23/2018</u>	
<u>BACKGROUND AT SECURITY OFFICE 0.01 mR/h</u>	



ATTACHMENT (1)