

000

SI-SIE-78a

PUBLICATION BY ERDA AUTHORIZED

NOTICE OF RESEARCH PROJECT SCIENCE INFORMATION EXCHANGE SMITHSONIAN INSTITUTION

SIE NO.

ERDA CONTRACT NO. E (26-1)-641

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

SUPPORTING DIV OR OFFICE: Environment and Safety, Life Sciences

NAME & ADDRESS OF CONTRACTOR OR INSTITUTION: (State the division, department, or professional school, medical, graduate or other, with which this project should be identified.)

University of Hawaii Research Corporation 1110 University Avenue, Room 402 Honolulu, Hawaii 96814

405460

TITLE OF PROJECT:

Fish Toxicity at Enewetak and Bikini Atolls, Marshall Islands

NAMES, DEPARTMENT, AND OFFICIAL TITLES OF PRINCIPAL INVESTIGATORS AND OTHER PROFESSIONAL SCIENTIFIC PERSONNEL: (not including graduate students) engaged on the project, and fraction of man-year devoted to the project by each person.

A. H. Banner Professor of Zoology University of Hawaii Co-Princi Investigator 1/20
J. E. Randall Ichthyologist B. P. Bishop Museum Co-Principal Investigator 1/15
P. J. Scheuer Professor of Chemistry University of Hawaii Acting P.I., 5/15 to 12/31, 1975 1/40

NO. OF GRADUATE STUDENTS ON PROJECT: 0 NO. OF GRADUATE STUDENT MAN-YEARS: 0

SUMMARY OF PROPOSED WORK: (200-300 words, omit Confidential Data). Summaries are exchanged with government and private agencies supporting research, are supplied to investigators upon request, and may be published in documents. Make summaries substantive, giving initially and for each annual revision the following: OBJECTIVE; SCIENTIFIC BACKGROUND FOR STUDY; PROPOSED PROCEDURE; TEST OBJECTS AND AGENTS.

Ciguatera is a human intoxication caused by the ingestion of certain tropical reef fishes. A plausible theory of the unpredictable outbreaks of ciguatera links the sudden toxicity of normally edible fish to man-made activities at coral reefs. The proposed clean-up activities at Enewetak and Bikini atolls might therefore be accompanied by appearance of ciguateric fishes. Both carnivorous and herbivorous fishes will be caught and tested for ciguatera by an established bioassay (feeding of mongooses).

REPOSITORY DOE/PASO
COLLECTION DOE/IN
BOX NO. 1234
BIKINI - misc. channels
FOLDER 9/24-12/75

RESULTS TO DATE:

One hundred and fifty-four specimens belonging to 24 species have been collected and tested. Of these, 11 of 12 specimens of Epinephelus fuscoguttatus (Serranidae) and 2 of 4 specimens of Plectropomus leopardus (Serranidae), totalling 8.5% of fish tested, were ciguateric.

Table with 2 columns: BUDGET (PRIMARY, SECONDARY) and PROGRAM CATEGORY NO.

Signature of Principal Investigator (Acting)

DATE: 9/25/75

INVESTIGATOR - DO NOT USE THIS SPACE