

REPOSITORY PNL
COLLECTION I-131 Atmosphere
BOX No. IC Nelson
FOLDER N/A

712551

March 29, 1963

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Manager-Internal Dosimetry

MONTHLY SUMMARY OF ACTIVITIES
MARCH, 1963

1. In collaboration with E. C. Watson, Environmental Studies & Evaluation, a draft of an abstract describing the measurement technique, experimental results, and conclusions of the recent I^{131} studies in man was delivered to L. K. Bustad, Biology Operation, for consideration of presentation at the forthcoming iodine symposium.
2. A draft of information needs was prepared to assist Manager-Internal Dosimetry in the preparation of a formal study proposal to obtain clinical data on plutonium excretion rates in man.
3. The measurement results from the In Vivo I^{131} studies in man were corrected for recent instrument calibration and republished for limited Hanford distribution.
4. A description of equipment and measurement techniques relative to the In Vivo I^{131} studies was prepared for C. C. Gamertsfelder for his use at a meeting relative to radioiodine recently held in Chicago.
5. Some I^{131} calibration standard prepared by the IAEA was given to Internal Dosimetry by Radiological Chemistry to check the calibration of the thyroid monitor. The results of the check confirmed earlier calibrations.
6. Through the cooperation of ABC Security and GE Photography, several aerial photographs of the Ringold area were taken. These photographs when composited will serve as illustrative material for the paper "Ringold - An Environmental Study" now in writing.
7. A new procedure for administering the bioassay sampling and whole body counting of new hires was put into place. In brief, this consists of Personnel Accounting having new hires report for Whole Body Counter examinations after which they are given bioassay sample containers to take home with them. The samples are picked up by IDO personnel after the sample period. This procedure worked well and resolved much of the problem of

getting bioassay equipment to new hires. More efficient sampling permits more timely clearance for the new hires' entry for work in radiation zones.

8. In collaboration with the IDO staff, the rationale governing bioassay sampling was deliberated at some length during the month. The results of the deliberation did not yield a satisfactory conclusion and attention to the problem will continue.
9. A study of the uptake of I^{131} in man from consumption of milk from cows on a regimen of stable iodine as well as I^{131} was organized. Measurements were made on the Whole Body Counter on the uptake of six male volunteers. The study is still in progress. ~~THE~~ ~~DELETED~~ is also participating as one of the study objects.
10. A discussion with Data Processing personnel relative to punched card input to the tritium dose calculation program provided for agreement on the format to be used. Two months of representative data for processing debug was prepared.
11. An investigation of the process whereby address changes are made to the Exposure file was conducted. The investigation disclosed that since the file is updated by the personnel file, fortnightly no permanent address action for GE employees can be taken through the Exposure file. Better employee response to sending in home address changes to the personnel file is being sought. All address changes to the construction worker file will be made through the Exposure file by IDO prepared keypunched change cards.
12. The results of the study of I^{131} in children's thyroids was discussed with L. S. Taylor of the National Bureau of Standards.
13. A resume' of special studies conducted at the Whole Body Counter during 1962 was prepared for Manager, IDO's further use in preparation of 1962 reports.

Activities Planned for April

1. Continue development of definition of IDO's Data Processing needs.
2. Continue I^{131} studies in man.
3. Complete tritium dose program changes.
4. In collaboration with E. C. Watson draft paper on I^{131} studies.

5. Fabricate experimental shielded thyroid monitor.
6. Prepare draft of the Ringold paper.
7. Continue participation in Operation Bootstrap.

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