



RECEIVED
JUL 14 1981
Ref. Lib.
L.B.L. LIBRARY

NEWSLETTER

Vol. 5, No. 6, June 1981

Contents

Weighing the Chemical Burden? Use the CHT
Data Base 1

User Group Meeting Held in Richland, Washington. 6

Stopword List to be Reduced. 8

FEDEX Survey: EIA Needs Your Help 8

RECON Statistics 9

New Format for DOE/RECON Newsletter. 9

DOE/RECON Calendar 9

For Reference

Not to be taken from this room

Published by:
INFORMATION RESEARCH GROUP, LIBRARY DEPT.
LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA, BERKELEY, CA 94720

for
DOE/TECHNICAL INFORMATION CENTER

Prepared for the U.S. Department of Energy under Contract W-7405-ENG-48

DISCLAIMER

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor the Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or the Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof or the Regents of the University of California.

WEIGHING THE CHEMICAL BURDEN? USE THE CHT DATA BASE

Chemicals Identified in Human Biological Media (CHT), now available on DOE/RECON as file #38, is a comprehensive data base of chemicals identified in human biological media (tissues, body fluids). It is under the direction of the Exposure Evaluation Division in the Environmental Protection Agency's (EPA) Office of Pesticides and Toxic Substances. This centralized resource of body-burden information is a product of the concern of scientists over reports of toxic chemicals in human tissues and body fluids.

"Body burden" is a reflection of exposures to food, air, and water contaminants, as well as administration of pharmaceuticals. The systematic acquisition of body-burden data facilitates a more relevant assessment of human exposure to xenobiotics (including toxic chemicals) than is possible using only environmental contamination levels.

Data are from the open literature back to 1974. Routine searches of the literature continue, and more records will be added annually. The CHT data base does not obviate the need to refer to the original literature or data source, and data in the file has not been screened or evaluated.

The first 3,500 records are now up on RECON. Available indexes for searching are:

AN= Analytical method
AU= Author
CA= Chemical Abstracts preferred name
CS= Corporate source
FO= Formula
IC= Input code
IT= Keywords
LA= Language (other than English)
LT= Literature type (Journal, Book, Conference, Letter)
NC= Subject category (Monitoring, Measurement and Analysis, Medical Aspects, Baseline Studies)
PD= Publication date (year)
RN= CAS registry number
RT= Route of administration (Inhalation, Injection, Ingestion, etc.)
SP= Sponsor
SY= Chemical synonyms
TI= Tissue
TL= Title

Tissues and body fluids (TI) in the data base at the present time are:

Adipose	Blood, plasma	Breath
Adrenal gland	Blood, serum	Cartilage
Amniotic fluid	Blood, whole	Cerebrospinal fluid
Aorta	Body	Diaphragm
Bile	Bone	Endometrium
Bladder	Bone marrow	Esophagus
Blood	Brain	Eye
Blood, cells	Breast	Fetal
Blood, fetal	Breast fluid	Gall bladder

Gall stone	Nail	Spleen
Gum	Nerve	Stomach
Gonads	Ovary	Synovial membrane
Hair	Oviduct	Tears
Heart	Pancreas	Teeth
Integument	Pineal gland	Tendon
Intestine	Pituitary	Testicle
Kidney	Placenta	Testis
Ligament	Pleural fluid	Thyroid gland
Liver	Prostate	Tonsil
Lung	Saliva	Tooth
Lymph node	Salivary gland	Trachea
Mammary gland	Semen	Umbilical cord
Milk	Skin	Urine
Milk, fat	Soft tissue	Uterus
Milk, whole	Spinal cord	Vitreous humor
Muscle	Spinal fluid	

The following abbreviations are used in AN (Analytical method):

AAS	Atomic absorption spectrometry
APDC-MIBK	Ammonium pyrrolidine diethiocarbamate-methylisobutyl ketone extraction
ASV	Anodic stripping voltammetry
CC	Column chromatography
Chem	Chemical
Electrochem	Electrochemical methods
EM	Electron microscopy
ES	Emission spectrometry
GC	Gas chromatography
GC-EC	Gas chromatography; electron-capture detection
GC/MS	Gas chromatography coupled with mass spectrometry
Histochem	Histochemistry
HPLC	High pressure liquid chromatography
IR	Infra-red analysis
ISE	Ion-specific electrode
MAS	Molecular absorption spectrometry
MED	Microwave emission detector (ion)
MS	Mass Spectrometry
NA	Neutron activation analysis
NMR	Nuclear magnetic resonance
PIXE	Proton-induced X-ray emission
RIA	Radioimmunoassay
TLC	Thin-layer chromatography
UV	Ultraviolet analysis
X-ray fluores	X-ray fluorescence
X-ray spectrom	X-ray spectrometry

Some of the remaining data elements relate to information that only the source documents contain. These fields include half-life, use and source of the chemical, tissue concentrations (range and mean), comments pertaining to the concentrations, number and sex of cases, and demographic data, as well as information on health, pathology, and morphology. In addition, one field contains chemical properties (molecular or atomic weight, melting point, boiling point and vapor pressure).

Display formats available are:

- 0 All fields
- 2 Default for printing
- 3 Title
- 4 Bibliographic information
- 5 Chemical information, Title
- 6 Tissue data, Title

The following are samples of searches on CHT:

- (1) Information on normal levels of copper in liver tissue.

ENTER:s ca=copper;s ti=liver;s nc=baseline studies

>PROCESSING<

- 1 111 CA=COPPER
- 2 202 TI=LIVER
- 3 1402 NC=BASELINE STUDIES

ENTER:c1 and2 and 3

>PROCESSING<

- 4 4 1 AND2 AND 3

EXAMPLE OF FORMAT 5

ENTER:d 4/5

>PROCESSING<

DIS 4/5/000001-000004//1 PAGE 1

<ACCESSION NO.> 80J0002012

<TITLE> Trace Elements in the Fetus and Young Infant II. Copper, Manganese, Selenium, and Chromium

<PREFERRED NAME> Copper

<SYNONYMS> Allbri Natural Copper; Anac 110; Arwood copper; CDA 101; CDA 102; CDA 110; CDA 122; C.I. Pigment Metal 2; C.I. 77400; CuEP; CuEPP; Cu M3; Copper; Copper M 1; Copper powder; DCuP1; E-Cu57; Kafar copper; M1 [copper]; M2 [copper]; M3 [copper]; M4 [copper]; M31; M3S; M 1; M 3; M 4; OFHC Cu; Raney copper; 1721 Gold

<REGISTRY NO> 7440-50-8

<FORMULA> Cu

<PROPERTIES> AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

<SOURCE> Diet

EXAMPLE OF FORMAT 6

ENTER:d 4/6

>PROCESSING<

DIS 4/6/000001-000004//1 PAGE 1

<ACCESSION NO.> 80J0002012

<TITLE> Trace Elements in the Fetus and Young Infant II. Copper, Manganese, Selenium, and Chromium

<TISSUE> Liver

<COMMENT> Review. Fetal tissue

<KEYWORDS> REVIEW; METALS; TRACE ELEMENTS; COPPER; MANGANESE; SELENIUM; CHROMIUM; NEWBORN; FETUS; BLOOD PLASMA; ERYTHROCYTES; MILK; LIVER; UNITED KINGDOM; NUTRITIONAL DEFICIENCIES; AMNIOTIC FLUID

<SUBJECT AREA> Baseline Studies

(2) All information since 1977 on drugs that have been ingested and measured in blood.

ENTER:s ti=blood\$;s drugs

>PROCESSING<

1 1243 TI=BLOOD\$

2 922 IT=DRUGS

ENTER:c 1 and 2

>PROCESSING<

3 549 1 AND 2

ENTER:e pd=1977

>PROCESSING<

EXPAND PD=1977

REF	DESCRIPTOR	CIT	RT
E01	PD=1974B	8	
E02	PD=1975	436	
E03	PD=1975A	1	
E04	PD=1975B	1	
E05	PD=1976	313	
-E06	PD=1977	572	
E07	PD=1977A	7	
E08	PD=1977B	13	
E09	PD=1978	731	
E10	PD=1978A	4	
E11	PD=1978B	8	
E12	PD=1979	731	
E13	PD=1979A	1	
E14	PD=1979B	1	
E15	PD=1980	130	
E16	RN=100-02-7	1	
E17	RN=100-41-4	2	
E18	RN=100-42-5	4	
E19	RN=100-52-7	1	
E20	RN=10045-97-3	8	

-MORE-

ENTER:s e6-e15

>PROCESSING<

4 2198 E6-E15

ENTER:c 4 and 3

>PROCESSING<

5 506 4 AND 3

ENTER:s rt=ingestion

>PROCESSING<

6 898 RT=INGESTION

ENTER:c 5 and 6

>PROCESSING<

7 285 5 AND 6

ENTER:s nc=baseline studies

>PROCESSING<

8 1402 NC=BASELINE STUDIES

ENTER:c 7 and 8

>PROCESSING<

9 88 7 AND 8

```

ENTER:ds
>PROCESSING<
  SET HISTORY (*=PRINTS, NPT=NO PRINTS)
  SET  DESCRIPTOR          CIT
    1  TI=BLOOD$          1243
    2  IT=DRUGS           922
    3  1 AND 2            549
    4  E6-E15            2198
EXPAND PD=1977
    5  4 AND 3           -506
    6  RT=INGESTION      898
    7  5 AND 6           285
    8  NC=BASELINE STUDIES 1402
    9  7 AND 8           88

```

EXAMPLE OF FORMAT 4

```

ENTER:d 9/4/1
>PROCESSING<
DIS 9/4/000001-000003//1
<ACCESSION NO.> 80J0003456 *****1
<TITLE> Autoinduction of Carbamazepine Metabolism in Children
  Examined by Stable Isotope Technique
<AUTHOR> Bertilsson, L.; Hofer, B.; Tybring, G.; Osterloh, J.;
  Rane, A.
<CORPAUTH> Huddinge Hospital, Department of Clinical
  Pharmacology, S-141 86 Huddinge, Sweden
<SPONSOR> Swedish Medical Research Council; Stiftelsen
  Margarethahemmet; Karolinska Institutet
<PUB DESC> Clinical Pharmacology and Therapeutics 27(1):83-88
<PUB DATE> 1980

```

CHT was established under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC) of the National Cancer Institute (NCI). Funding is provided through the NCI-EPA Collaborative Program. The work is being done by the Oak Ridge National Laboratory's Chemical Effects Information Center (CEIC) through interagency agreements involving NCI, EPA, and DOE. Members of the ICGEC Task Group on Chemicals in Human Tissues provide support to the program's activities. Besides EPA, NCI, and DOE, agencies represented by members of the task group include the Armed Forces Institute of Pathology, the Center for Disease Control, the Department of Agriculture, the Food and Drug Administration, the National Bureau of Standards, the National Center for Toxicological Research, the National Institute for Environmental Health Sciences, the National Institute for Occupational Safety and Health, and the National Library of Medicine.

For further information, contact Virginia Cone at 615/574-7772 or FTS: 624-7772.

-Virginia Cone,
 Chemical Effects
 Information Center

DOE/RECON USER GROUP MEETING HELD IN RICHLAND, WASHINGTON

The fourth meeting of the DOE/RECON User Group was held on April 29-30, 1981, in Richland, Washington, hosted by Shirley Gydesen and Wayne Snyder of Battelle Pacific Northwest Laboratories. Seven members of the User Group were present; Dave Bost, TIC, and Leon Yount, ORNL, also attended.

As at previous meetings, much progress could be noted in system, data base, and service aspects of DOE/RECON.

RECON Programmers

Leon Yount reported that Karl Haeuslein, the veteran systems programmer of DOE/RECON, had left for Vienna in February, to take up a position at INIS. Barbara Corey has been asked to take on the lead responsibility for DOE/RECON systems programming.

Uptime and Telecommunications

Leon reported that DOE/RECON's "uptime" was very much better.

The dedicated lines having been removed in January 1981, some alterations were made in system telecommunications. A few errors crept in during this process, causing an extreme slowdown for some DOE/RECON users, while others were simultaneously getting very fast service. The problems were fixed, and now things are working well.

The TELENET-related problems of losing data is still under investigation. It was brought out that the "POSSIBLE DATA LOSS" message is being received at 300-baud speed as well as at 1200-baud in some cities.

FTS usage is still a problem: Oak Ridge Operations Office wants to cut down on the use of FTS for accessing RECON. Ways are being sought to encourage DOE/RECON users to choose TELENET rather than FTS. User Group members stressed that it is extremely important to have a back-up telecommunications system in case the primary system fails. FTS is such a back-up for TELENET, for those who have access. Commercial long-distance dial-up is another back-up. TELENET service in some areas, such as Chicago and Gaithersburg, leaves much to be desired.

The question was asked whether an alternative telecommunications system, e.g., TYMNET, could be solicited; it was felt that usage to date did not warrant bringing in another telecommunications system.

The need for more 1200-baud direct-dial ports was expressed. The possibility of adding Vadic triple modems at DOE/RECON is being looked into.

Charges and Purchase Orders

The computer center at Union Carbide has raised its rates, so a raise in DOE/RECON rates should be expected next year.

Regarding purchase orders for service, Leon stressed that an open-ended purchase order is best. Failing that, the statement, "estimated usage of \$2000," is better than "not to exceed \$2000." The latter phrase could cause

service to be discontinued midstream, if charges exceed the purchase order limits.

Search-Save Capability

A search-save capability is being written for DOE/RECON by Barbara Corey. A number of questions about desirable attributes of such a capability were asked in a questionnaire; User Group members responded in writing at the meeting and afterwards.

Data Base Additions

Dave Bost reported on DOE/RECON data bases. TIC is making an effort to get other DOE files from the DOE community on RECON. One example of a file that is being planned for RECON is a data base of fallout from weapons testing, being prepared at Grand Junction, Colorado.

EPRI

Work was in process on the Electric Power Research Institute (EPRI) file, which had arrived but was not readable at ORNL. Rather than shipping it back, special efforts are being made to interpret the file.

RIP

The Energy Research in Progress (RIP) file is receiving a lot of attention. New bilateral agreements cover "in-progress" information from Germany and France. The foreign information will be put on RECON as separate files.

EDB Coverage

Next year, a substantial sum will be spent on trying to complete the coverage of EDB. One additional source of information is now under negotiation: TIC presently contracts with IFI/Plenum to cover U.S. patent literature; a contract to cover patent literature from the Eastern bloc is also being negotiated with IFI/Plenum.

Discussions with Chemical Abstracts on a contract to include energy information from their data base has come to a halt. Chemical Abstracts plans to change its revenue base so as to increase the revenue from online usage, and is no longer interested in selling its processed information to another online data base.

Stopwords

Some analyses of the RECON stopword list have been made. They show that a greatly abbreviated list of 11 or 12 words would save only 30% of the words now stopped; 70% would still be stopped. (Editor's note: Plans for a reduced stopword list have just been announced; please see next article.)

EDB Thesaurus

The EDB Thesaurus is being printed and should be available fairly soon. A permuted index to the thesaurus is also being prepared, and will be available separately later. These items will be announced in the DOE/RECON Newsletter.

RECON User's Manual

LBL had prepared and brought a final draft version of the RECON User's Manual, System and Commands portions, to the User Group Meeting; as it was reviewed by the group, one or two more minor changes in the text were suggested, and these were subsequently incorporated before the text was sent to TIC for printing.

Priorities for Change

The entire RECON User Group Priorities for Change document was reviewed and new items were noted. The meeting ended with a tour of the BNWL Library.

-Jo Robinson, LBL

STOPWORD LIST TO BE REDUCED

Dave Bost, Director, Science and Technology Division, has recommended that the stopword list for all data bases on DOE/RECON be reduced to the following nine words: AN, AND, BY, FOR, FROM, OF, THE, TO and WITH (DIALOG List).

Work on removing the unnecessary stopwords will begin with file 1 (EDB). All data bases on DOE/RECON should reflect this new list as time permits. It is estimated that the EDB file may be finished by the end of summer. Users should watch for announcements in the online NEWS column or in the newsletter.

FEDEX SURVEY: EIA NEEDS YOUR HELP

The Energy Information Administration (EIA) is conducting a user evaluation of the FEDEX data base during July. The evaluation will help EIA determine the strengths and weaknesses of FEDEX from the viewpoint of the users. The results of the evaluation will be used to improve the responsiveness of the data base to the needs of the community of energy information users.

EIA is contacting individuals who are familiar with FEDEX and its component publications to request their comments on FEDEX and to solicit suggestions for its improvement. Some FEDEX searchers use FEDEX at the request of others and are not themselves the ultimate consumers of the FEDEX data. EIA is interested in obtaining the comments of both FEDEX searchers and FEDEX data consumers, including consumers who do not perform their own searches.

In order to reach the latter, EIA is requesting the cooperation of those who are searchers only. FEDEX searchers are asked to request the names of those who will use the data so that, when contacted by the evaluation team, searchers will be able to identify the data consumers who should be contacted for comments.

EIA would like to give as many individuals as possible an opportunity to participate in this FEDEX evaluation. Users from industry, academia, consulting and research firms, associations, libraries, federal agencies, state and

local government, and government-owned contractor-operated facilities are being contacted. If you have not yet been contacted by an EIA representative and would like to participate in this evaluation, please call Richard Francis at 202/252-1185 (FTS 252-1185).

-Richard Francis, EIA

RECON STATISTICS

RECON uptime for May was 98.5%. There were 5,631 user sessions, and 142,824 citations were output via the PRINT command.

-Leon Yount, ORNL

NEW FORMAT FOR DOE/RECON NEWSLETTER

Beginning with the July-August issue (summer schedule), the DOE/RECON Newsletter will be published in a new format. The newsletter will resume monthly publication in September.

DOE/RECON CALENDAR

- Sept. 24-25 Advanced DOE/RECON Training
 (limited to 2 persons per organization)
 Oak Ridge, TN
- Nov. 16-18 Basic DOE/RECON Training (for newer users)
 Cleveland, OH
- Nov. 19-20 System-independent EDB, and advanced DOE/RECON Training
 (for more experienced users)
 Cleveland, OH

Inquiries about training dates, locations, registration, and logistics may be directed to Virginia Sternberg at Lawrence Berkeley Laboratory at 415/486-6307, or FTS 451-6307. Inquiries about training content may be directed to Jo Robinson at the same number. Please send training reservations to Jo Robinson, DOE/RECON Training Coordinator, Lawrence Berkeley Laboratory, Bldg. 50, Room 130, Berkeley, CA 94720.

Editor: Margaret Hu
Deadline: 11th of each month.
Please send your contributions
or suggestions to the address
on the back cover.
Tel. 415/486-6307, FTS 451-6307

Pub. 388, Vol. 5, No. 6
6/81/860

This report was done with support from the Department of Energy. Any conclusions or opinions expressed in this report represent solely those of the author(s) and not necessarily those of The Regents of the University of California, the Lawrence Berkeley Laboratory or the Department of Energy.

Reference to a company or product name does not imply approval or recommendation of the product by the University of California or the U.S. Department of Energy to the exclusion of others that may be suitable.

INFORMATION RESEARCH GROUP
LAWRENCE BERKELEY LABORATORY
BLDG. 50, ROOM 130
UNIVERSITY OF CALIFORNIA
BERKELEY, CA 94720

FIRST CLASS