

CONSOLIDATION OF PHYSICAL EXAMINATION PROGRAMS IN PERSONNEL DEPARTMENT

On September 27, 1951, a meeting was held in the Refinery Superintendent's office for the purpose of discussing the general subject of toxicity of agricultural products and the physical examination program established to protect employees working with the toxicants against overexposure. The notes of this discussion are attached (Exhibit A).

As indicated in the notes covering the September 27, 1951, discussion, Mr. Barton expressed the opinion that the various special medical programs in effect at the refinery should be consolidated and handled by a central body, preferably the Personnel Department. The details of working out a tentative procedure were delegated to the departmental representatives in attendance.

With reference to the physical examination program as outlined in Head Office Personnel's letter dated June 8, 1951, under the subject "Physical Examination Employees Handling CBP-55 and OS-1199" and later supplemented by Head Office Personnel's letter dated August 29, 1951, the following procedure has been developed to provide the machinery necessary for maintaining proper records and adequate controls.

Upon the recommendation of Dr. Hine all employees working in the following occupations at the locations indicated should receive an initial physical examination at which time a complete blood count and urinalysis should be made. ✓

1. Compounders working on second floor of Insecticide Plant

E.G. Price	Blender A
L.J. Ferreira, Jr.	Blender B and A relief
C. Shrubsall	Blender B relief

2. Fillers at the Insecticide Plant

H.A. Foster	Package Handler A (Filler)
G. Morgan	Package Handler A (Filler)
C. Jones	Package Handler A (Filler)
R.J. Winner	Package Handler A (Filler)
C. Hughey	Package Handler A (Filler)
D.R. Rivera	Package Handler A (Filler)

3. Fillers at the Light Oil Filling House filling insecticide containers

Gordon Ferreira	Sub Foreman
C. Agostino	Package Handler A (Filler)

Form (Exhibit B) has been developed to record the incidence of exposure and material to which the employee was exposed. This record is to be submitted to the Personnel Department on a monthly basis. The data contained on this report is posted to the individual employee's record (Exhibit C) and it will be this summary sheet which will indicate whether the employee has received significant contact to warrant a re-examination three months after the initial examination. Subsequent examinations, if warranted, will be made at six month intervals.

The following forms have been designed by Dr. Hine for use in this program. Copies are attached.

1. Form I - Occupational History
This form is to be completed before the employee is sent to the physician for initial examination and a copy given to the examining physician for his information.
2. Form II - Physician's Report of Examination
This form is similar to our standard physical examination report but has been expanded to include additional information believed necessary for the purpose of this program.
3. Form III - Special Re-examination
This form is to be used to record the results of the periodic re-examinations. It may also be used in the event a sudden acute exposure or suspected chronic exposure necessitates referral to the physician.
4. Form IV A - Complete Blood Count
 - (a) A complete blood test now is required only at time of the initial examination, the three month re-examination and the final examination when the employee ceases handling the products.
 - (b) At the six month interval re-examination, the hemoglobin and white blood count laboratory tests only need be performed.
 - (c) If the doctor or laboratory making the blood test does not have the equipment for the "albumin/globin ratio", a "BSP liver function test" will be acceptable.
5. Form IV B - Urinalysis
Dr. Hine indicated that the urinalysis need only be performed at time of initial examination, three month re-examination and thereafter to coincide with the six month check. This test should also be performed in conjunction with the final examination.

The above forms should be prepared in triplicate and the original of each form sent to Dr. C.H. Hine, c/o Dr. K.R. Edlund, Shell Development Company, Emeryville, California. The duplicate copy is to be retained by Personnel and the triplicate held by the physician for future reference.

Dr. Hine stated that wherever practical initial examinations should be given employees prior to their transfer into an assignment requiring them to come in contact with the toxicants. Therefore, to accomplish this objective, it will be the responsibility of the department concerned to give the Personnel Department adequate notice of any proposed change in personnel working with the toxic materials in order that arrangements may be made for scheduling the required physical examination. It will also be the responsibility of departments concerned to advise Personnel of employees no longer exposed to these toxicants in order that final examinations may be scheduled.

All physical examinations will be performed by Drs. Coates and Bradshaw and the billing for such services will be directed to the Personnel Department for review before approving for payment. At the suggestion of Dr. Hine, the blood count and urinalysis examinations will be made initially by the Shell Development nurse at the refinery First Aid dispensary. Subsequent sampling will be performed by the refinery First Aid Attendant who is a registered nurse. He will forward such samples to Emeryville, c/o Dr. Hine, for analysis until such time as he is able to perform the analytical work locally. Details of arranging for physical

examinations and related work will be worked out between Personnel and the department concerned.

In the staffing of jobs requiring employees to come in contact with these toxic materials, no person should be selected who has a history of tuberculosis, chronic respiratory disease, liver disease, kidney disease or chronic skin conditions, nor should persons who are alcoholics be permitted to work with these toxic substances. Any questionable case should be referred to the Personnel Department.

With reference to the special physical examination required of employees in the Dispatching Department associated with the blending of tetraethyl lead compounds with gasoline, the present program is as follows:

1. All operators working in the ethyl blending operation, specifically the Pumper/Gauger Specials and the Zone 4 Gaugers, undergo an annual examination by a duPont doctor. These examinations are usually performed in August or September and arrangements are made by the Dispatching Department to have the men available. A report from the examining physician is received by the Dispatching Department Manager shortly after the examinations and indicates thereon the employees approved for continued work in this activity.
2. Employees transferred to either a Pumper/Gauger Special or Zone 4 Gauger position should receive an examination either before reporting for duty or immediately thereafter. This examination should be made by either Dr. Coates or Dr. Bradshaw as they are familiar with the requirements.

In consolidating this program with the other medical plans in the Personnel Department, it will henceforth be the responsibility of the Dispatching group to advise the former department of employees requiring interim examinations and also those employees who should receive examinations at the annual affair. All correspondence and record keeping will be handled by Personnel.

In connection with the special physical examinations required of employees working with radioactive isotopes, Dr. Hine, in his letter of January 29, 1951, to Dr. W.A. Bailey, suggested the following program:

1. An initial physical examination including a chest x-ray. The physical examination could be carried out at Emeryville according to Dr. Hine while the x-ray could be taken locally (Drs. Coates and Bradshaw).
2. Physical examinations to be repeated at six month intervals.
3. Blood examinations at three intervals to be performed locally (Drs. Coates and Bradshaw) with the request that a white blood count and differential count be performed. A copy of the results obtained should be forwarded to Emeryville for retention in their files.
4. Dr. Hine strongly advised the establishment of a film badge service as protection to employees and also to comply with legislation. Arrangements were made with the Industrial Health and Hygiene Associates, 2380 Ellsworth Street, Berkeley, to provide the service. Badge films are to be forwarded at weekly intervals to the service which will make a monthly report as to the amount of exposure the individual was subjected to as well as other pertinent information.

The program suggested by Dr. Hine was adopted and has been in operation since February, 1951.

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LAM 026405

Under the proposed arrangement where all medical programs would be centralized in the Personnel Department, it will be the responsibility of the Research Department to submit on a monthly basis certain data as to incidence of exposure of those employees working with radioactive isotopes. This information can be reported on a form developed for this purpose. (Exhibit B). The Research group will continue as in the past to send the exposed badge films to the badge service company at weekly intervals. Their report should be directed to the refinery Personnel Department for review and discussion with the interested parties in the Research group.

OCTOBER 30, 1951

LAM 026406

ABS-044340

EXHIBIT A

SUMMARY OF DISCUSSION

PHYSICAL EXAMINATION EMPLOYEES HANDLING CHEMICAL PRODUCTS

A meeting was held in the Refinery Superintendent's office Thursday, September 27, 1951, starting at 3:20 p.m. Those in attendance were:

Dr. Hine, Shell Development, Emeryville, and Messrs. Barton, Bland, Evenson and Harrison of the Martinez Refinery.

Dr. Hine opened the discussion by reviewing briefly the material which has been developed on the general subject of toxicity of agricultural products by his office and the New York offices of Shell Chemical Corporation and Shell Oil Company. He made specific reference to the following material, copies of which have been received at Martinez:

1. Physical Examination Employees Handling CBP-55 and OS-1199, under date of June 8, 1951.
2. Toxicity Manual Chemical Products No. 1 CBP-55 and OS-1199, under date of June 8, 1951.
3. Toxicity of Agricultural Products, First Aid and Treatment CBP-55 and OS-1199, date June 6, 1951.
4. Physical Examination Employees Handling Chemical Products, dated August 29, 1951. (This communication advised that the program had been extended to include employees handling Dieldrin, Aldrin, TEPP, Toxaphene, DDT and Pentachlorophenol.

Dr. Hine advised that in the company of the Safety Engineer and Mr. Lounsbury, he had just completed a tour of the Refinery where the facilities for handling, filling and loading the agricultural toxicants are located. He remarked that from what he had observed in this brief tour that the following personnel, in his opinion, are subject to enough exposure to these toxicants to be included under the physical examination program:

1. The Compounders working on the second floor of the Insecticide Plant.
2. All Fillers in the Insecticide Plant.
3. All Fillers at the Light Oil Filling House working with the toxic insecticides.

Following a lengthy discussion on whether employees transporting insecticide containers should also be included in the program, Dr. Hine stated that he did not feel that such employees received sufficient exposure to warrant their inclusion, at least at this time. He added if the data obtained from physical examination and laboratory work of those employees initially included under the program indicated that the program should be extended to other groups then steps would be taken to make this possible. Dr. Hine also remarked that he later may wish to recommend some changes in the refinery loading facilities, particularly in regard to drainage from equipment handling toxic material.

In connection with local doctors who might be able to handle this program for us, Dr. Hine advised that Doctors Coates and Bradshaw have recently completed

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physical examinations, as outlined under the program, to several employees of the Shell Chemical Martinez Plant, and was confident that we would encounter no difficulties if they also handled our work. The usual fee according to Dr. Hine, for this type of examination is from \$5-\$10 plus laboratory fees which run about \$23.00.

It was agreed that the program should be instituted as soon as practical with an initial examination given to those employees working in the positions outlined earlier in the summary. Such employees would be re-examined three months after the initial examination, providing that there was significant contact during that time. Re-examination would then occur at six month intervals. (While the specific subject was not discussed the procedural letter of June 8, 1951, states that an exit examination is given to each employee at time he ceases handling the products, unless he has been exposed for less than one month from date of last examination.)

It was also concluded that employees selected to work in either the compounding or filling assignments should if at all possible receive a physical examination prior to their transfer into the group.

Dr. Hine stated that he felt it desirable from a data accumulation viewpoint to have each employee concerned undergo the laboratory sample work at monthly intervals. The ensuing discussion pointed out that due to the general low level of employees in the classifications previously mentioned it might be poor psychology to schedule the laboratory work at such frequent intervals. It was concluded to obtain the laboratory samples at no more frequent intervals than the general periodic physical examinations.

In connection with the laboratory analyses which commercially amounts to approximately \$23.00, it was agreed that the Emeryville nurse, experienced in taking the required samples, would visit the refinery First Aid dispensary and do the initial sampling. After observing her technique and following instructions, it was tentatively agreed that the new refinery First Aid Attendant, a registered nurse, could do all subsequent sampling and in turn forward them to Emeryville for analysis.

In this connection certain laboratory apparatus will have to be purchased and Dr. Hine, at the request of Mr. Barton, stated that he would prepare an itemized listing of the equipment required and mail it to the refinery. The cost was estimated to be \$150.00.

In connection with the program it was agreed that certain basic records would have to be developed which would indicate the incidence of exposure for each employee working with the toxic insecticides, type of material exposed to, etc. These records would be the control for scheduling re-examinations. It was suggested by Mr. Barton that for efficient operation and to avoid duplication, these records should be maintained in the Personnel Department. The development of the records, mechanics of reporting, etc., he stated, should be worked out between the principals involved (Insecticide section of the Lubricating Oils Department, Fire and Safety Department and Personnel).

In concluding the meeting Mr. Barton expressed his appreciation to Dr. Hine and extended an open invitation to him to visit the refinery whenever he could. It was agreed that whenever a batch of Bladex or other toxic material was scheduled to be processed, Evenson would contact Mr. Barton a few days in advance so he could in turn advise Dr. Hine who had previously expressed an interest in observing this operation.

Meeting concluded at 4:30 p.m.

October 30, 1951

LAM 026408

ABS-044342

MONTHLY REPORT OF EMPLOYEES EXPOSED TO TOXIC MATERIALS
OR RADIOACTIVE ISOTOPES

Department _____

Month of _____

LAM 026409

ABS-044343

Time and material exposed to by date (see footnote)

<u>Name of Employee</u>	<u>Gate No.</u>	<u>Position</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>

*After "hours of exposure" indicate code letter representing the toxic material to which employee was exposed. Code schedule is as follows:

- A - Aldrin
- B - DDT
- C - Dieldrin
- D - Pentachlorophenol
- E - TEPP
- F - Toxaphene

Name _____

Occupation _____

Age _____ Company Service _____

Department _____

Date of initial physical examination _____

Date of initial laboratory work _____

Date of three months re-examination _____

Date of three months re-examination _____

Date of six months re-examination _____

Date of six months re-examination _____

Date of six months re-examination _____

Date of six months re-examination _____

INCIDENCE OF EXPOSURE AND AGENT

Weekly Period	A Aldrin	B DDT	C Dieldrin	D Penta-Chlorophenol	E TEPP	F Toxophene	Radioactive Isotopes	Remarks
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LAM 026410

Form I

Occupational History*

Name _____ Company _____ Date _____

Home Address _____ Payroll Center _____

Sex _____ Department _____

Date of Birth _____ Job Classification _____

Date	Organization	Division	Job Classification	Duties Performed	Chemical Agents Handled	Time Spent in Contact

* List in reverse chronological order. Give past five years only unless prior to five years involved exposure to industrial hazards (dust, chemical, fumes, extremes in temperature and pressure).

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PERSONAL HISTORY:

Under physician's care during the past five years _____

For what and when _____

Form 11
Physician's Report of Examination

Detail of illness _____

(Syphilis, Kidney Trouble, Epilepsy, Heart Trouble, Tuberculosis, Cancer, Diabetes, Varicose Veins, Varicella, Rheumatism, Pneumonia, Asthma, Bronchitis, Chronic Colds or Sinusitis, Tonsillitis, Headaches, Nervous Disorders, Hepatitis, Allergies, Skin Disorders, or other serious illness)
Industrial diseases compensated _____

Operations _____ For what and when? _____

GENERAL: Height _____ Weight _____

Parent Age _____

SKIN _____

Scars _____

Acne _____

Chronic dermatitis _____

Seborrhea _____

Unusual pigmentation _____

Jaundice _____

Petechiae _____

Other abnormalities _____

EYES: Conditions _____

Vision: Uncorrected RI 20/____ LI 20/____

Corrected RI 20/____ LI 20/____

Color Blindness _____

Conjunctivitis _____

Chemosis _____

Iritis _____

Sclera _____

Retina _____

Pupillary response _____

Other abnormalities _____

EARS: Otitis _____

Hearing: RI _____/20 LI _____/20

NOSE _____

Polyps _____

Inflammation _____

SOOTH: Caries _____

Pyorrhea _____

General condition _____

Physician's Name _____

Street Address _____

City and State _____

THROAT _____

Inflammation _____

SINUS _____

NECK _____

CHEST: Contour _____

Cough _____

Breath sounds _____

Voice sounds _____

Rales _____

Movement _____

Rate _____

Other abnormal physiology _____

HEART: Size _____

Rate _____

Recumbent _____

Standing _____

Sitting _____

After Masters _____

Blood pressure _____

Recumbent _____

Standing _____

Sitting _____

After Masters _____

Rhythm _____

Heart sounds _____

Murmurs _____

Murmurs transmitted? _____

Arteries _____

Pulse _____

Injuries _____

What and when? _____

ABDOMEN _____

Appearance _____

Tenderness _____

Liver size _____

Palpable viscera _____

Other abnormal physiology _____

HERILIA: Developed RI _____ LI _____

Potential RI _____ LI _____

Undescended testicle _____

GENITO-URINARY _____

Varicocele or Hydrocele _____

EXTREMITIES _____

Stiffness _____

Amputations _____

Deformities _____

Varicose Veins _____

Flat feet _____

BACK _____

ANUS & RECTUM _____

Hemorrhoids _____

Fissure _____

NERVOUS & MENTAL _____

Gait _____

Coordination _____

Tremor _____

Superficial reflexes _____

Deep reflexes _____

Romberg _____

Pathologic reflexes _____

Stimulation _____

Depression _____

Psyche _____

Other evidence of altered physiology _____

Special Reexamination

Form III

Name _____

Date _____

LAM 026413

HISTORY

Health since last examination _____

Days absent from work _____

Chemicals handled _____

History of exposure _____

SENT HISTORY

Chief complaint _____

General Health _____

EYE IRRITATION _____

Frequency _____

Duration _____

Intensity _____

Other complaints _____

RESPIRATORY TRACT _____

Irritation _____

Nares _____

Pharynx _____

Trachea _____

Cough _____

Pain _____

Epistaxis _____

Rhinitis _____

Other complaints _____

ABDOMEN _____

Nausea _____

Anorexia _____

Tenderness _____

Pain _____

Change in bowel habits _____

Icterus _____

Other complaints _____

URINARY

Frequency _____

Hematuria _____

Color _____

Other complaints _____

SKIN

Pruritus _____

Irritation _____

Area _____

Duration _____

Frequency _____

Other complaints _____

NEURO-MUSCULAR

Vertigo _____

Malaise _____

Headache _____

Pain _____

Nervousness _____

Depression _____

Other complaints _____

Physician's Name _____
Street Address _____
City and State _____

PHYSICAL EXAMINATION

Form 111 (continued)

GENERAL _____
 Weight _____
 Appearance _____
 SKIN _____
 Scars _____
 Acne _____
 Chronic dermatitis _____
 Seborrhea _____
 Unusual pigmentation _____
 Jaundice _____
 Petechiae _____
 EYES _____
 Visual acuity _____
 Conjunctivitis _____
 Chemosis _____
 Iritis _____
 Sclera _____
 Retina _____
 Pupillary response _____
 RESPIRATORY TRACT _____
 Nasal passage _____
 Inflammation _____
 Edema _____
 Pharynx _____
 Inflammation _____
 CHEST _____
 Rate _____
 Movement _____
 Breath sounds _____
 Rales _____
 Abnormal physiology _____

CARDIO-VASCULAR _____
 Rhythm _____
 Murmur _____
 Size _____
 Rate _____
 Recumbent _____
 Standing _____
 Sitting _____
 After Masters _____
 Blood pressure _____
 Recumbent _____
 Standing _____
 Sitting _____
 After Masters _____
 ABDOMEN _____
 Appearance _____
 Tenderness _____
 Liver size _____
 Palpable viscera _____
 NERVOUS AND MENTAL _____
 Coordination _____
 Tremor _____
 Superficial reflexes _____
 Deep reflexes _____
 Romberg _____
 Pathologic reflexes _____
 Stimulation _____
 Depression _____
 Psyche _____

OTHER EVIDENCE OF
 ALTERED PHYSIOLOGY _____
 Physician's Name _____
 Street Address _____
 City and State _____

LAM 026414

Form IVA
Complete Blood Count

Name:				
Date:				
RBC				
WBC				
Hemoglobin				
Differential				
Neutrophils				
Segmented				
Non-Segmented				
Lymphocytes				
Large				
Small				
Monocytes				
Eosinophils				
Basophils				
Myelocytes				
Abnormal Cells				
Nucleated Reds				
Albumin/globulin ratio				
Sedimentation Rate				
Coagulation Time				
Bleeding Time				
Icterus Index				

Physician's Name _____
 Street Address _____
 City and State _____

LAM 026415

ABS-044349

Form IVB
Urinalysis

Name:					
Date:					
Quantity					
Color					
Transparency					
Odor					
Reaction					
Specific gravity					
Albumin					
Sugar					
Acetone					
Microscopic					
Casts per LPF					
WBC per HPF					
RBC per HPF					
Crystals					

Physician's Name _____
Street Address _____
City and State _____

LAM 026416

ABS-044350

CONSOLIDATION OF PHYSICAL EXAMINATION PROGRAMS IN PERSONNEL DEPARTMENT

Due to the increasing number of special physical examination programs in effect at the Martinez Refinery, it has been decided that henceforth all such activities be consolidated for administrative purposes in the Personnel Department. To provide the machinery necessary for maintaining proper records and controls for each of these programs, the following procedure has been developed.

In conformance with Head Office Personnel's letter dated June 8, 1951, under the subject "Physical Examination Employees Handling CBP-55 and OS-1199" and later supplemented by their letter dated August 29, 1951, "Physical Examination Employees Handling Chemical Products" and upon the recommendation of Dr. Hine from the Emeryville Laboratories, all employees working at the following locations are to receive an initial physical examination, complete blood count and urinalysis.

1. Compounders working on second floor of Insecticide Plant
2. Fillers at the Insecticide Plant
3. Fillers at the Light Oil Filling House filling insecticide containers

Form Exhibit A has been developed to record the incidence of exposure and material to which the employee was exposed. This record is to be submitted to the Personnel Department on a monthly basis. The data contained on this report is posted to the individual employee's record (Exhibit B) and it will be this summary sheet which will indicate whether the employee has received significant contact to warrant a re-examination three months after the initial examination. Subsequent examinations, if warranted, will be made at six month intervals.

The following forms have been designed by Dr. Hine for use in this program. Copies are attached.

1. Form I - Occupational History
This form is to be completed before the employee is sent to the physician for initial examination. A copy is given to the examining physician for his information.
2. Form II - Physician's Report of Examination
This form is similar to our standard physical examination report but has been expanded to include additional information believed necessary for the purpose of this program.
3. Form III - Special Re-examination
This form is to be used to record the results of the periodic re-examinations. It may also be used in the event a sudden acute exposure or suspected chronic exposure necessitates referral to the physician.
4. Form IV A - Complete Blood Count
 - (a) A complete blood test is required at time of the initial examination, the three month re-examination and the final examination when the employee ceases handling the products. Employees receiving initial physical examinations will undergo a complete blood count which will consist of sedimentation rate, coagulation time, bleeding time and icterus index determination. These would be in addition to what is commonly considered a complete blood count.
 - (b) At the six month interval re-examination, the hemoglobin and white blood count laboratory tests only need be performed.

- (c) If the doctor or laboratory making the blood test does not have the equipment for the "albumin/globin ratio", a "BSP liver function test" will be acceptable.

5. Form IV B - Urinalysis

Dr. Hine indicated that the urinalysis need only be performed at time of initial examination, three month re-examination and thereafter to coincide with the six month check. This test should also be performed in conjunction with the final examination.

The above forms should be prepared in triplicate and the original of each form sent to Dr. C.H. Hine, c/o Dr. K.R. Edlund, Shell Development Company, Emeryville, California. The duplicate copy is to be retained by Personnel and the triplicate held by the physician for future reference.

Dr. Hine stated that wherever practical initial examinations should be given employees prior to their transfer into an assignment requiring them to come in contact with the toxicants. Therefore, to accomplish this objective, it will be the responsibility of the department concerned to give the Personnel Department adequate notice of any proposed change in personnel working with toxic materials in order that arrangements may be made for scheduling the required physical examination. It will also be the responsibility of departments concerned to advise Personnel of employees no longer exposed to these toxicants in order that final examinations may be scheduled.

All physical examinations will be performed by Drs. Coates and Bradshaw and the billing for such services will be directed to the Personnel Department for review before approving for payment. At the suggestion of Dr. Hine, the blood count and urinalysis examinations will be made initially by the Shell Development nurse at the refinery First Aid dispensary. Subsequent laboratory work will be performed by the refinery First Aid Attendant who is a registered nurse. He will forward such samples to Emeryville, c/o Dr. Hine, for analysis until such time as he is able to perform the analytical work locally. Details of arranging for physical examinations and related work will be worked out between Personnel and the department concerned.

In the staffing of jobs requiring employees to come in contact with these toxic materials, no person should be selected who has a history of tuberculosis, chronic respiratory disease, liver disease, kidney disease or chronic skin conditions, nor should persons who are alcoholics be permitted to work with these toxic substances. Any questionable case should be referred to the Personnel Department.

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1. All operators working in the ethyl blending operation, specifically the Pumper/Gauger Specials and the Zone 4 Gaugers, undergo an annual examination by a duPont doctor. These examinations are usually performed in August or September and arrangements are made by the Dispatching Department to have the men available. A report from the examining physician is received by the Dispatching Department Manager shortly after the examinations and indicates thereon the employees approved for continued work in this activity.

2. Employees transferred to either a Pumper/Gauger Special or Zone 4 Gauger position should receive an examination either before reporting for duty or immediately thereafter. This examination should be made by either, Dr. Coates or Dr. Bradshaw as they are familiar with the requirements.

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1. An initial physical examination including a chest x-ray. The physical examination could be carried out at Emeryville according to Dr. Hine while the x-ray could be taken locally (Drs. Coates and Bradshaw.)
2. Physical examinations to be repeated at six month intervals. Examinations to be carried out at Emeryville.
3. Complete blood examinations and urinalysis, (Forms IV A and IV B respectively) are to be carried out at three month intervals. The initial and subsequent six month examinations can be performed at Emeryville at the time the employee undergoes a physical examination. The blood examinations and urinalysis at the three month interval mid-way between the Emeryville visits are to be performed locally by Drs. Coates and Bradshaw. A copy of the results in the latter instance should be forwarded to Dr. Hine.
4. Dr. Hine strongly advised the establishment of a film badge service as protection to employees and also to comply with legislation. Arrangements were made with the Industrial Health and Hygiene Associates, 2380 Ellsworth Street, Berkeley, to provide the service. Badge films are to be forwarded at weekly intervals to the service which will make a monthly report as to the amount of exposure the individual was subjected to as well as other pertinent information.

The program suggested by Dr. Hine was adopted and has been in operation since February, 1951.

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LAM 026394

December 19, 1951

ABS-044328

Form I

Occupational History*

Name _____ Company _____ Date _____
Home Address _____ Payroll Center _____
Sex _____ Department _____
Date of Birth _____ Job Classification _____

Date	Organization	Division	Job Classification	Duties Performed	Chemical Agents Handled	Time Spent in Contact
LAM 026397						

* List in reverse chronological order. Give past five years only unless prior to five years involved exposure to industrial hazards (dust, chemical, fumes, extremes in temperature and pressure).

Physician's Report of Examination

PERSONAL HISTORY:

Under physician's care during the past five years _____ For what and when _____

Detail of illness

(Syphilis, Kidney trouble, Epilepsy, Heart trouble, Tuberculosis, Cancer, Diabetes, Varicose Veins, Varicocoele, Rheumatism, Pneumonia, Asthma, Bronchitis, Chronic Colds or Sinusitis, Tonsillitis, Headaches, Nervous Disorders, Hepatitis, Allergies, Skin Disorders, or other serious illness)

Industrial diseases compensated _____

Operations _____ For what and when? _____

GENERAL: Height _____ Weight _____

Appearance _____

Apparent Age _____

SKIN

Scars _____

Acne _____

Chronic dermatitis _____

Seborrhea _____

Unusual pigmentation _____

Jaundice _____

Petechiae _____

Other abnormalities _____

EYES: Conditions _____

Vision: Uncorrected RT 20/ _____ LT 20/ _____

Corrected RT 20/ _____ LT 20/ _____

Color Blindness _____

Conjunctivitis _____

Chemosis _____

Iritis _____

Sclera _____

Retina _____

Pupillary response _____

Other abnormalities _____

EARS: Otitis _____

Hearing: RT _____/20 LT _____/20

NOSE _____

Polyps _____

Inflammation _____

MOUTH: Caries _____

Pyorrhea _____

General condition _____

Physician's Name _____

Street Address _____

City and State _____

Injuries _____ What and when? _____

THROAT

Inflammation _____

SINUS

NECK

CHEST: Contour _____

Cough _____

Breath sounds _____

Voice sounds _____

Rales _____

Movement _____

Rate _____

Other abnormal physiology _____

HEART: Size _____

Rate _____

Recumbent _____

Standing _____

Sitting _____

After Masters _____

Blood pressure _____

Recumbent _____

Standing _____

Sitting _____

After Masters _____

Rhythm _____

Heart sounds _____

Murmurs _____

Murmurs transmitted? _____

Arteries _____

Pulse _____

ABDOEN

Appearance _____

Tenderness _____

Liver size _____

Palpable viscera _____

Other abnormal physiology _____

HEMIA: Developed RT _____ LT _____

Potential RT _____ LT _____

Undescended testicle _____

GENITO-URINARY

Varicocoele or Hydrocele _____

EXTREMITIES

Stiffness _____

Aputations _____

Deformities _____

Varicose Veins _____

Flat feet _____

BACK

ANNUS & RECTUM

Hemorrhoids _____

Fissure _____

NERVOUS & MENTAL

Gait _____

Coordination _____

Tremor _____

Superficial reflexes _____

Deep reflexes _____

Roanberg _____

Pathologic reflexes _____

Stimulation _____

Depression _____

Psyche _____

Other evidence of altered physiology _____

LAM 026398

Form III

Special Reexamination

Name _____

Date _____

HISTORY

Health since last examination _____

Days absent from work _____

Chemicals handled _____

History of exposure _____

PRESENT HISTORY

Chief complaint _____

General Health _____

EYE IRRITATION

Frequency _____

Duration _____

Intensity _____

Other complaints _____

RESPIRATORY TRACT

Irritation _____

Nares _____

Pharynx _____

Trachea _____

Cough _____

Pain _____

Epistaxis _____

Hemoptysis _____

Dyspnea _____

Other complaints _____

ABDOMEN

Nausea _____

Anorexia _____

Tenderness _____

Pain _____

Change in bowel habits _____

Icterus _____

Other complaints _____

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URINARY

Frequency _____

Hematuria _____

Color _____

Other complaints _____

SKIN

Pruritus _____

Irritation _____

Area _____

Duration _____

Frequency _____

Other complaints _____

NEURO-MUSCULAR

Vertigo _____

Malaise _____

Headache _____

Pain _____

Nervousness _____

Depression _____

Other complaints _____

Physician's Name _____

Street Address _____

City and State _____

Form III (continued)

PHYSICAL EXAMINATION

GENERAL

Weight _____
 Appearance _____
 SKIN _____
 Scars _____
 Acne _____
 Chronic dermatitis _____
 Seborrhea _____
 Unusual pigmentation _____
 Jaundice _____
 Petechiae _____
 EYES _____
 Visual acuity _____
 Conjunctivitis _____
 Chemosiis _____
 Iritis _____
 Sclera _____
 Retina _____
 Pupillary response _____
 RESPIRATORY TRACT _____
 Nasal passage _____
 Inflammation _____
 Edema _____
 Pharynx _____
 Inflammation _____
 CHEST _____
 Rate _____
 Movement _____
 Breath sounds _____
 Rales _____
 Abnormal physiology _____

CARDIO-VASCULAR

Rhythm _____
 Murmur _____
 Size _____
 Rate _____
 Recumbent _____
 Standing _____
 Sitting _____
 After Masters _____
 Blood pressure _____
 Recumbent _____
 Standing _____
 Sitting _____
 After Masters _____
 ABDOMEN _____
 Appearance _____
 Tenderness _____
 Liver size _____
 Palpable viscera _____
 NERVOUS AND MENTAL _____
 Coordination _____
 Tremor _____
 Superficial reflexes _____
 Deep reflexes _____
 Romberg _____
 Pathologic reflexes _____
 Stimulation _____
 Depression _____
 Psyche _____

OTHER EVIDENCE OF ALTERED PHYSIOLOGY

Physician's Name _____
 Street Address _____
 City and State _____

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Form IVA
Complete Blood Count

Name:				
Date:				
RBC				
WBC				
Hemoglobin				
Differential				
Neutrophils				
Segmented				
Non-Segmented				
Lymphocytes				
Large				
Small				
Monocytes				
Eosinophils				
Basophils				
Myelocytes				
Abnormal Cells				
Nucleated Reds				
Albumin/globulin ratio				
Sedimentation Rate				
Coagulation Time				
Bleeding Time				
Icterus Index				

Physician's Name _____
 Street Address _____
 City and State _____

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ABS-044335

Form IVB
Urinalysis

Name:					
Date:					
Quantity					
Color					
Transparency					
Odor					
Reaction					
Specific gravity					
Albumin					
Sugar					
Acetone					
Microscopic					
Casts per LPF					
WBC per HPF					
RBC per HPF					
Crystals					

Physician's Name _____
 Street Address _____
 City and State _____

LAM 026402

ABS-044336

MEDICAL PROGRAMS
Physical Examination Program

BEST
AVAILABLE
COPY

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