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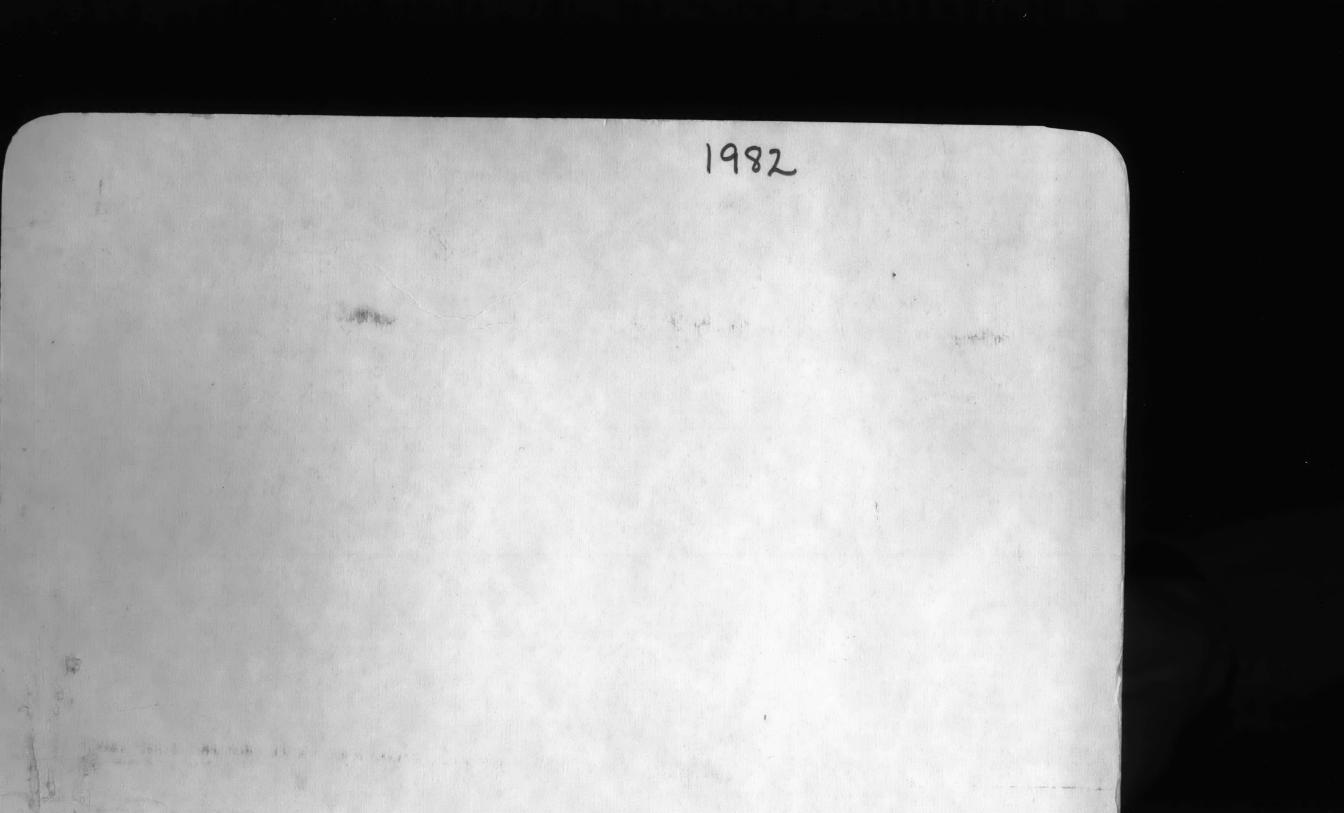
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FROM DPDO CAMP LEJEUNE NC

TO: CG MCB CAMP LEJEUNE NC

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SECOND FSSG

MCAS H NEW RIVER NC

NAVREGMEDCEN CAMP LEJEUNE NC

NAVREGDENCEN CAMP LEJEUNE NC

EMCB CAMP LEJEUNE

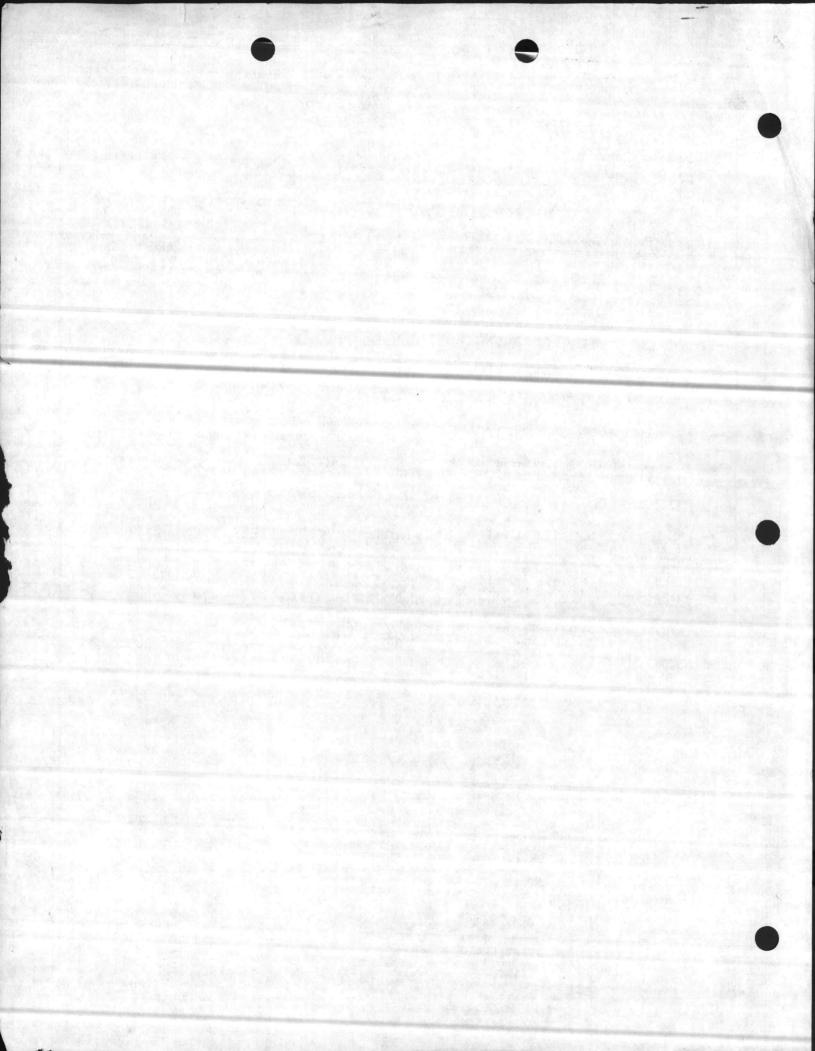
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65432

SUBJ: HAZARDOUS MATERIAL/WASTE WAREHOUSES, TP-451 AND TC-863 1. THIS OFFICE HAS ASSUMED RESPONSIBILITY FOR SUBJECT WAREHOUSES. REQUIREMENTS STILL EXIST FOR LOCATION AND COMPATIBLE ITEMS LAYOUT, WHICH MUST BE COMPLETED BEFORE ITEMS CAN BE ACCEPTED FOR STORAGE. 2. WHEN THIS WORK IS COMPLETED AND UPON NOTIFICATION THIS OFFICE WILL BEGIN RECEIVING AND STORING HAZARDOUS MATERIAL/WASTE.

B. ADDRESSES ARE REQUESTED TO READDRESS THIS MESSAGE TO SUBORDINATE.
COMMANDS TO INSURE WIDEST DISSEMINATION.

ISSTF   GSTF   DPDO   OCDR	
DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE	SPECIAL INSTRUCTIONS
MRS. DONNA HARRINGTON, SECRETARY GS-4, DPDo, 5613, 9 DEC 82	ACT   BLOG NRMC   NRDC
M. J. KING , CHIEF , DPDO , 2303	
SIGNATURE	UNCLASSIFICATION UNCLASSIFICATION BUT TO THE GROUP



ASSISTANT CHIEF OF STAFF, FACILITIES

18 Nov 82 DATE

File- 6240

TO:

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PUBLIC WORKS O

COMM-ELECT O

DIR, FAMILY HOUSING

DIR, UNACCOMPANIED PERS HSG

**BASE FIRE CHIEF** 

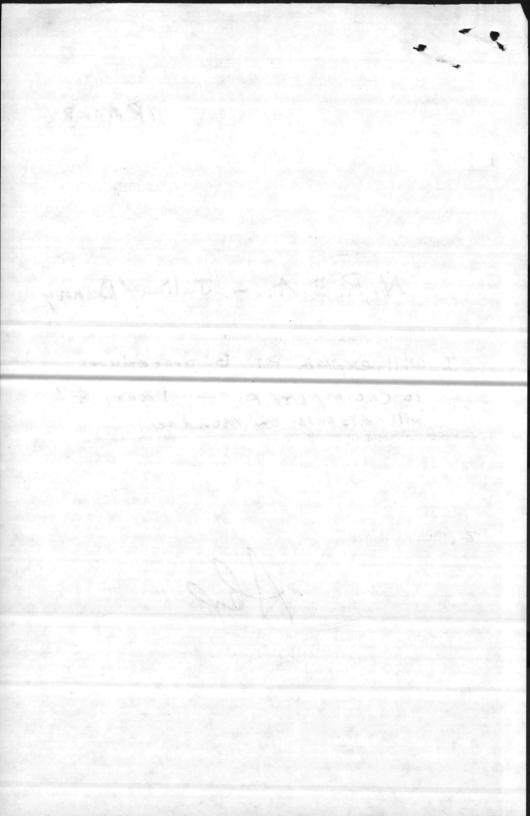
ATTN: N. R. E. A. - Julian/Danny

1. Attached is forwarded for information.

I will explain PT B procedures to Col M/LTCF - Danny & I will discuss on Monday. Please initial, or comment, and return all papels to this effice.

2 Your file copy

"LET'S THINK OF A FEW REASONS WHY IT CAN BE DONE"



DIVISION OF HEALTH SERVICES EASTERN REGIONAL OFFICE 404 St. Andrews Street Greenville, N.C. 27834 (919) 756-1343

November 15, 1982

Commanding General U.S. Marine Corp Base Camp Lejeune, NC 28542

Attention: Assistant Chief of Staff, Facilities

Dear Sir:

On Thursday November 4, 1982 an inspection by the N.C. Solid and Hazardous Waste Management Branch was performed at the hazardous waste storage buildings TC 863 and TP 451 located on base.

Our inspection revealed that the regulatory requirements addressed in my letter of October 19, 1982 have been met. This letter is to inform you that these facilities meet the requirements for hazardous waste storage facilities and can now begin receiving hazardous waste.

If you have any questions or if I may be of any further assistance please do not hesitate to call.

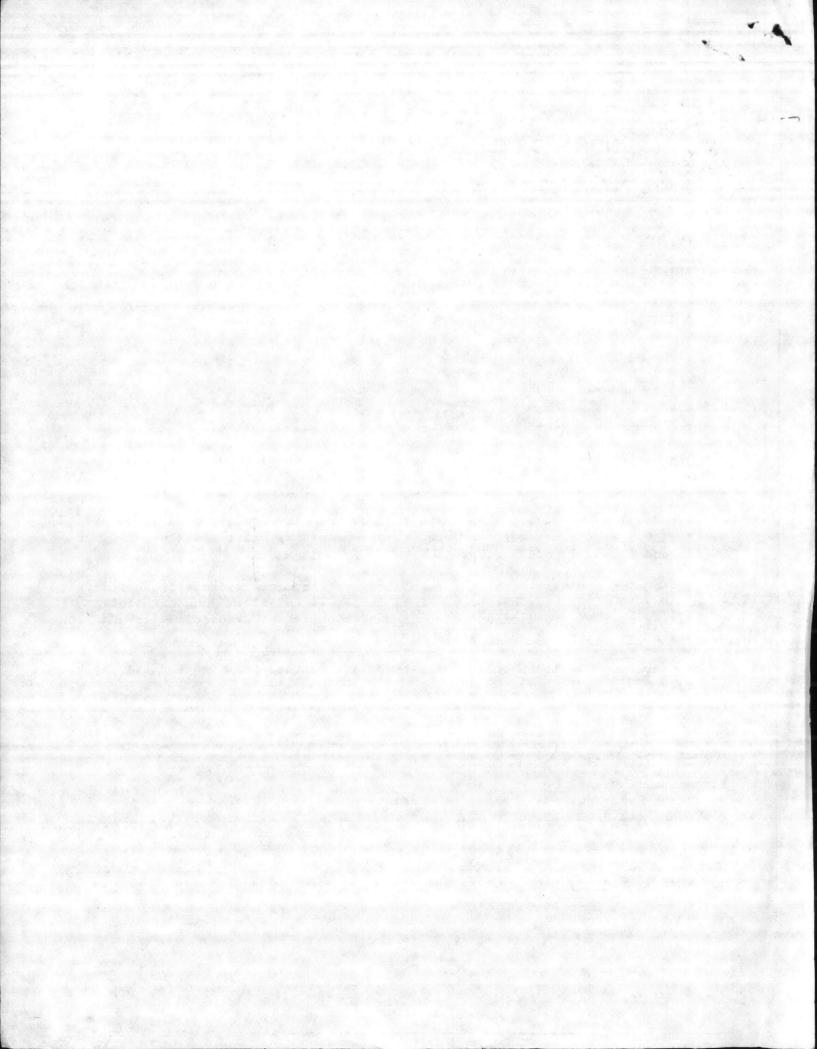
Very truly yours,

Kau

Raymond L. Church Solid and Hazardous Waste Management Branch Environmental Health Section

sle

cc: Asst. Chief of Staff, Logistics Traffic Management Office O.W. Strickland Jerry Rhodes



to: NRCA

DIVISION OF HEALTH SERVICES EASTERN REGIONAL OFFICE 404 St. Andrews Street Greenville, N.C. 27834 (919) 756-1343

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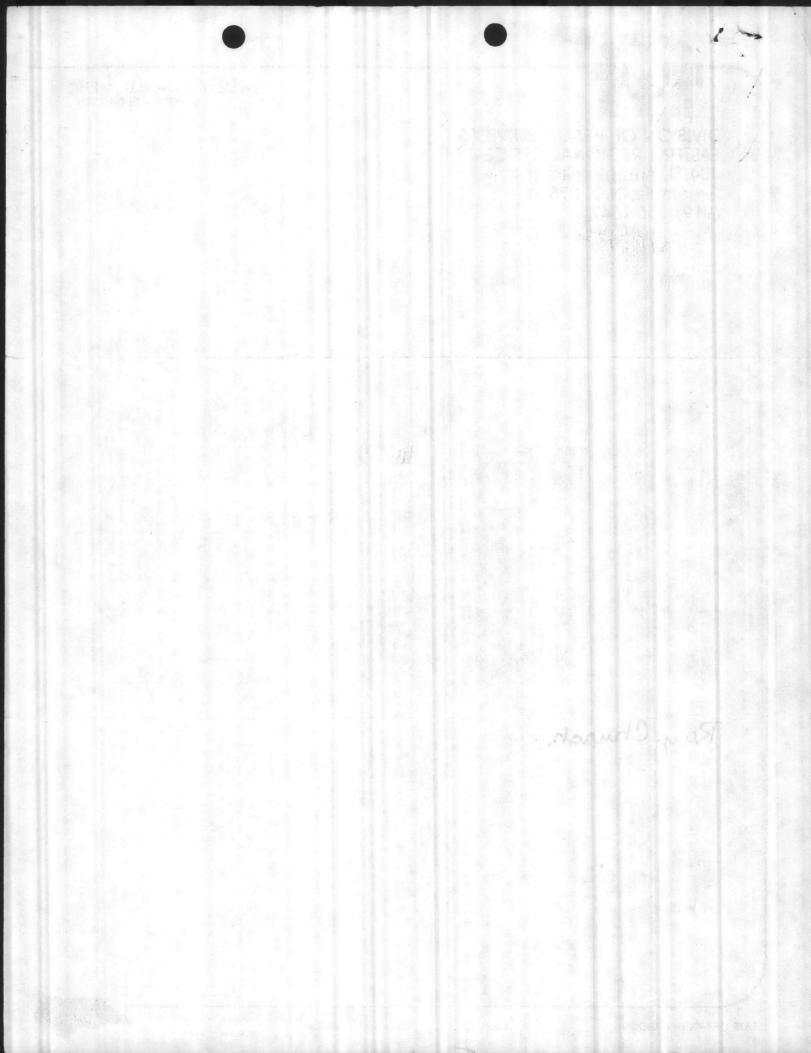
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Very truly yours,

Raymond L. Church Solid and Hazardous Waste Management Branch Environmental Health Section

sle

cc: Asst. Chief of Staff, Logistics Traffic Management Office O.W. Strickland Jerry Rhodes



\* UNCLASSIFIED \*

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292/20437

ROUTINE

1.

PT00351

PAGE 01

RT TU ZY UW RUEACMC5239 2922044-UUUU--RUEBDOA. ZNR UUUUU R 181428Z OCT 82 FM CMC WASHINGTON DC TO AIG EIGHT ACT: CG MCB BT UN CLAS //N11000// SUBJ: DISPOSAL OF SPILL RESIDUES (CMC CODE LFF-2) HODP DS BATTLE CREEK MI O11912Z OCT 82 (PASEP) A . MCO 4570.244 OF 20 JAN 82 8. MCO P11000.84 c. 1. REF A FORWARDED FOR ACTION AS APPROPRIATE. ITS CONTENTS WILL BE INCORPORATED INTO FORTHCOMING UPDATES OF REFS B AND C. BT #5 23 9

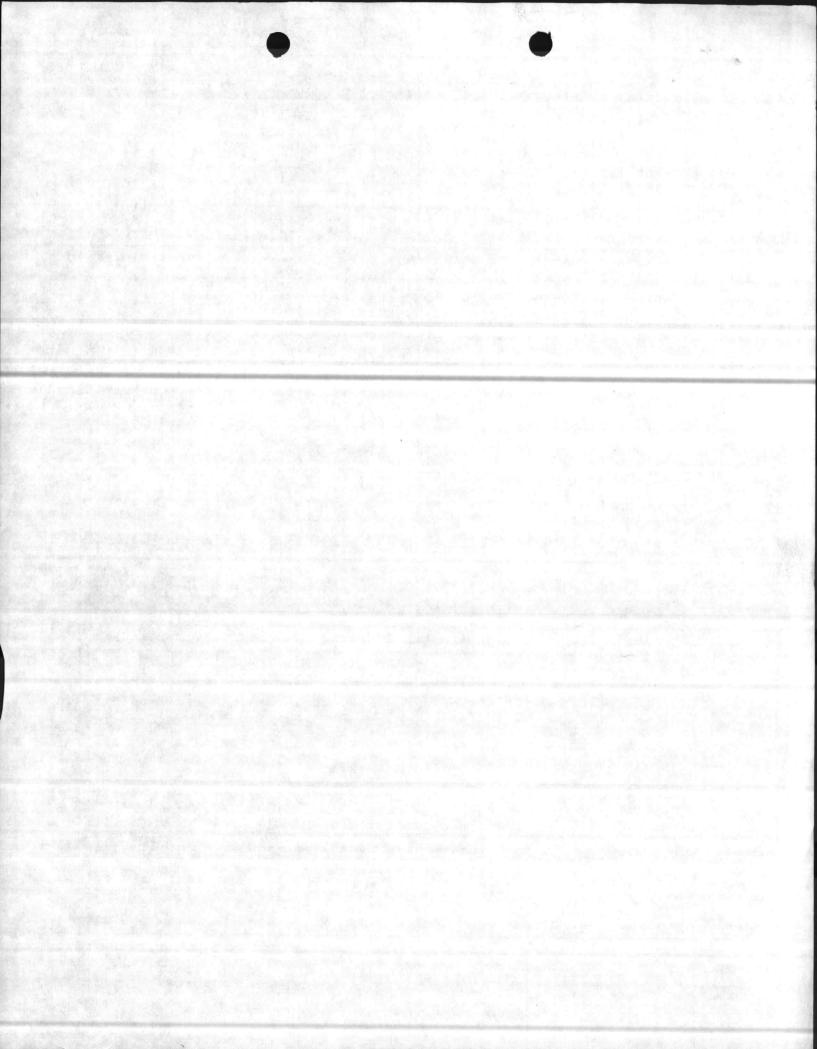
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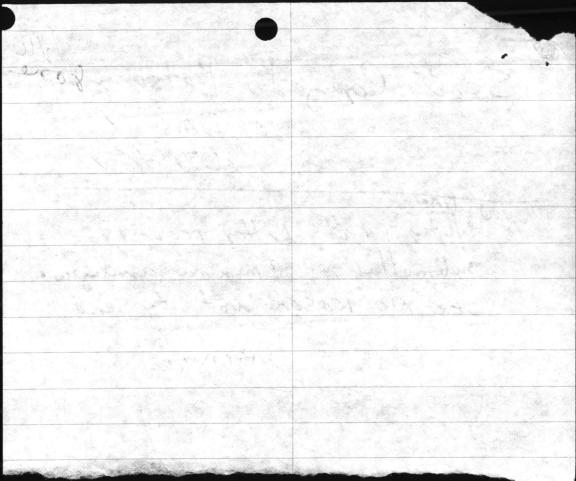
ROUTINE

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Send Copy to Bets & Some BMO 1 UTILities JULIAN Note That Letter requests Submittal of Chemica analysis. see NO ICasan not to send DAnny



11000

**DIVISION OF HEALTH SERVICES** P.O. Box 2091 Raleiah, N.C. 27602-2091

October 25, 1982

Commanding General USMC Camp Lejeune Camp Lejeune, North Carolina 28542

ATTN: R. F. Calta, Lieutenant Colonel USMC Base Maintenance Officer

Sir:

To conform the potable water treatment facilities of USMC Camp Lejeune to the provisions of the North Carolina Safe Drinking Water Act, the following public water supply I.D. numbers have been assigned.

04-67-041 USMC Hadnot Point USMC New River Air Station 04-67-042 04-67-043 USMC Holcomb Boulevard 04-67-044 USMC Tarawa Terrace 04-67-045 04-67-046 USMC Camp Johnson USMC Rifle Range 04-67-047 USMC Courthouse Bay 04-67-048 USMC Onslow Beach

These I.D. numbers should be shown on all reports of chemical analysis and operations from the respective treatment facilities and microbiological analyses from representative points within the respective distribution system.

These should be reported to Mr. John McFadyen in this office monthly.

Thank you for your continued cooperation.

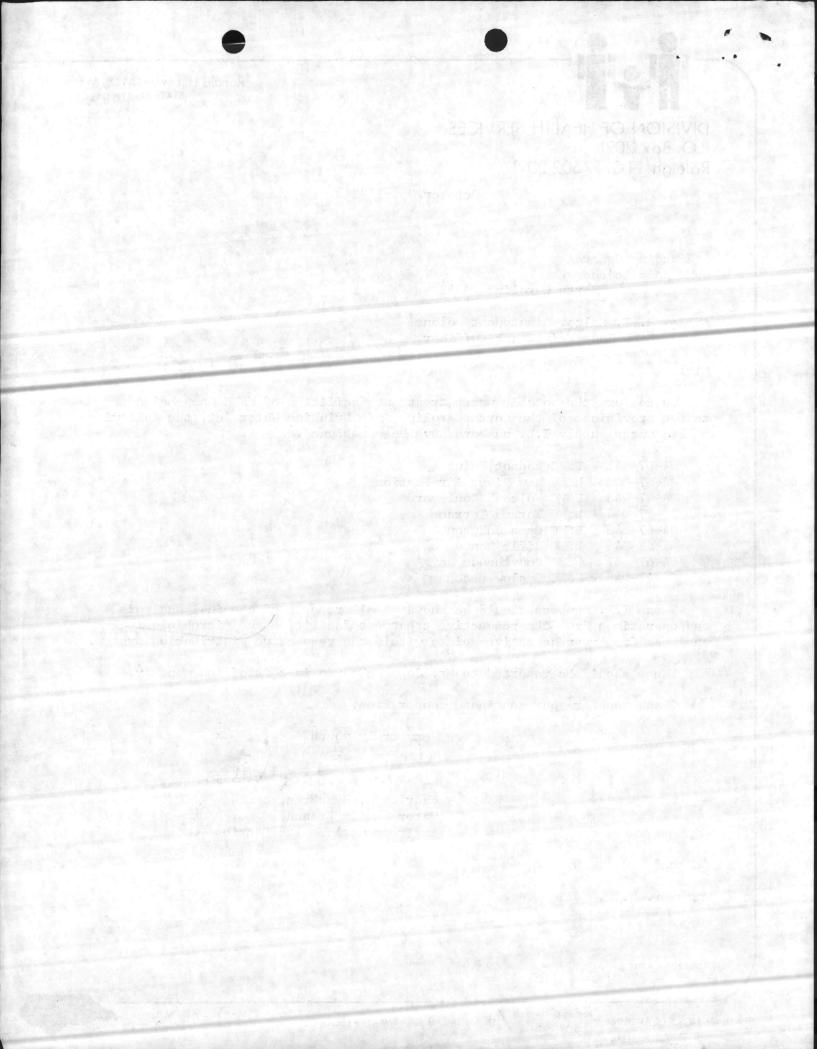
Very truly yours,

Charles E. Rundgren, Head Water Supply Branch Environmental Health Section

CER: chf

cc: Mr. M. P. Bell

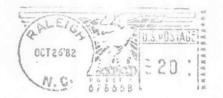
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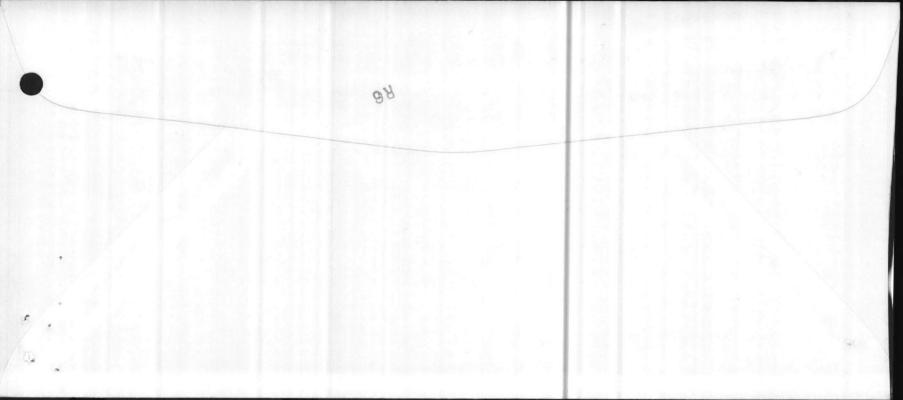
#### SDWA

STATE OF NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES DIVISION OF HEALTH SERVICES P. O. BOX 2091

RALEIGH. NORTH CAROLINA 27602 -2091



Commanding General Attn: R. F. Calta, Lieutenant Colonel USMC Base Maintenance Officer USMC Camp Lejeune Camp Lejeune, North Carolina 28542







### NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS DIVISION Marine Corps Base Camp Lejeune, North Carolina 28542

NREAD/TS/th 6240 8 Oct 1982

From: Director,

To: Assistant Chief of Staff, Facilities

- Subj: Hazardous Waste Disposal Inspections; status of Camp Lejeune (MCB) Storage Facility
- Ref: (a) Mtg btwn Ray Church (NC Div of Health Services), Jim Norris (TMO),
   D. Sharpe and T. Stamps (NREAD) on 6 Oct 1982
   (b) Fed Regs 40 CFR, 264 and 265

1. During reference (a) it was determined that the following requirements must be met before the hazardous waste storage facility (TP-451 and adjacent building) will be in compliance with reference (b) standards:

a. Install fence and gates

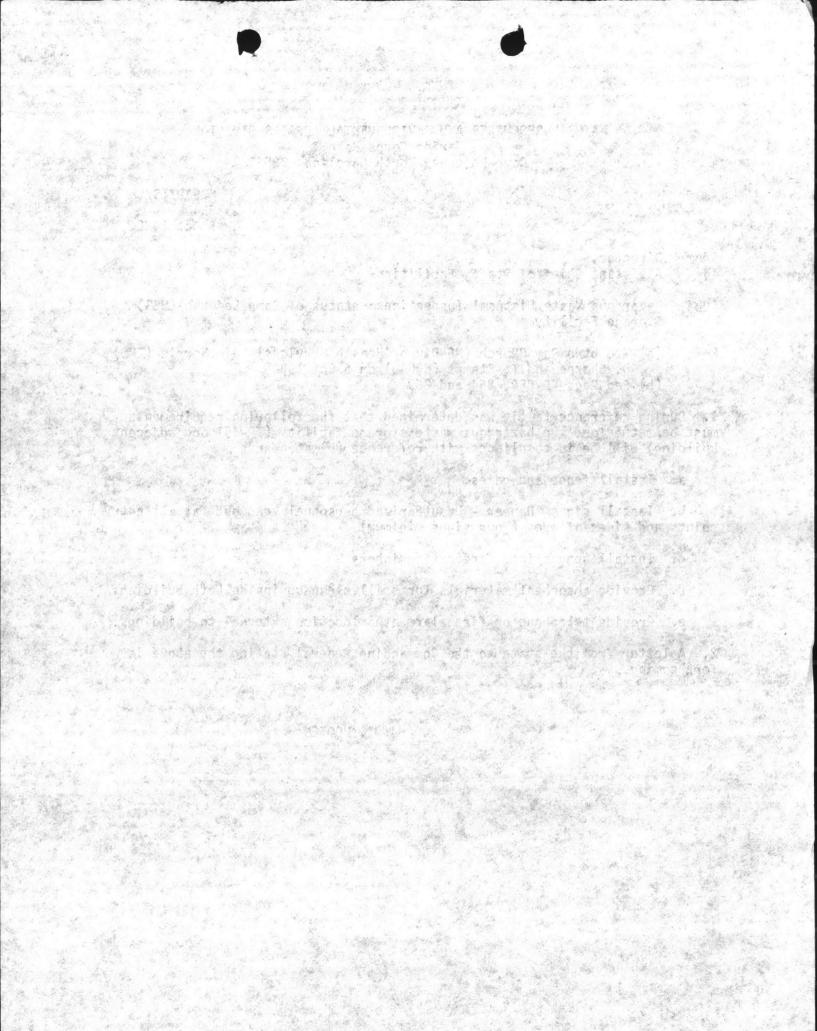
b. Install signs "Danger - Unauthorized personnel keep out" at all entry points and sides of area (four signs minimum)

c. Install appropriate fire extinguishers

- d. Provide absorbent materials for spill clean-up inside both buildings
- e. Provide telephone or fire alarm at a location external to buildings.

2. A letter from the state to the Commanding General stating the above is forthcoming.

J. I. WOOTEN

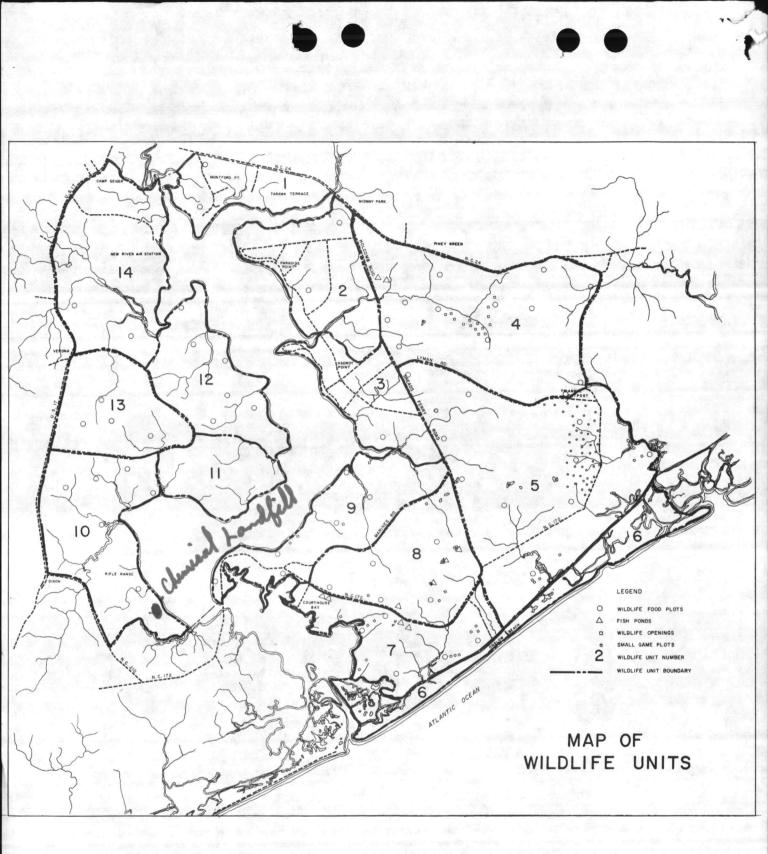


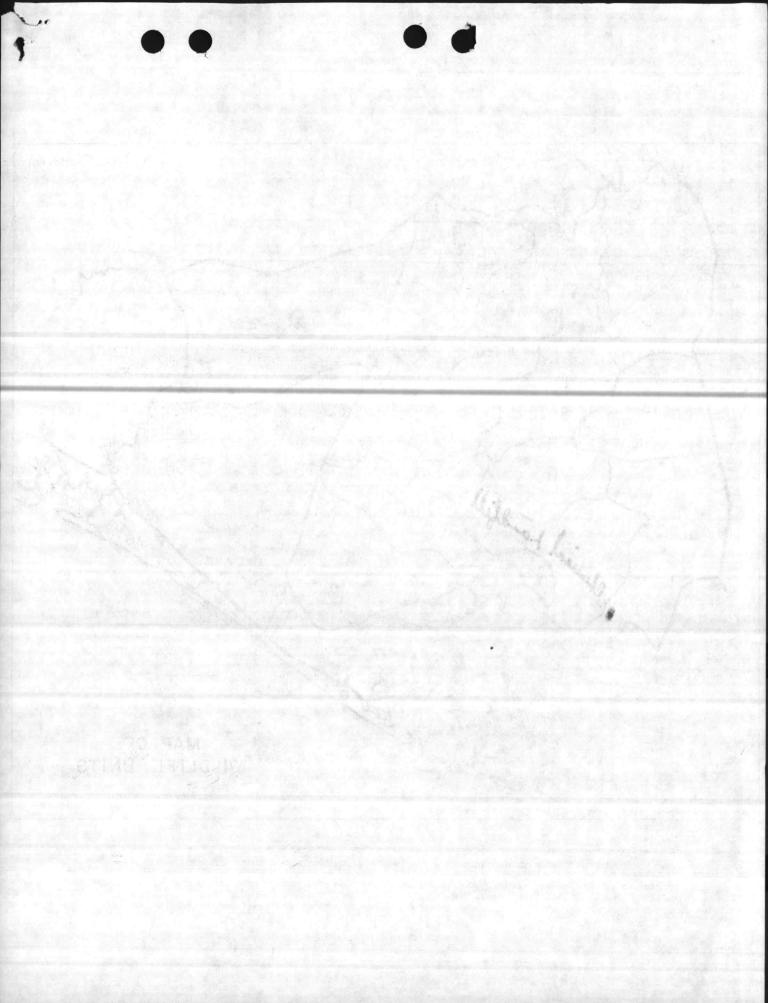
2005 URA RESOURCES AND ENVIRONMENT AF STRANCH Base Maintenance Division Marine Corps Base Camp Lejeune, North Carolina 28542 Date 6 Oct 82 Director, NREAB From: To: File Subj: Chimical Landfill - Now or Martan Gar disposal 1955 On 5 det 52 IT cal Fitzgerald, Ac/Stac Maj L. Scutton STA and I met Tuplone 346-3720 Retired Bare Maint Mr. Jory Rochelle (Retired Bare Maint Heavy Equipment Operator) at Subj tandfill mat Claria of Base. Mr. Rochille show as where he burried app 50 en 55 gal driver of suly Gas. He described Now he ware dringd with protecting NBC Gray (Bar much it). Mo Rochelle also mentioned another Das disposal site near old sow mill site off Holcomb Blod. He voluntured to show we the site on 8 Det 82.

· copy of atached map provide LT col Fitzgerald on 5 Det 82 or requested. - Mwill be with Moz Scutter mino on subj Dos. Julian 

5 set 82 by T. Worten Chimical Landful Rifle Rouge Nerve on Mustard Gas Disposal sati app 50 to 55 gal drum Norme or Mustard Gas Disposal site 話 Y New Ring X Not to Seal Event Breek

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ROUTINE

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PAGE 01

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RTTUZYUW RUEACMC6537 2952323-UUUU--RUEBDOA. ZNR UUUUU R 221444Z OCT 82 FM CMC WASHINGTON DC TO AIG EIGHT ACT: MCB BT UNCLAS //N11000// SUBJ: HAZARDOUS WASTE RECORDKEEPING AND REPORTING ROMTS (CMC CODE LFF-2)

A. CMC 1014257 MAR 82

B. MCBUL 6280 OF 1 MAY 80 WITH CH 1-2

C. FEDERAL REGISTER VOL 47 FR44938 OF 12 OCT 82. (NOTAL) 1. REF A ADVISED OF ENVIRONMENTAL PROTECTION AGENCY (EPA) SANCTIONED DELAY FOR IMPLEMENTING THREE ROMTS UNDER ITS HAZARDOUS WASTE (HW) REGULATIONS. PUBLISHED UNDER SUBTITLE C OF RESOURCE CONSERVATION AND RECOVERY ACT (RCRA). AND IMPLEMENTED BY REF B. FOL SUMMARIZES REF C ANNOUNCEMENT RE SUBJ ROMTS:

A. 1981 ANNUAL RPT: GENERATOR AND TREATMENT. STORAGE. AND DISPOSAL (TSD) FACILITY RPTS FOR CALENDAR YEAR 1981 MUST BE POSTMARKED TO APPROPRIATE REGIONAL OFFICE OF EPA NLT 10 JAN 83. (EPA TO PRINT AND DISTRIBUTE ANNUAL RPT FORMS. IF FORMS NOT RCVD BY 30 NOV 82. REC CONTACT COGNIZANT ENGINEERING FIELD DIV OF

PAGE 02 RUFACMC6537 UNCLAS FACENGCOM FOR ASSISTANCE).

B. QUARTEPLY GROUND-WATER MONITORING RPTS: OPERATORS OF HW SURFACE IMPOUNDMENTS, LANDFILLS, AND LAND TREATMENT FACILITIES MUST SUBMIT 6 MAR 82, 3 JUN 82, AND 3 SEP 82 GROUND-WATER MONITORING ANALYSIS RPTS IMMEDIATELY. (THE FINAL QUARTERLY RPT IS DUE 4 DEC 82).

C. GROUND-WATER QUALITY ASSESSMENT PROGRAM OUTLINE: THOSE TSD FACILITIES REQUIRING AN OUTLINE OF A GROUND-WATER QUALITY ASSESSMENT PROGRAM SHOULD NOW HAVE IT ON-SITE, AVAILABLE FOR REVIEW UPON REQUEST BY EPA REGULATORY OFFICIALS.

2. THESE CHANGES DO NOT AFFECT ANY MORE STRINGENT ROMTS IMPOSED BY STATES.

3. QUESTIONS RE THIS SUBJ SHOULD BE DIRECTED TO MR. PAUL HUBBELL AT AV 224-2171/3188.

BT #6 53 7

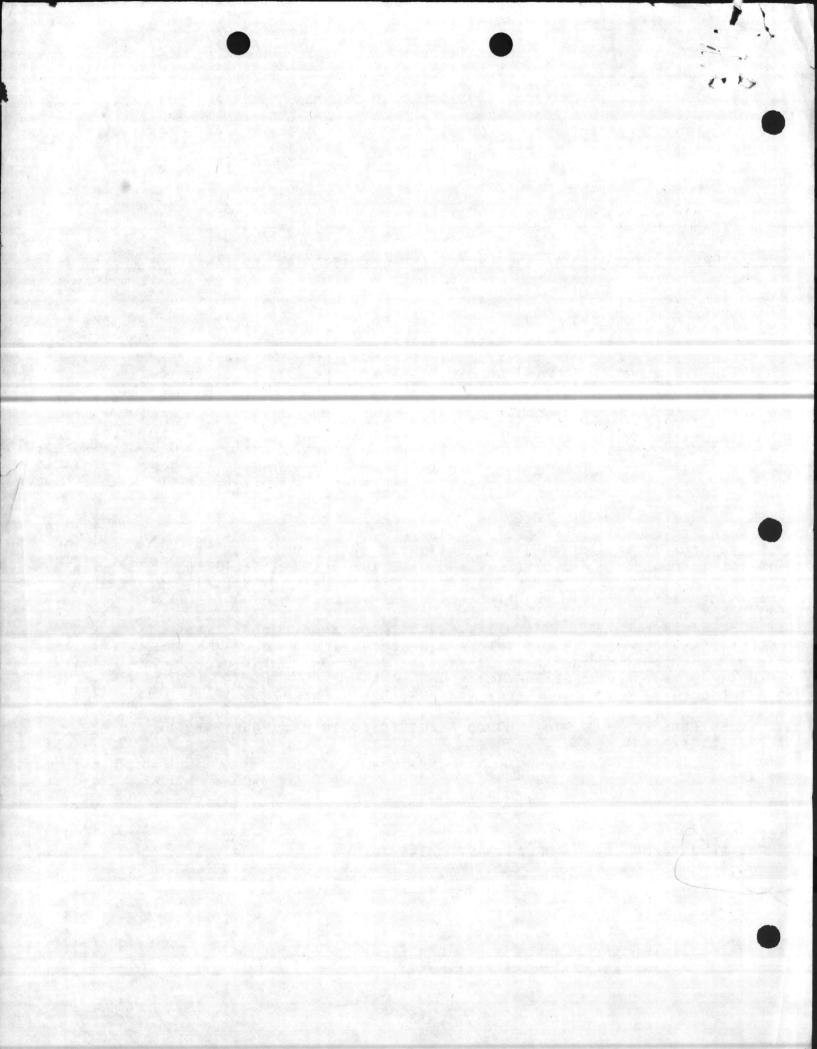
ORIGINAL ACTION

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ACT: BFAC INFO: BADJ, COMP, MAIN, BPWO, DOST //345//

ROUTINE

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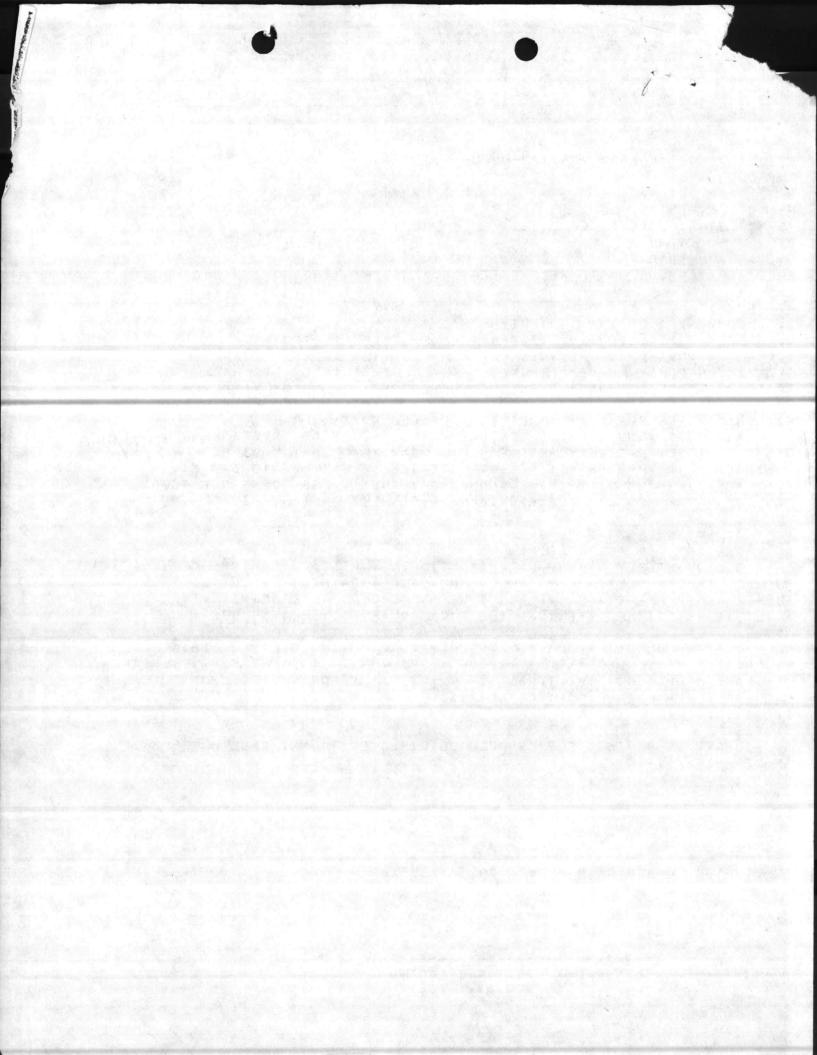


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ROUTINE

\* UNCLASSIFIED •



MAIN/DDS/th 6240 SEP 2 8 1982 8 ALV

Mr. Gordon Layton Solid and Hazardous Waste Branch Environmental Health Section, Division of Health Services Post Office Box 2091 Paleich, North Carolina 27602-2091

Dear Sir:

Encl

The enclosed information is provided per your request of 22 September 1982. The list is representative of the kinds and quantities of medicines and medical supplies which are disposed of annually by military medical organizations assigned to Marine Corps Base. Camp Lejeune. Please advise of any items on the list which cannot be disposed of at the Base Sanitary Landfill (Permit No. 67-03).

Questions regarding this matter should be forwarded to Mr. Danny Sharpe at telephone extension (919) 451-2083.

Sincerely,

R. F. CALTA Lieutenant Colonel, U. S. Marine Corps Base Maintenance Officer By direction of the Commanding General

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MAIN/JIW/th 6240 SFP 2 1 1982

From: Base Maintenance Officer To: Staff Judge Advocate

Subj: Hazardous Waste Regulations

Encl: (1) Div of Health Ser Itr of 1 Sep 1982

1. Natural Resources and Environmental Affairs personnel have discussed the enclosure with Mr. Emil Breckling, North Carolina Solid and Hazardous Waste Branch. He advised that Camp Lejeune, as a federal facility, was exempt from the requirements. However, it is requested your office review the enclosure and provide an opinion.

2. Point of contact is Mr. Danny Sharpe, Natural Resources and Environmental Affairs Branch, extension 1690.

R. F. CALTA

SEP 2 1 1982

Sec. 3



DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

September 1, 1982

TO: Owners and Operators Hazardous Waste Treatment, Storage or Disposal Facilities in North Carolina

FROM: Glenn Dunn, Attorney Solid & Hazardous Waste Management Branch

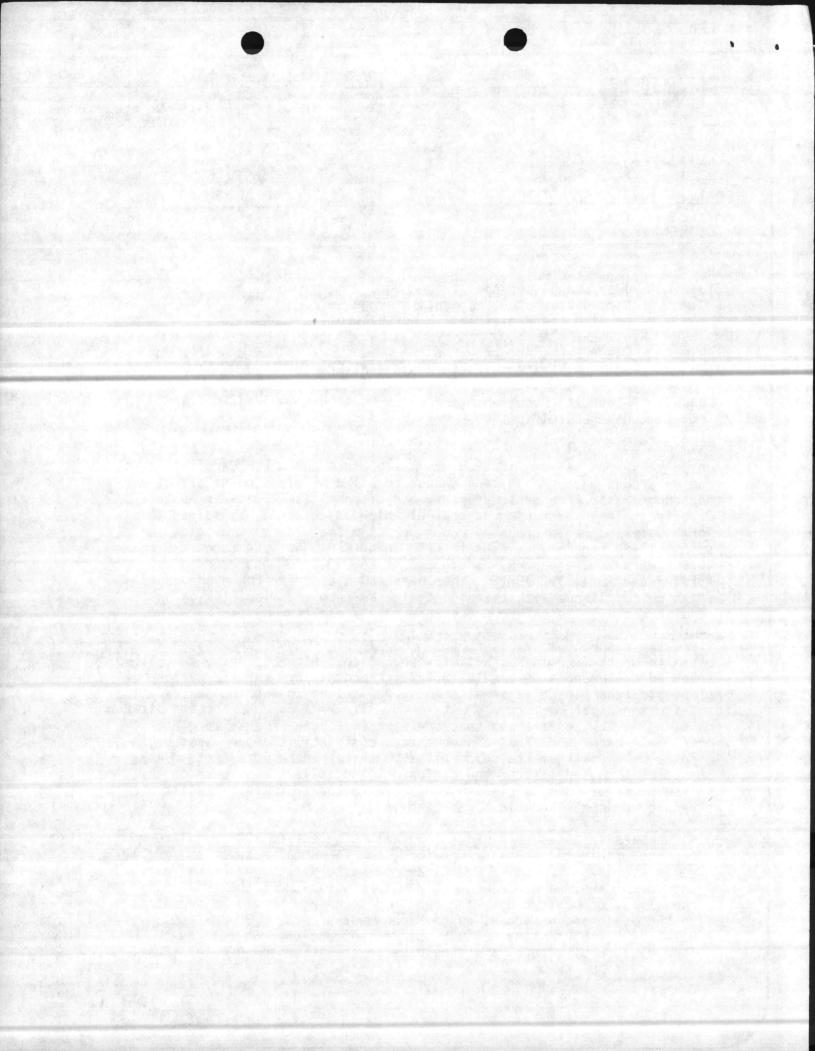
SUBJECT: Financial Requirements for TSDF's - Changed Deadlines and Other Clarifications

On July 7, 1982, a notification was mailed from the North Carolina Solid and Hazardous Waste Management Branch to all owners and operators of hazardous waste treatment, storage, and disposal facilities in North Carolina. That memorandum, a copy of which is attached, explained that North Carolina would probably adopt verbatim the Federal financial responsibility regulations as set forth in 40 CFR, Part 264 Subpart H and 40 CFR Part 265 Subpart H, as adopted on May 19, 1980 and amended on April 7 and April 16, 1982. That memorandum also set forth the dates on which compliance with the financial assurance and liability coverage regulations will be enforced (see the July 7 memorandum).

Since the memorandum was sent, the Federal rules have been adopted verbatim in North Carolina as anticipated. Also, in the interim, two wellattended conferences were held in Raleigh and Hickory for the purpose of clarifying the financial requirements regulations to the industries and institutions that must comply with them. It was apparent from the discussions at the conferences that the financial requirements were not completely understood and, consequently, most facilities are just beginning to make arrangements to comply with them. There were certain key points that caused most of the confusion, and it is the purpose of this follow-up memorandum to clarify those points and to further explain the schedule for compliance in North Carolina.

-- North Carolina is authorized to implement the entire RCRA regulatory program within the State. Therefore, the financial regulations are administered by the Solid and Hazardous Waste Management Branch of the North Carolina Department of Human Resources, not the EPA. All questions, communications, and required documents should be submitted to the Solid and Hazardous Waste Management Branch, P.O. Box 2091, Raleigh, North Carolina 27602, should indicate that it relates to financial requirements, and should be to the Attention of Glenn Dunn.

ENCLOSURE (1)



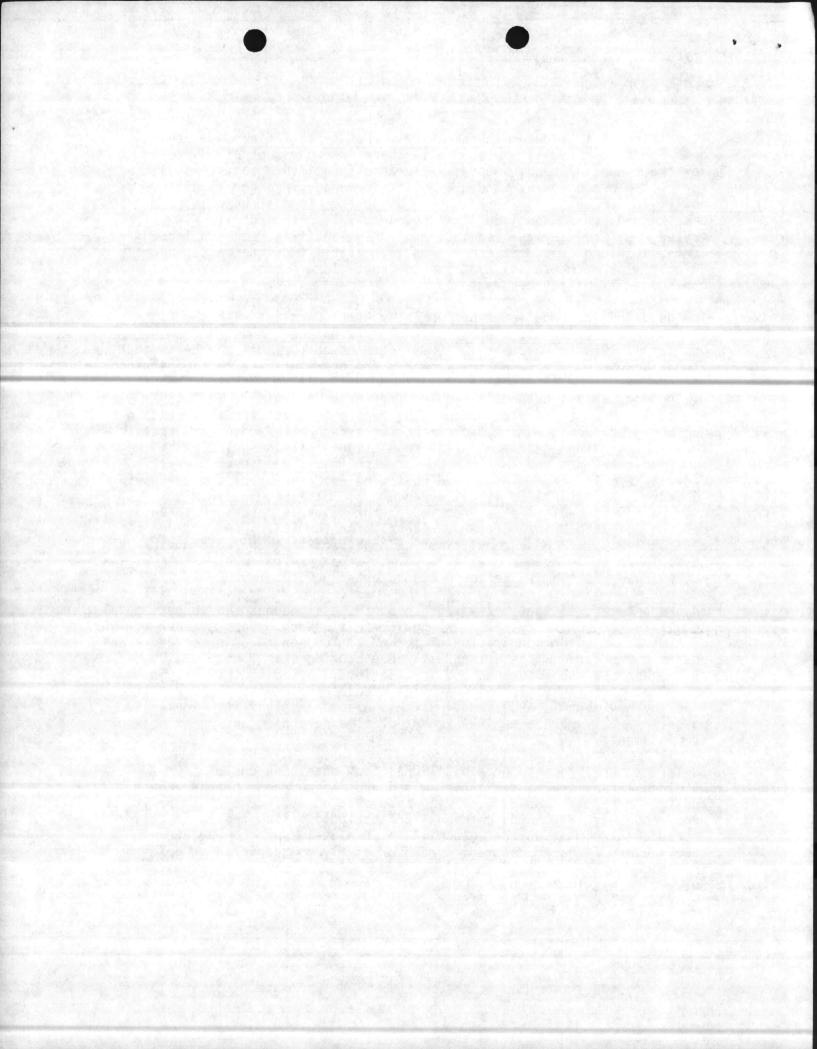
--It is essential to determine accurately what type of financial re-<u>quirements your facility must meet</u>. There are four separate purposes for the financial requirements: assurance for closure costs, assurance for post-closure costs, sudden liability coverage, and non-sudden liability coverage. All TSDF's must provide some form of assurance for closure and non-sudden liability coverage, unless the facility is exempted explicitly by the regulations. Only landfills, surface impoundments, and land treatment facilities (i.e. facilities that are subject to post-closure measures) must provide post-closure cost assurances and non-sudden liability coverage.

--The deadline for compliance by TSDF's in North Carolina with the financial assurances for closure and post-closure has been changed from October 1, 1982 to November 1, 1982. The reason for this change is that it has become apparent that many owners and operators are just beginning to understand the alternative mechanisms available to them and the nature of the documentation that is required for each mechanism. This is a particularly acute problem because the regulations require that certain documents be submitted for each mechanism and that the documents contain the exact wording specified in the regulations. The description of the required documents and the wording for each is set out in the April 7 Federal Register (for closure and post-closure assurances) and the April 16 Federal Register (for liability coverage). The requirements for closure and post-closure assurances are more clearly described in an excellent Guidance Manual prepared recently for the EPA. However, due to the complexity of these regulations and the fact that the Guidance Manual has only recently become available, it is apparent that many TSDF's will not be ready to submit the correct documents by October 1, 1982.

In order to ensure that every TSDF in North Carolina has the correct model documents to use, every TSDF must notify this Branch before October 1, 1982 of the mechanism or combination of mechanisms chosen to assure closure and post-closure care. This Branch will then provide each facility with copies of the appropriate documents and instructions. By doing this, it is our hope that most facilities will provide adequate documents the first time (i.e. by November 1, 1982) and thus this Branch and facility owners and operators will spend a minimal amount of time returning and re-executing the documents.

It is not our intent to prohibit TSDF's from obtaining copies of the Guidance Manual or the regulations, and proceeding ahead of the aboveoutlined schedule. However, if you choose to do so, you are strongly urged to obtain the Guidance Manual and strictly follow the instructions and documents in it so that you will be absolutely sure to execute and submit every required document worded precisely as specified. Copies of the Guidance Manual may be obtained from: 1CF, Inc. 1850 K Street, N.W., Suite 950, Washington, D.C. 20006.

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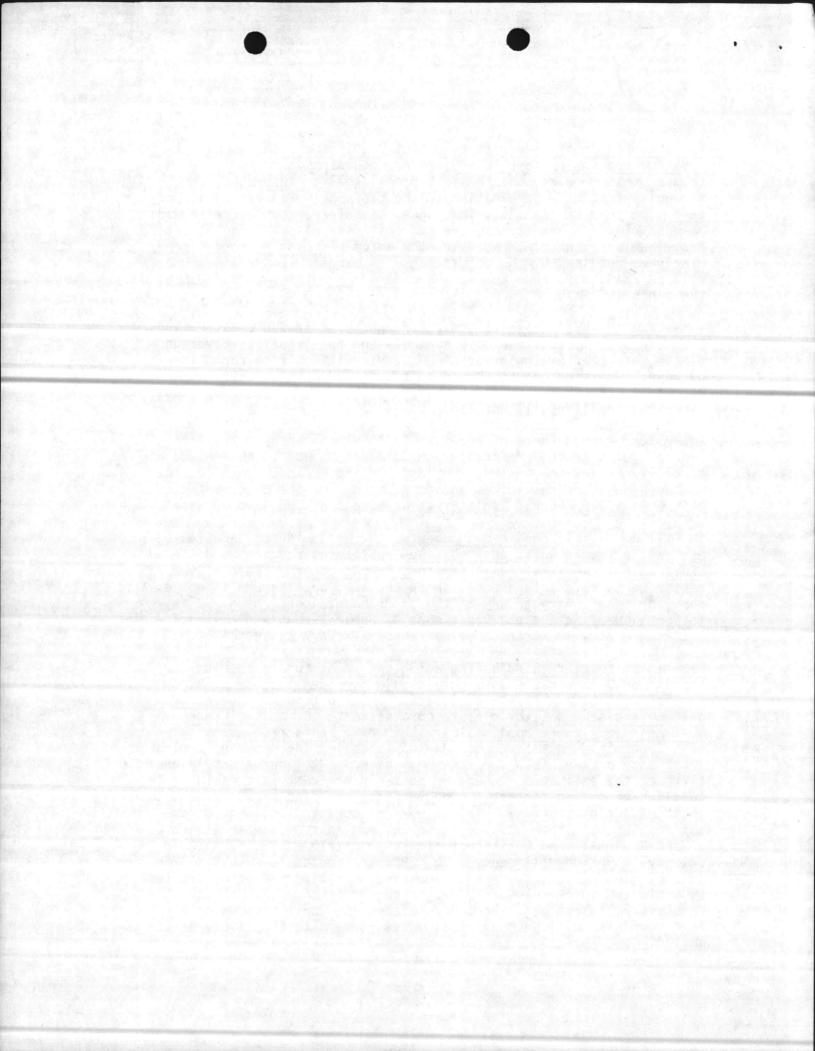
--The date for compliance with financial requirements for sudden liability coverage remains October 1, 1982. The mechanisms that can be used to meet this requirement are limited to liability insurance, the financial test or a combination of the two. Most facilities already have some form of liability insurance, therefore, compliance should be much simpler than for closure and post-closure care and the October deadline is reasonable. However, the documents must be worded precisely as required by the regulations. A manual with model documents will be ready very soon and can be ordered from the same address as the financial assurances manual.

-3-

Those TSDF's that choose to use the financial test for closure (and post-closure, if applicable) assurances and for liability coverage please note that a single set of documents will suffice for this purpose. Those documents should be submitted to this Branch by October 1, and the extension to November 1 of the closure/post-closure assurance deadline will not apply to you.

Again let me urge those of you that follow this approach the April 16 Federal Register or, preferably the Guidance Manual to obtain and carefully follow the instructions and wording for documents provided in those publications. I am enclosing a copy of the pertinent pages of the April 16 Federal Register to be sure that you have it available.

- --<u>In filling out all required documents, the words "North Carolina Department of Human Resources" must be substituted for the words "Administrator", Regional Administrator" or "Director". Each of the latter terms refers to a position in the EPA, but the EPA is not a party or beneficiary to any of these agreements concerning TSDF's in North Carolina and the Department of Human Resources, the administering agency in North Carolina, must therefore be substituted.</u>
- --Facilities that are considering using the trust fund mechanism for closure or post-closure assurance should consider that final RCRA permits will have a five year duration and the fund will therefore be required to equal the closure cost estimate (or post-closure cost estimate, where applicable) within five years from issuance of the permit. This five year period is called the "pay-in" period. Thus, each payment into the fund must be equal to approximately onefifth of the estimated closure or post-closure cost (not taking into consideration such factors as the interest the fund might earn or the costs of administration). This five-year duration will not become applicable until the facility converts from Part A Interim Status to a Part B permit, and until that time the interim status formula for the pay-in period will apply, i.e. 20 years beginning with the effective date of the regulations or the remaining operating period of the facility as estimated in the closure plan, whichever is shorter. However, North Carolina will soon begin Part B permitting so facilities using the trust fund mechanism will soon be required to convert to the five year pay-in period.



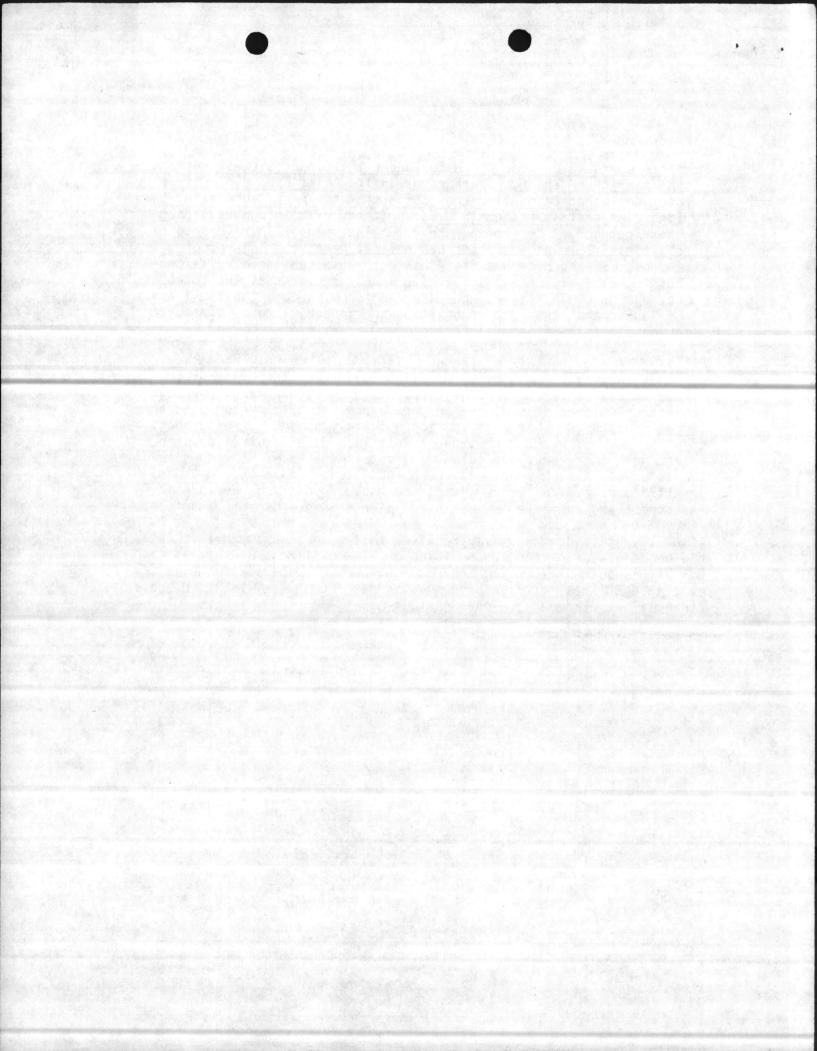
--<u>There seems to be some confusion under the financial test concerning</u> <u>the meaning of the four paragraphs in the Chief Financial Officer's</u> <u>statement that categorize the TSDF's that the Party submitting the</u> <u>financial test is responsible for</u>. It may help in understanding these categories to remember that the last paragraph refers to facilities in States where the EPA has delegated the RCRA program to the host State, but that State has not yet established rules concerning financial responsibility. Also remember that the total of the number of TSDF's in each paragraph should equal the total number of TSDF's that the Party submitting the financial test is assuring by means of the financial test.

Finally, in closing this memorandum, it is unfortunately necessary to ask that those TSDF's in North Carolina that have already submitted financial assurances review the documents submitted against the regulations or Guidance Manual and prepare a new set of assurances accordingly. This Branch has received approximately 55 sets of assurances and a quick review shows that nearly all lack some required documents and/or have incorrectly executed documents. If you wish us to return the documents that have already been submitted, please inform us and we will do so. If after reviewing your submission, you conclude it is correct and complete as submitted, please inform us to that effect.

Also, I want to urge whomever receives this memorandum to get it into the hands of the person responsible for financial requirements as quickly as possible (if you are not that person) because of the impending deadlines. If you have questions or otherwise wish to discuss financial requirements, please contact me.

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DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

July 7, 1982

Ronald H. Levine, M.D., M.P.H.

STATE HEALTH DIRECTOR

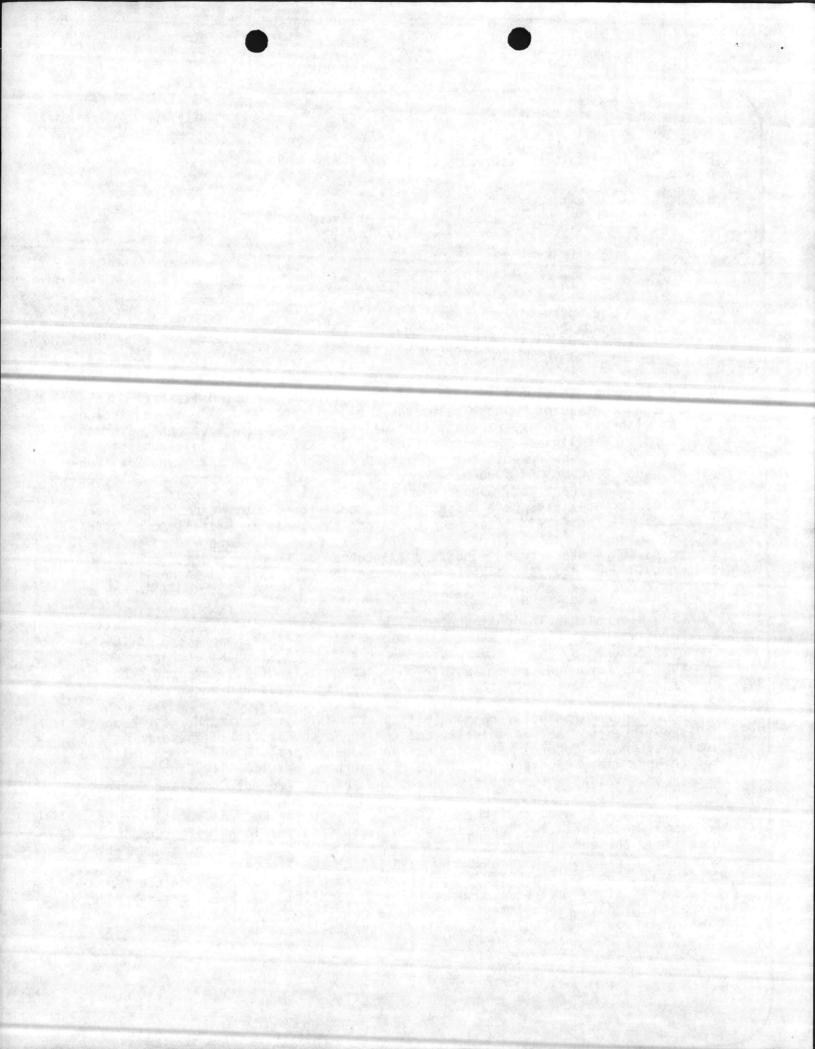
TO: Owners and Operators Hazardous Waste Treatment, Storage or Disposal Facilities in North Carolina

On November 19, 1980, the State of North Carolina adopted its Hazardous Waste Management Rules. These rules adopt by reference the Federal regulations dealing with financial requirements for all hazardous waste treatment, storage, and disposal facilities. More specifically, 10 NCAC 10F .0032(g) adopts the final financial requirements for facilities set forth in 40 CFR, Part 264, Subpart H, and 10 NCAC 10F .0033(h) adopts the interim financial requirements set forth in 40 CFR, Part 265, Subpart H. North Carolina's rules require that hazardous waste facilities have financial assurance for closure (and post-closure if a disposal facility). Four mechanisms are available to facility owners for accomplishing this task. These are: (1) Trust Fund; (2) Surety Bond guaranteeing payment into a trust fund; and (3) Letter of Credit; and (4) other methods that provided an equivalent degree of protection concerning human health and the environment as mechanisms 1, 2, and 3.

The Federal regulations adopted by North Carolina also require that all hazardous waste treatment, storage and disposal facilities operating in the State be covered by liability insurance for sudden (accidental) occurrences, and that all hazardous waste surface impoundments, landfills, or land treatment facilities have liability insurance covering non-sudden occurrences.

The Federal financial responsibility regulations, Subpart H, have been revised since they were originally adopted in North Carolina. These revisions, published in the Federal Registers on April 7 and April 16, 1982, accomplished two things. They expanded the financial assurance and liability insurance mechanisms available to facility owners and set new Federal compliance dates.

It is anticipated that the above revisions in the Federal rules, except for compliance dates, will be adopted in North Carolina in August. Until that time, the existing North Carolina Rules for Hazardous Waste Management continue in effect. These existing rules have been strictly enforced concerning required cost estimates for closure and post-closure. When the Federal revisions have been adopted in North Carolina, the Solid and Hazardous Waste Management Branch intends to enforce compliance with the Subpart H, Financial Requirement Rules, beginning on the following dates:



unitient is	Permitted Status & <u>New Facilities</u>	Interim Status & Existing Facilities
Financial assurance for closure and post-closure care plans	At least 60 days before the first receipt of hazardous waste	October 1, 1982
Liability coverage for sudden accidental occurrences	At least 60 days before the first receipt of hazardous waste	October 1, 1982
Liability coverage for non-sudden accidental occurrences	At least 60 days before the first receipt of hazardous waste	Annual Sales or Revenues over \$10 mil. \$5-\$10 mil. others

The new additional Federal mechanisms for achieving financial assurance as published in the Federal Register on April 7 and April 16, 1982 are likely to be adopted as written in North Carolina, and should therefore provide accurate guidance in your preparations for providing financial assurance by the above dates. Please contact this office at (919) 733-2178 if you have any questions regarding your responsibilities in complying with these requirements.

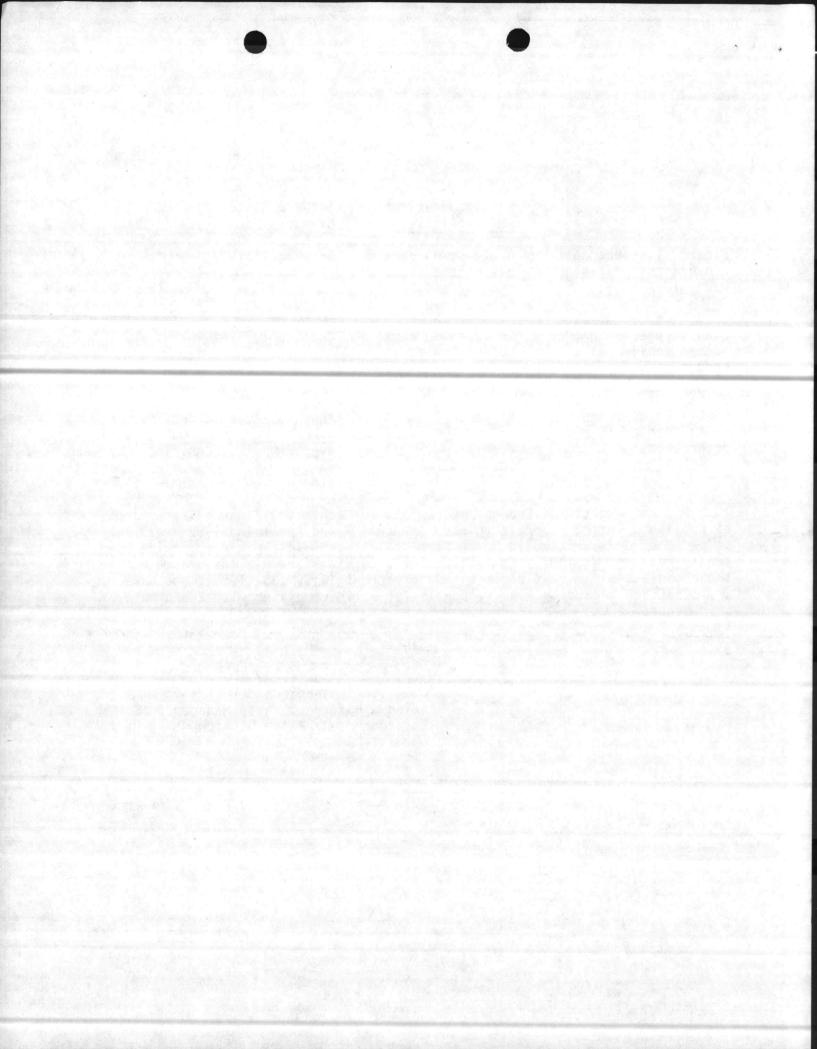
Sincerely, 0. W. Strickland, Head

Solid & Hazardous Waste Management Branch Environmental Health Section

OWS:nlc

Attachment

-2-



NOTE: THE RULES DEFINING LIABILITY COVERAGE REQUIREMENTS ARE ON PAGES 1-3, AND THE WORDING FOR THE INSTRUMENTS IS ON PAGES 3-5.

### PART 265-INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

### Subpart H-Financial Requirements

a. Section 265.141 is revised to read as follows:

§ 265.141 Definitions of terms as used in this subpart.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations" whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited' refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current habilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

owner's equity. "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. The Agency intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured."

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" . means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

### \$ 265.147 Liability requirements.

(a) Coverage for sudden accidental occurrences. By the effective date of these regulations, an owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million. exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (a)(1), (a)(2), and (a)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be smended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 204.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 204.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrator if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

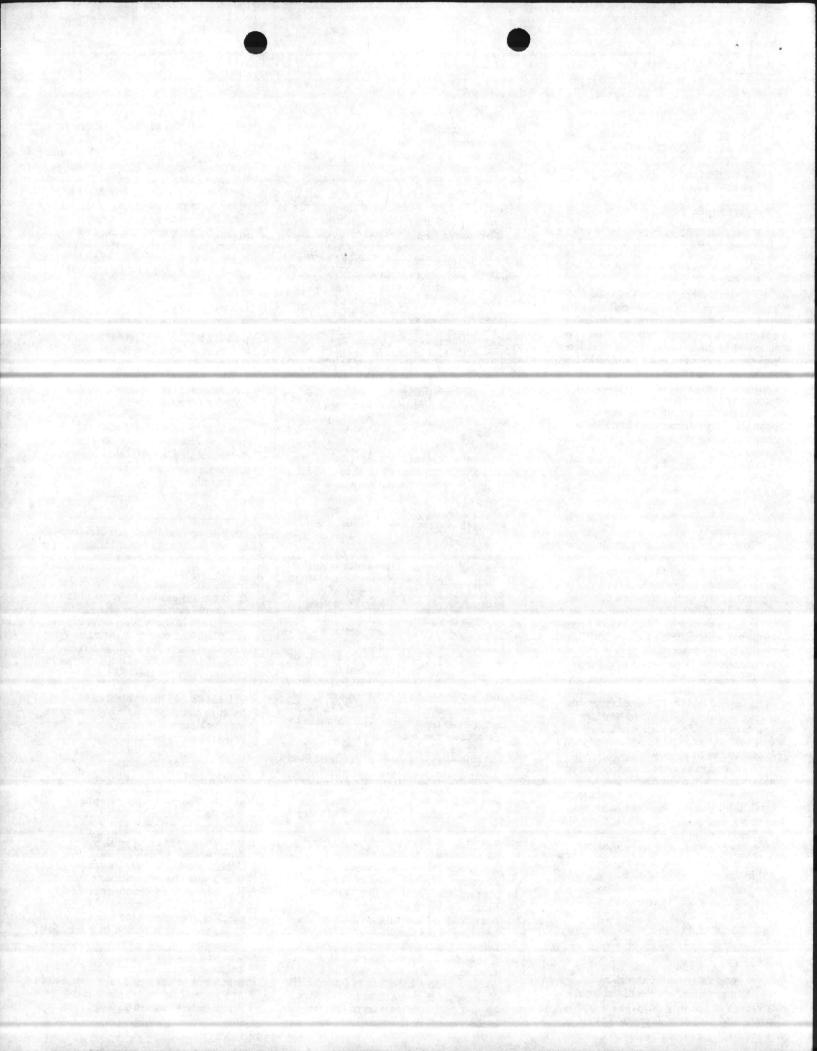
(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) Coverage for nonsudden accidental occurrences. An owner or operator of a surface impoundment. landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily damage and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (b)(1). (b)(2), and (b)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 204.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 204.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the E Sacilities are located in more than one



Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage must total at least the minimum amounts required by this paragraph.

(4) The required liability coverage for nonsudden accidental occurrences must be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these regulations, will determine which of the dates applies. If the owner and operator of a facility are two different parties, or if there is more than one owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues will determine the date by which the coverage must be demonstrated. The dates are as follows:

(i) For an owner or operator with sales or revenues totalling \$10 million or more, 6 months after the effective date of these regulations.

(ii) For an owner or operator with sales or revenues greater than \$5 million but less than \$10 million, 18 months after the effective date of these regulations.

(iii) All other owners or operators, 30 to months after the effective date of these 7 regulations.

(5) By the date 6 months after the effective date of these regulations an owner or operator who is within either of the last two categories (paragraphs (b)(4)(ii) or (b)(4)(iii) of this section) must, unless he has demonstrated liability coverage for nonsudden accidental occurrences, send a latter to the Regional Administrator stating the date by which he plans to establish such coverage.

(c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the Regional Administrator that the invelse of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or ( group of facilities, the owner or operator

may obtain a variance from the Regional

Administrator. The request for a variance must be submitted in writing to

the Regional Administrator. If granted

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the variance will take the form of an adjusted level of required liability coverage, such level to be based on the Regional Administrator's assessment of the degree and duration of risk

associated with the ownership or operation of the facility or group of facilities. The Regional Administrator may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Regional Administrator to determine a level of financial responsibility other than that required by paragraphs (a) or (b) of this section. The Regional Administrator will process a variance request as if it were a permit modification request under 122.15(a)(7)(iii) of this Chapter and subject to the procedures of § 124.5 of this Chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his. discretion or whenever he finds, on the basis of requests for a public hearing. a significant degree of pubic interest in a tentative decision to grant a variance.

(d) Adjustments by the Regional Administrator. If the Regional Administrator determines that the levels of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Regional Administrator may adjust the level of financial responsibility required under paragraphs (a) or (b) of this section as may be necessary to protect human health and the environment. This adjusted level will be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Regional Administrator determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with paragraph (b) of this section. An owner or operator must furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator requests to determine whether cause exists for such adjustments of level or type of coverage. The Regional Administrator will process an adjustment of the level of required coverage as if it were a permit modification under § 122.15(a)(7)(iii) of this Chapter and subject to the procedures of § 124.5 of this Chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing. a significant degree of public interest in a tentative decision to adjust the level or

(e) Period of coverage. An owner or operator must continuously provide liability coverage for a facility as required by this section until certifications of closure of the facility, as specified in § 265.115, are received by the Regional Administrator.

(f) Financial test for liability coverage. (1) An owner or operator may

satisfy the requirements of this section by demonstrating that he passes a .... financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of paragraph (f)(1)(i) or (f)(1)(ii):

(i) The owner or operator must have: (A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least \$10 million; and

(C) Assets in the United States amounting to either: (1) At least 90 percent of his total assets; or (2) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator must have:(A) A current rating for his most

recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least \$10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (1) at least 90 percent of his total assets; or (2) at least six times the amount of liability coverage to be demonstrated by this test.

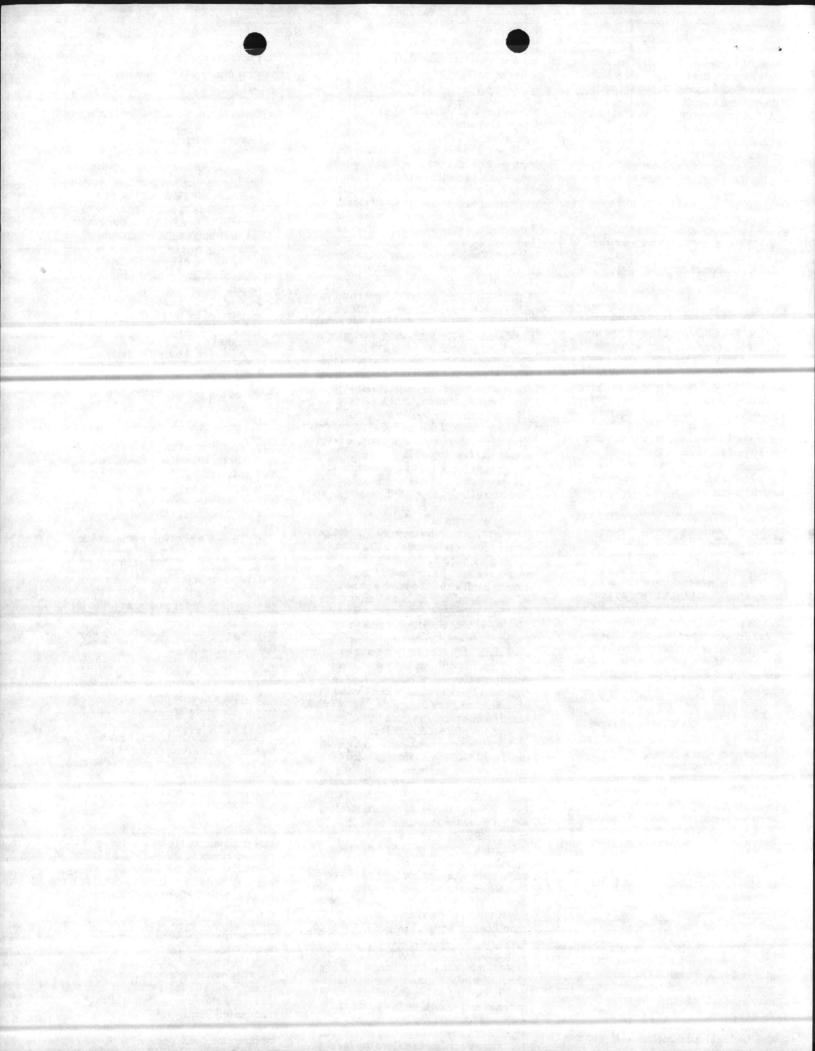
(2) The phrase "amount of liability coverage" as used in paragraph (f)(1) of this section refers to the annual aggregate amounts for which coverage is required under paragraphs (a) and (b) of this section.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by §§ 264.143(f), 264.145(f), 265.143(e). and 265.145(e), and liability coverage, he must submit the letter specified in § 264.151(g) to cover both forms of financial responsibility; a separate letter as specified in § 264.151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified



(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure. no matters came to his attention which caused him to believe that the specified " data should be adjusted.

(4) The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in paragraph (f)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letterfrom the chief financial officer must:

[1] Kequest the extension; (ii) Certify that he has grounds to believe that the owner or operator meets - the criteria of the financial test: .

(iii) Specify for each facility to be covered by the test the EPA. Identification Number, name, address. the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year. when he will submit the documents specified in paragraph (f)(3) of this .... section; and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant. 12 (5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(b) II the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must obtain

insurance for the entire amount of required liability coverage as specified in this section. Evidence of insurance must be submitted to the Regional Administrator within 90 days after the end of the fiscal year for which the yearend financial data show that the owner or operator no longer meets the test requirements.

(7) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this section within 30 days after notification of disallowance.

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### § 264.151 Wording of the instruments.

(g) A letter from the chief financial officer, as specified in §§ 254.147(f) or 265.147(f) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer (to . demonstrate liability coverage or to demonstrate both liability coverage and

assurance of closure or post-closure care). [Address to Regional Administrator of every Region in which facilities for which financial responsibility is to be demonstrated

through the financial test are located.] I am the chief finencial officer of [owner's r operator's name and address]. This letter

er operator's name and address]. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage fineert "and closure and/or post-closure care" if applicable] as specified in Subpart H of 40 CPR Parts 206 and 205. [Fill out the following paragraph regarding facilities and liability coverage. For each facility, include its EPA Identification Number, name, and address.]

Number, name, and address.]

The owner or operator identified above is the owner or operator of the following tractilities for which liability coverage is being demonstrated through the financial set

specified in Subpart H of 40 CFR Parts 264 and 285: .

de .

If you are using the financial test to demonstrate coverage of both Nability and closure and post-closure cars, fill in the following four paragraphs regarding facilities and associated closers and post-choure cost estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, mans, address, and current closure and/or post-closure cost ġ estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 284 and 285. The caspent closure Tr and/or post-closure cost estimates covered 0 by the test are shown for each facility:

2. The ewner or operator identified above guarantees, through the corporate guarantee specified in Bubpert H of 40 CFR Parts 254 and 205, the closure and post-cleast's care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-chastre care so guaranteed are shown for each ficility:

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this owner or operator is demonstrating financial assurance for the ic closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 386 and 286. The surrent closure and/or postsideure cost estimates covered by such a test re shown for each facility: 4. The owner or operator identified above was or operates the following hazardous waste management facilities for which

financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other

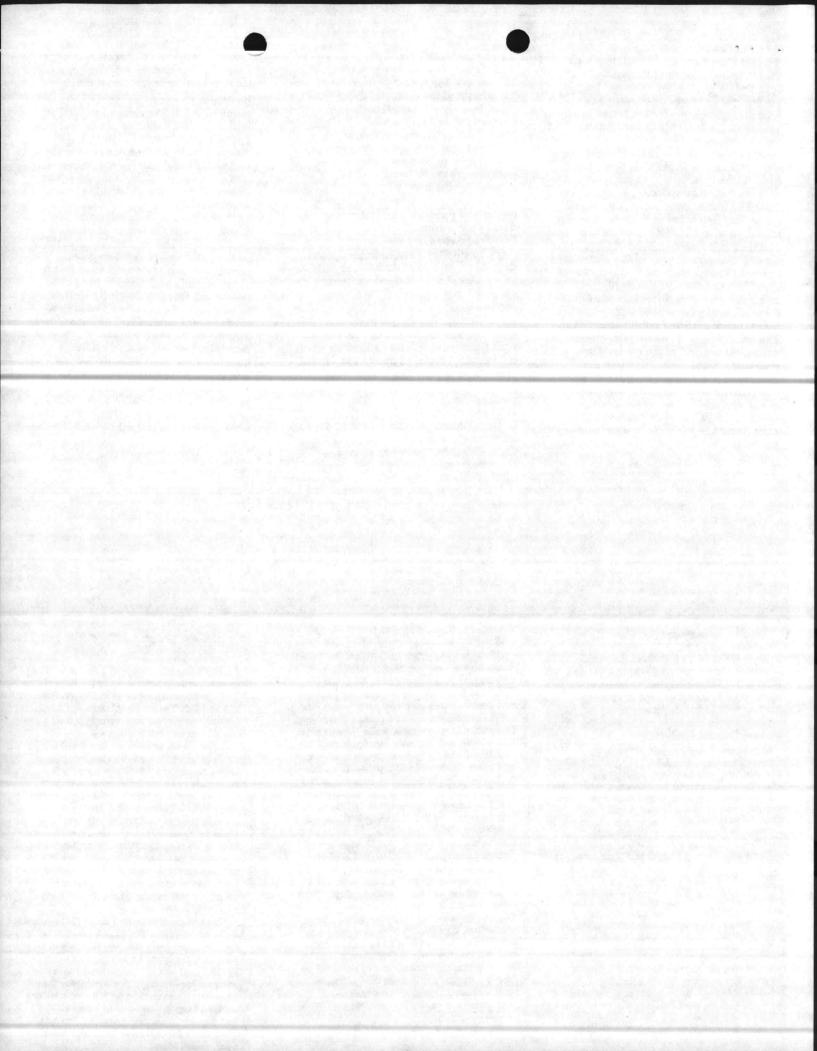
financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: -

This owner or operator [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission

(SEC) for the latest fiscal year.

La year, ended [date].

The fiscal year of this owner or operator ends on (month, day). The figures for the following items marked with an asterisk are derived from this owner's or operator's \* independently asdited, year-and financial statements for the latest completed fiscal



### Part A. Liability Coverage for Accidental Occurrences

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of \$\$ 264.147 or 285.147 are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of \$\$ 284.147 or 285.147 are used.]

#### ALTERNATIVE !

Amount of annual appropriate fieldity coverage to be demonstrated Current assets Current fieldities Net working capital (line 2 minus line 3) Tangible net worth K If less than 80% of assets are locat- ed in the U.S., give total U.S. assets A line 5 at less \$10 million?		NO
t is the 4 st least 6 times ine 1?		1.71
a ine 5 at least 6 times ine 17.		-
10. Are at least 90% of assets located	Starting and	
in the U.S.? If not complete line 11.		
11. Is line 6 at least 6 timos line 1?	-	
and the second states		
ALTERNATIVE I	is mist	
. Amount of annual appregate fability	an a	
coverage to be demonstrated	8	-
. Current bond rating of most recent		
lesuance and name of railing service	8	
Date of lesuance of bond		
. Date of maturity of bond	-	
5. Tancible net worth	. 8	
6. Total assets in U.S. frequired only if		•
less than 90% of assets are located in		
the U.S.)	8	-
	YES	NO
Is line 5 at least \$10 million?	-	-
. Is line 5 at least 6 times line 17		-
9. Are at least 90% of aseets located in	1.1.1.1.1	
the U.S.7 If not, complete fine 10.	-	
0. Is line 6 at least 6 times line 1?		-

[Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage and closure or post-closure care.]

### Part B. Closure or Post-Closure Care and Liability Coverage

[Fill in Alternative I !! the criteria of paragraphs (f)(1)(i) of \$ \$ 284.143 or 284.145 and (f)(1)(i) of \$ 264.147 are used or if the criteria of paragraphs (e)(1)(i) of \$\$ 285.143 or 285.145 and (f)(1)(i) of \$ 285.147 are used. Fill in Alternative II if the criteria of paragraphs (I)(1)(ii) of \$ 284.143 or 284.145 and (I)(1)(ii) of § 284.147 are used or if the criteria ofparagraphs (e)(1)(ii) of \$\$ 285.143 or 285.145 and (f)(1)(ii) of § 285.147 are used.]

### ALTERNATIVE |

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1.	Sum	of	current	cios	-	and	pos	-clo-	
	sure	000	t eetime	stes	(tota	i of		cost	
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1	2 Amount	of	annual	acgregate	Rebilley	
	coverage	10	be deate	belation	sector at 1	

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### ALTERNATIVE -- Continued 5. Tangible net worth 6. Net worth \*7. Current as 8. Current Rabilitie 9. Net working capital (line 7 m \*10. The sum of net income plus deprecision, depietion, end amortization \*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) YES 12. In line 5 at least \$10 million? 12. Its time 5 at least 510 million? 13. Its, time 5 at least 6 times line 3? 14. Its line 9 at least 6 times line 3? 15. Are at least 90% of assets located in the U.S.? If not, complete line 16 16. Its line 11 at least 6 times line 3? 17. Is line 4 divided by line 6 less than 2.07 18. Is line 10 divided by line 4 greater then 0.17 19. Is line 7 divided by line 8 greater 1.57 ALTERNATIVE II Sum or current closure and post-clo-sure cost estimates (total of all cost estimates listed above) Amount of annual agor overage to be dem Sum of lines 1 and 2 Current bond rating of most recent lesuance and name of rating service

NO

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....

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1. ...................

5. Date of issuence of bond 6. Date of maturity of bond

\*7. Tangble net worth (if any portion of the closure or post-closure cost est-mates is included in "total liabilities"

menos & included in "total liabilities" on your financial statements you may add that portion to this line) 8 Total assets in the U.S. (required only If less than 80% of assets are located the U.S.)

9. Is line 7 at least \$10 million? 10. Is line 7 at least 6 times ine 37 11. Are at least 80% of assets located in the U.S.? If not, complete line 12 12. Is line 8 at least 6 times line 37

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

[Signature] [Name] Title (Date)

(i) A hazardous waste facility liability endorsement as required in \$\$ 284.147 or 265.147 must be worded as follows. except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Hazardous Weste Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection

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with the insured's obligation to demonstrate financial responsibility under 40 CFR 284.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs.

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2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 285.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

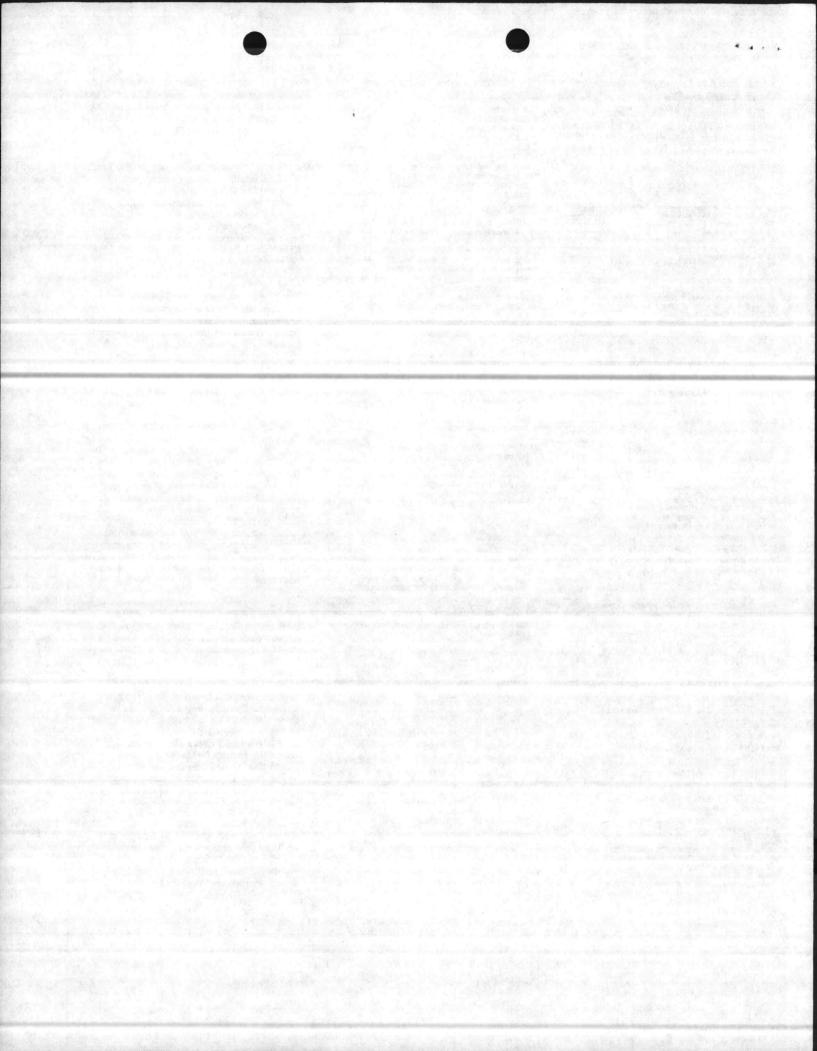
(e) Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(iss) is (are) located.

Attached to and forming part of policy No. \_\_\_\_\_issued by [name of Insurer], herein called the Insurer, of [address of Insurer] to day of -18 -, 19-

I hereby certify that the wording of this endorsement is identical to the wording specified in 40 CFR 264.151(i) as such regulation was constituted on the date first above written, and that the Insurer is

× ...

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licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of Authorized Representative of Insurer]

[Type name] [Title], Authorized Representive of [name of Insurer]

[Address of Representative]

. . 4.

(j) A certificate of liability insurance as required in §§ 264.147 or 265.147 must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Hazardous Waste Facility Certificate of Liability Insurance

1. [Name of Insurer]. (the "Insurer"), of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured], (the "insured"), of [address of obligation to demonstrate financial responsibility under 40 CFR 284.147 or 285.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate". limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number —, issued on [date]. The effective date of said policy is [date].

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 285.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements. (d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such

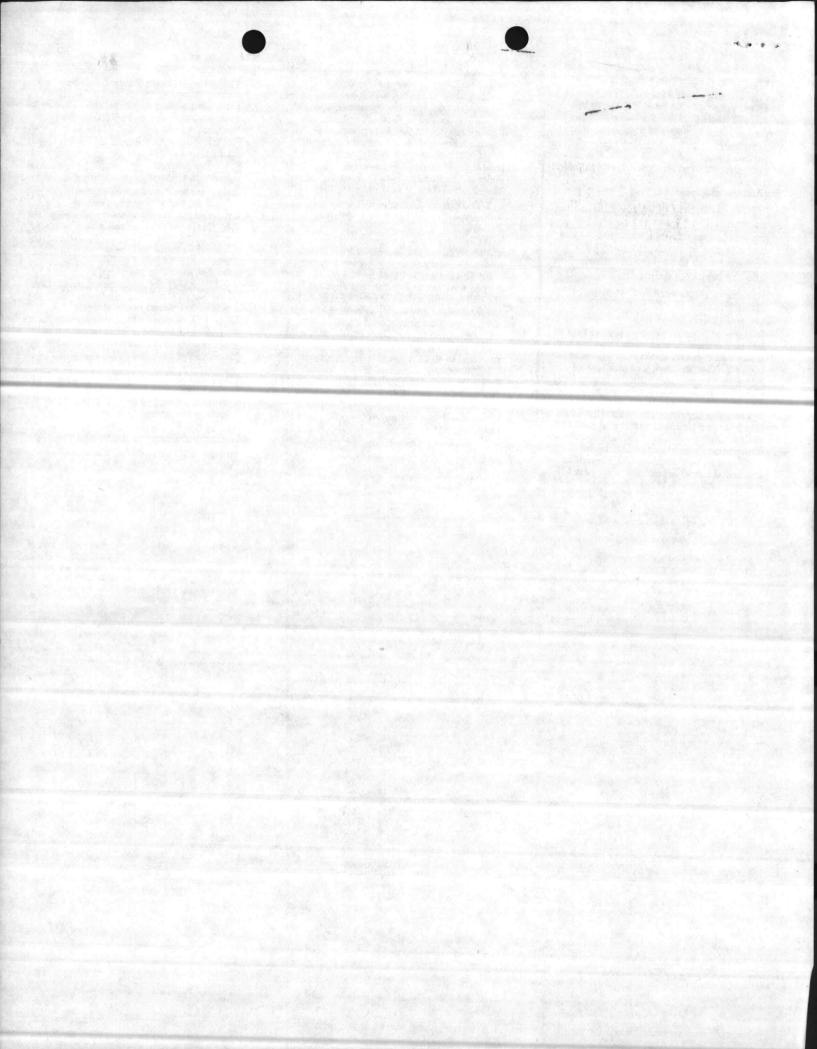
regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surglus lines insurer, in one or more States.

[Signature of authorized representative of Insurer]

[Type name]

[Title]. Authorized Representative of [name of Insurer]

[Address of Representative]



OFFICE OF THE STAFF JUDGE ADVOCATE Marine Corps Base Camp Lejeune, North Carolina 28542

> SJA/LLS/ero 5800/200-82 28 Sep 1982

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RTS

FIRST ENDORSEMENT on BMO 1tr MAIN/JIW/th 6240 of 21 Sep 1982

From: Staff Judge Advocate To: Base Maintenance Officer

Subj: Hazardous Waste Regulations

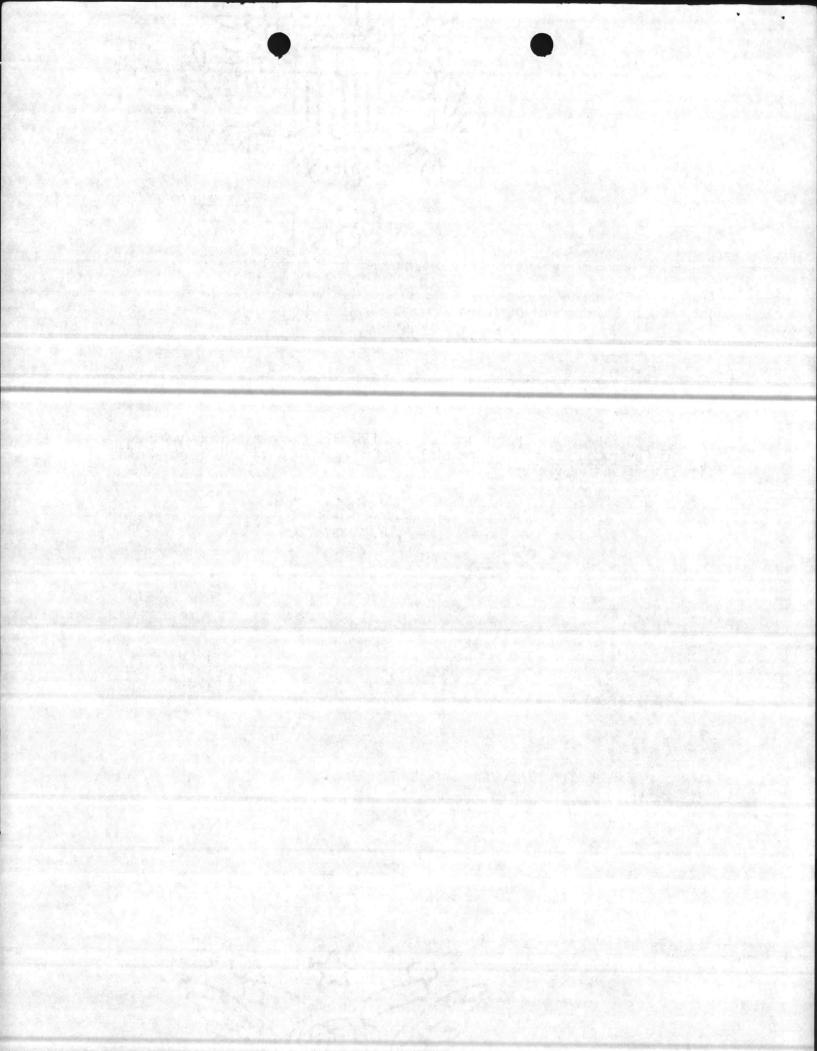
Ref: (a) 40 CFR § 265.140

1. Returned.

Danny Note . Return for file & I W

> 2. Subparagraph (c) of reference (a) specifically exempts States and the Federal Government from the financial requirements of hazardous waste facilities owners and operators.

W. L. MAXEY D



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BASE MAINTENANCE DIVISION Marine Corps Base Camp Lejeune, North Carolina 28542

> MAIN/JIW/th 6240 SEP 2 1 1982

RLL

From: Base Maintenance Officer To: Staff Judge Advocate

Subj: Hazardous Waste Regulations

Encl: (1) Div of Health Ser ltr of 1 Sep 1982

1. Natural Resources and Environmental Affairs personnel have discussed the enclosure with Mr. Emil Breckling, North Carolina Solid and Hazardous Waste Branch. He advised that Camp Lejeune, as a federal facility, was exempt from the requirements. However, it is requested your office review the enclosure and provide an opinion.

2. Point of contact is Mr. Danny Sharpe, Natural Resources and Environmental Affairs Branch, extension 1690.

R. F. CALTA

and a second second



Ronald H. Levine, M.D., M.P.H. STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

September 1, 1982

TO: Owners and Operators Hazardous Waste Treatment, Storage or Disposal Facilities in North Carolina

FROM: Glenn Dunn, Attorney Solid & Hazardous Waste Management Branch

SUBJECT: Financial Requirements for TSDF's - Changed Deadlines and Other Clarifications

On July 7, 1982, a notification was mailed from the North Carolina Solid and Hazardous Waste Management Branch to all owners and operators of hazardous waste treatment, storage, and disposal facilities in North Carolina. That memorandum, a copy of which is attached, explained that North Carolina would probably adopt verbatim the Federal financial responsibility regulations as set forth in 40 CFR, Part 264 Subpart H and 40 CFR Part 265 Subpart H, as adopted on May 19, 1980 and amended on April 7 and April 16, 1982. That memorandum also set forth the dates on which compliance with the financial assurance and liability coverage regulations will be enforced (see the July 7 memorandum).

Since the memorandum was sent, the Federal rules have been adopted verbatim in North Carolina as anticipated. Also, in the interim, two wellattended conferences were held in Raleigh and Hickory for the purpose of clarifying the financial requirements regulations to the industries and institutions that must comply with them. It was apparent from the discussions at the conferences that the financial requirements were not completely understood and, consequently, most facilities are just beginning to make arrangements to comply with them. There were certain key points that caused most of the confusion, and it is the purpose of this follow-up memorandum to clarify those points and to further explain the schedule for compliance in North Carolina.

-- North Carolina is authorized to implement the entire RCRA regulatory program within the State. Therefore, the financial regulations are administered by the Solid and Hazardous Waste Management Branch of the North Carolina Department of Human Resources, not the EPA. All questions, communications, and required documents should be submitted to the Solid and Hazardous Waste Management Branch, P.O. Box 2091, Raleigh, North Carolina 27602, should indicate that it relates to financial requirements, and should be to the Attention of Glenn Dunn.

ENCLOSURE (1)

STATE OF NORTH CAROLINA

James B. Hunt, Jr. / DEPARTMENT OF HUMAN RESOURCES

--It is essential to determine accurately what type of financial re-<u>quirements your facility must meet</u>. There are four separate purposes for the financial requirements: assurance for closure costs, assurance for post-closure costs, sudden liability coverage, and non-sudden liability coverage. All TSDF's must provide some form of assurance for closure and non-sudden liability coverage, unless the facility is exempted explicitly by the regulations. Only landfills, surface impoundments, and land treatment facilities (i.e. facilities that are subject to post-closure measures) must provide post-closure cost assurances and non-sudden liability coverage.

--The deadline for compliance by TSDF's in North Carolina with the financial assurances for closure and post-closure has been changed from October 1, 1982 to November 1, 1982. The reason for this change is that it has become apparent that many owners and operators are just beginning to understand the alternative mechanisms available to them and the nature of the documentation that is required for each mechanism. This is a particularly acute problem because the regulations require that certain documents be submitted for each mechanism and that the documents contain the exact wording specified in the regulations. The description of the required documents and the wording for each is set out in the April 7 Federal Register (for closure and post-closure assurances) and the April 16 Federal Register (for liability coverage). The requirements for closure and post-closure assurances are more clearly described in an excellent Guidance Manual prepared recently for the EPA. However, due to the complexity of these regulations and the fact that the Guidance Manual has only recently become available, it is apparent that many TSDF's will not be ready to submit the correct documents by October 1, 1982.

In order to ensure that every TSDF in North Carolina has the correct model documents to use, every TSDF must notify this Branch before October 1, 1982 of the mechanism or combination of mechanisms chosen to assure closure and post-closure care. This Branch will then provide each facility with copies of the appropriate documents and instructions. By doing this, it is our hope that most facilities will provide adequate documents the first time (i.e. by November 1, 1982) and thus this Branch and facility owners and operators will spend a minimal amount of time returning and re-executing the documents.

It is not our intent to prohibit TSDF's from obtaining copies of the Guidance Manual or the regulations, and proceeding ahead of the aboveoutlined schedule. However, if you choose to do so, you are strongly urged to obtain the Guidance Manual and strictly follow the instructions and documents in it so that you will be absolutely sure to execute and submit every required document worded precisely as specified. Copies of the Guidance Manual may be obtained from: 1CF, Inc. 1850 K Street, N.W., Suite 950, Washington, D.C. 20006. --The date for compliance with financial requirements for sudden liability coverage remains October 1, 1982. The mechanisms that can be used to meet this requirement are limited to liability insurance, the financial test or a combination of the two. Most facilities already have some form of liability insurance, therefore, compliance should be much simpler than for closure and post-closure care and the October deadline is reasonable. However, the documents must be worded precisely as required by the regulations. A manual with model documents will be ready very soon and can be ordered from the same address as the financial assurances manual.

Those TSDF's that choose to use the financial test for closure (and post-closure, if applicable) assurances and for liability coverage please note that a single set of documents will suffice for this purpose. Those documents should be submitted to this Branch by October 1, and the extension to November 1 of the closure/post-closure assurance deadline will not apply to you.

Again let me urge those of you that follow this approach the April 16 Federal Register or, preferably the Guidance Manual to obtain and carefully follow the instructions and wording for documents provided in those publications. I am enclosing a copy of the pertinent pages of the April 16 Federal Register to be sure that you have it available.

- --In filling out all required documents, the words "North Carolina Department of Human Resources" must be substituted for the words "Administrator", Regional Administrator" or "Director". Each of the latter terms refers to a position in the EPA, but the EPA is not a party or beneficiary to any of these agreements concerning TSDF's in North Carolina and the Department of Human Resources, the administering agency in North Carolina, must therefore be substituted.
- --Facilities that are considering using the trust fund mechanism for closure or post-closure assurance should consider that final RCRA permits will have a five year duration and the fund will therefore be required to equal the closure cost estimate (or post-closure cost estimate, where applicable) within five years from issuance of the permit. This five year period is called the "pay-in" period. Thus, each payment into the fund must be equal to approximately onefifth of the estimated closure or post-closure cost (not taking into consideration such factors as the interest the fund might earn or the costs of administration). This five-year duration will not become applicable until the facility converts from Part A Interim Status to a Part B permit, and until that time the interim status formula for the pay-in period will apply, i.e. 20 years beginning with the effective date of the regulations or the remaining operating period of the facility as estimated in the closure plan, whichever is shorter. However, North Carolina will soon begin Part B permitting so facilities using the trust fund mechanism will soon be required to convert to the five year pay-in period.

--There seems to be some confusion under the financial test concerning the meaning of the four paragraphs in the Chief Financial Officer's statement that categorize the TSDF's that the Party submitting the financial test is responsible for. It may help in understanding these categories to remember that the last paragraph refers to facilities in States where the EPA has delegated the RCRA program to the host State, but that State has not yet established rules concerning financial responsibility. Also remember that the total of the number of TSDF's in each paragraph should equal the total number of TSDF's that the Party submitting the financial test is assuring by means of the financial test.

Finally, in closing this memorandum, it is unfortunately necessary to ask that those TSDF's in North Carolina that have already submitted financial assurances review the documents submitted against the regulations or Guidance Manual and prepare a new set of assurances accordingly. This Branch has received approximately 55 sets of assurances and a quick review shows that nearly all lack some required documents and/or have incorrectly executed documents. If you wish us to return the documents that have already been submitted, please inform us and we will do so. If after reviewing your submission, you conclude it is correct and complete as submitted, please inform us to that effect.

Also, I want to urge whomever receives this memorandum to get it into the hands of the person responsible for financial requirements as quickly as possible (if you are not that person) because of the impending deadlines. If you have questions or otherwise wish to discuss financial requirements, please contact me.

Ronald H. Levine, M.D., M.P.H. STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

July 7, 1982

TO: Owners and Operators Hazardous Waste Treatment, Storage or Disposal Facilities in North Carolina

On November 19, 1980, the State of North Carolina adopted its Hazardous Waste Management Rules. These rules adopt by reference the Federal regulations dealing with financial requirements for all hazardous waste treatment, storage, and disposal facilities. More specifically, 10 NCAC 10F .0032(g) adopts the final financial requirements for facilities set forth in 40 CFR, Part 264, Subpart H, and 10 NCAC 10F .0033(h) adopts the interim financial requirements set forth in 40 CFR, Part 265, Subpart H. North Carolina's rules require that hazardous waste facilities have financial assurance for closure (and post-closure if a disposal facility). Four mechanisms are available to facility owners for accomplishing this task. These are: (1) Trust Fund; (2) Surety Bond guaranteeing payment into a trust fund; and (3) Letter of Credit; and (4) other methods that provided an equivalent degree of protection concerning human health and the environment as mechanisms 1, 2, and 3.

The Federal regulations adopted by North Carolina also require that all hazardous waste treatment, storage and disposal facilities operating in the State be covered by liability insurance for sudden (accidental) occurrences, and that all hazardous waste surface impoundments, landfills, or land treatment facilities have liability insurance covering non-sudden occurrences.

The <u>Federal</u> financial responsibility regulations, Subpart H, have been revised since they were originally adopted in North Carolina. These revisions, published in the Federal Registers on April 7 and April 16, 1982, accomplished two things. They expanded the financial assurance and liability insurance mechanisms available to facility owners and set new Federal compliance dates.

It is anticipated that the above revisions in the Federal rules, except for compliance dates, will be adopted in North Carolina in August. Until that time, the existing North Carolina Rules for Hazardous Waste Management continue in effect. These existing rules have been strictly enforced concerning required cost estimates for closure and post-closure. When the Federal revisions have been adopted in North Carolina, the Solid and Hazardous Waste Management Branch intends to enforce compliance with the Subpart H, Financial Requirement Rules, beginning on the following dates:

STATE OF NORTH CAROLINA

	Permitted Status & <u>New Facilities</u>	Interim Status & Existing Facilities
Financial assurance for closure and post-closure care plans	At least 60 days before the first receipt of hazardous waste	October 1, 1982
Liability coverage for sudden accidental occurrences	At least 60 days before the first receipt of hazardous waste	October 1, 1982
Liability coverage for non-sudden accidental occurrences	At least 60 days before the first receipt of hazardous waste	Annual Sales or Revenues over \$10 mil. \$5-\$10 mil. others Annual Sales Date Jan. 16, 1983 Jan. 16, 1984 Jan. 16, 1985

The new additional Federal mechanisms for achieving financial assurance as published in the Federal Register on April 7 and April 16, 1982 are likely to be adopted as written in North Carolina, and should therefore provide accurate guidance in your preparations for providing financial assurance by the above dates. Please contact this office at (919) 733-2178 if you have any questions regarding your responsibilities in complying with these requirements.

Sincerely,

0. W. Strickland, Head Solid & Hazardous Waste Management Branch Environmental Health Section

OWS:nlc

Attachment

-2-

## NOTE: THE RULES DEFINES LIABILITY COVERAGE REQUIMENTS ARE ON PAGES 1-3, AND THE WORDING FOR THE INSTRUMENTS IS ON PAGES 3-5.

### PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

### Subpart H-Financial Requirements

a. Section 265.141 is revised to read as follows:

# § 265.141 Definitions of terms as used in this subpart.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations" whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited' refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent toowner's equity.

"Tangible net worth" means the tangible cssets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. The Agency intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured."

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

### § 265.147 Liability requirements.

(a) Coverage for sudden accidental occurrences. By the effective date of these regulations, an owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (a)(1), (a)(2), and (a)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 204.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 204.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrator if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) Coverage for nonsudden accidental occurrences. An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily damage and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (b)(1). (b)(2), and (b)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the is facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage must total at least the minimum amounts required by this paragraph.

(4) The required liability coverage for nonsudden accidental occurrences must be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these regulations, will determine which of the dates applies. If the owner and operator of a facility are two different parties, or if there is more than one owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues will determine the date by which the coverage must be demonstrated. The dates are as follows:

(i) For an owner or operator with sales or revenues totalling \$10 million or more, 6 months after the effective date of these regulations.

(ii) For an owner or operator with sales or revenues greater than \$5 million but less than \$10 million, 18 months after the effective date of these regulations.

(iii) All other owners or operators, 30 to months after the effective date of these regulations.

(5) By the date 6 months after the effective date of these regulations an owner or operator who is within either of the last two categories (paragraphs (b)(4)(ii) or (b)(4)(iii) of this section) must, unless he has demonstrated liability coverage for nonsudden accidental occurrences, send a letter to the Regional Administrator stating the date by which he plans to establish such coverage.

(c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the Regional Administrator that the tevels of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the Regional Administrator. The request for a variance must be submitted in writing to the Regional Administrator. If granted,

ne variance will take the form of an adjusted level of required liability coverage, such level to be based on the Regional Administrator's assessment of a the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Regional Administrator may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Regional Administrator to determine a level of financial responsibility other than that required by paragraphs (a) or (b) of this section. The Regional Administrator will process a variance request as if it were a permit modification request under § 122.15(a)(7)(iii) of this Chapter and subject to the procedures of § 124.5 of this Chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of pubic interest in a tentative decision to grant a variance.

(d) Adjustments by the Regional Administrator. If the Regional Administrator determines that the levels of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Regional Administrator may adjust the level of financial responsibility required under paragraphs (a) or (b) of this section as may be necessary to protect human health and the environment. This adjusted level will be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Regional Administrator determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with paragraph (b) of this section. An owner or operator must furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator requests to determine whether cause exists for such adjustments of level or type of coverage. The Regional Administrator will process an adjustment of the level of required coverage as if it were a permit modification under § 122.15(a)(7)(iii) of this Chapter and subject to the procedures of § 124.5 of this Chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to adjust the level or type of required coverage.

2 e) Period of coverage. An owner or operator must continuously provide liability coverage for a facility as required by this section until certifications of closure of the facility, as specified in § 265.115, are received by the Regional Administrator.

(f) Financial-test for liability coverage. (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of

paragraph (f)(1)(i) or (f)(1)(ii): (i) The owner or operator must have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least \$10 million; and

(C) Assets in the United States amounting to either: (1) At least 90 percent of his total assets; or (2) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator must have: (A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least \$10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (1) at least 90 percent of his total assets; or (2) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in paragraph (f)(1) of this section refers to the annual aggregate amounts for which coverage is required under paragraphs (a) and (b) of this section.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by § 264.143(f), 264.145(f), 265.143(e), and 265.145(e), and liability coverage, he must submit the letter specified in § 264.151(g) to cover both forms of financial responsibility; a separate letter as specified in § 264.151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from . the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements: and

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(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in paragraph (f)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter. from the chief financial officer must:

(1) Kequest the extension; (ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA. Identification Number, name, address, the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test:

(iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations:

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (f)(3) of this section; and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(b) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must obtain

insurance for the entire amount of required liability coverage as specified in this section. Evidence of insurance must be submitted to the Regional Administrator within 90 days after the end of the fiscal year for which the yearend financial data show that the owner or operator no longer meets the test requirements.

(7) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this section within 30 days after notification of disallowance.

# § 264.151 Wording of the instruments.

(g) A letter from the chief financial officer, as specified in \$\$ 264.147(f) or 265.147(f) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer (to . demonstrate liability coverage or to demonstrate both liability coverage and

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assurance of closure or post-closure care). [Address to Regional Administrator of every Region in which facilities for which financial responsibility is to be demonstrated through the financial test are located.]

I am the chief financial officer of [owner's er operator's name and address]. This letter is in support of the use of the financial test to is in support of the use of the financial test to demonstrate financial responsibility for liability coverage fineer "and closure and/or post-closure care" if applicable] as specified in Subpart H of 40 CFR Parts 204 and 205. [Fill out the following paragraph regarding facilities and liability coverage. For each facility, include its EPA Identification Number name, and address.]

Number, name, and address.] The owner or operator identified above is

the owner or operator of the following to facilities for which liability coverage is b demonstrated through the financial ust

Ac .

specified in Subpart H of 40 CFR Parts 264 and 265:

[If you are using the financial test to demonstrate coverage of both liability and closure and post-closure care, fill in the following four paragraphs regarding facilities and associated closure and post-closure cost cotimates. If there are no facilities that belong 1 in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, same, address, 3 and current closure and/or post-closure cost Ŕ estimates. Identify each cost estimate as to whether it is for closure or post-closure care.] 1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or postclosure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 284 and 285. The current closure 17. and/or post-closure cost estimates covered ø by the test are shown for each facility: (P 2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264

and 205, the closure and post-closure care of the following facilities owned or operated by

its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility:

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent 1i IF or substantially equivalent to the financial

test specified in Subpart H of 40 CFR Parts 1:305 and 205. The current closure and/or postfesure cost estimates covered by such a test e shown for each facility: -

4. The owner or operator identified above us or operates the following hazardous waste management facilities for which

Financial assurance for closure or, if a

(i) disposal facility, post-closure care, is not ac demonstrated either to EPA or a State

through the financial test or any other

financial assurance mechanism specified in

Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State

mechanisms. The current closure and/or

post-closure cost estimates not covered by such financial assurance are shown for each

facility: This owner or operator [insert "is required"

or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year. 1-

The fiscal year of this owner or operator Ψi

ends on [month, day]. The figures for the <sup>91</sup> following items marked with an asterisk are

" derived from this owner's or operator's

independently audited, year-end financial

"-statements for the latest completed fiscal

year, ended [date]. [Fill in part A if you are using the financial test to demonstrate coverage only for the liability requirements.]

### Part A. Liability Coverage for Accidental Occurrences

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of \$\$ 264.147 or 265.147 are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of §§ 264.147 or 285.147 are used.]

### ALTERNATIVE I

1. Amount of annual aggregate liability coverage to be demonstrated	-	1
*2. Current assets	8	-
*3. Current liabilities	-	-
4. Net working capital (line 2 minus line 3)	-	_
*5. Tangible net worth	-	-
*6. If less than 90% of assets are locat-	1201.55	
ed in the U.S., give total U.S. assets	-	-
	YES	
7. Is line 5 at least \$10 million?		
8. Is line 4 at least 6 times line 1?		
9. Is line 5 at least 6 times line 17.		
*10. Are at least 90% of assets located		
In the U.S.? If not, complete line 11.		
11. Is line 6 at least 6 times line 1?		•

### AI TERNATIVE II

1. Amount of annual aggregate coverage to be demonstrated	Inbility	See.
2. Current bond rating of most	mont	- ·
issuance and name of rating		Concession of the local division of the loca
3. Date of issuance of bond	-	
4. Date of maturity of bond	· · · · · ·	
*5. Tangible net worth		12.
*6. Total assets in U.S. (required	only #	
less than 90% of assets are lo		
the U.S.)	-	
	YE	S NO
7. Is line 5 at least \$10 million?		
8. Is line 5 at least 6 times	ine 1?	
*9. Are at least 90% of assets lo		
the U.S.7 If not, complete I		
10. Is line 6 at least 6 times		

[Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage and closure or post-closure care.]

### Part B. Closure or Post-Closure Care and Liability Coverage

[Fill in Alternative I if the criteria of paragraphs (f)(1)(i) of \$\$ 264.143 or 284.145 and (f)(1)(i) of § 284.147 are used or if the criteria of paragraphs (e)(1)(i) of \$\$ 265.143 or 285.145 and (f)(1)(i) of \$ 265.147 are used. Fill in Alternative II if the oritoria of paragraphs (f)(1)(ii) of \$\$ 284.143 or 284.145 and (f)(1)(ii) of § 284.147 are used or if the criteria ofparagraphs (e)(1)(ii) of \$\$ 265.143 or 285.145 and (f)(1)(ii) of § 285.147 are used.]

### ALTERNATIVE |

1. Sum of ourrent clo ure and m a listed abdre)

Amount of annual a e to be de

 Sum of lines 1 and 2
 Total liabilities (if any closure or post-closure is included in y

### ALTERNATIVE -- Continued

- \*5. Tangible net worth \*6. Net worth \*7. Current assets **Current liabl**
- 9. Net working capital (line 7 minus line 8)
- \*10. The sum of net ation, depletion, and a 11. Total assets in U.S less than 90% of asse ts in U.S. (required only if

the U.S.) st \$10 m

12. Is line 5 at k 13. Is, line 5 at least 6 14. Is line 9 at least 6 line 15. Are at least 90% of in the U.S.? If not, co of as 15. Inc 16 line 16. Is line 11 at d by 17. Is line 4 divid

2.07 18. Is line 10 divided by line then 0.17

19. is line 7 div 1.5?

#### ALTERNATIVE II

YES

NO

	Sum or current closure and post-clo- sure cost estimates (total of all cost estimates listed above)	en deserves Status	
	2. Amount of annual aggregate liability	-	
	coverage to be demonstrated		1000
	3. Sum of lines 1 and 2	-	
6	4. Current bond rating of most recent	-	and the second second
	issuance and name of rating service	8	
	5. Date of issuance of bond	-	_
	6. Date of maturity of bond	-	
	°7. Tangible net worth (if any portion of		
	the closure or post-closure cost esti-	12.	1.1
	mates is included in "total liabilities"		
	on your financial statements you may		
	add that portion to this line)	-	
	*8 Total assets in the U.S. (required only		
	If less than 90% of assets are located	0 · · ·	
	in the U.S.)	-	
	D in line 7 of local Add willing a	YES	NO
	9. Is line 7 at least \$10 million?		
	10. Is line 7 at least 6 times line 3?		-
	"11. Are at least 90% of assets located		
	in the U.S.? If not, complete line 12 12. Is line 8 at least 6 times line 37	-	
	IC. IN MIN O BL MEREL O BITNES BITS 37		
	A CONTRACTOR OF		

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

•	[Signatu	Ire]	
	[Name]		
	[Title]		
	[Date]		•
ŧ.,		-1+	

(i) A hazardous waste facility liability endorsement as required in §§ 264.147 or 265.147 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

tirm'

Hazardous Waste Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection

with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences." "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are linsert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in

which the facility(iea) is (are) located. Attached to and forming part of policy No. issued by [name of Insure], herein called the Insurer, of [address of Insurer] to [name of insured] of [address] this - day of , 19-. The effective date of said policy - day of ia -, 19-

I hereby certify that the wording of this endorsement is identical to the wording specified in 40 CFR 264.151(i) as such regulation was constituted on the date first above written, and that the Insurer is





licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of Authorized Representative of Insurer]

[Type name] [Title], Authorized Representive of [name of Insurer]

[Address of Representative]

(j) A certificate of liability insurance as required in §§ 284.147 or 265.147 must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Hazardous Waste Facility Certificate of Liability Insurance

1. [Name of insurer]. (the "Insurer"), of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured]. (the "insured"), of [address of obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability]. exclusive of legal defense costs. The coverage is provided under policy number ——, issued on [date]. The effective date of said policy is [date].

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements. (d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

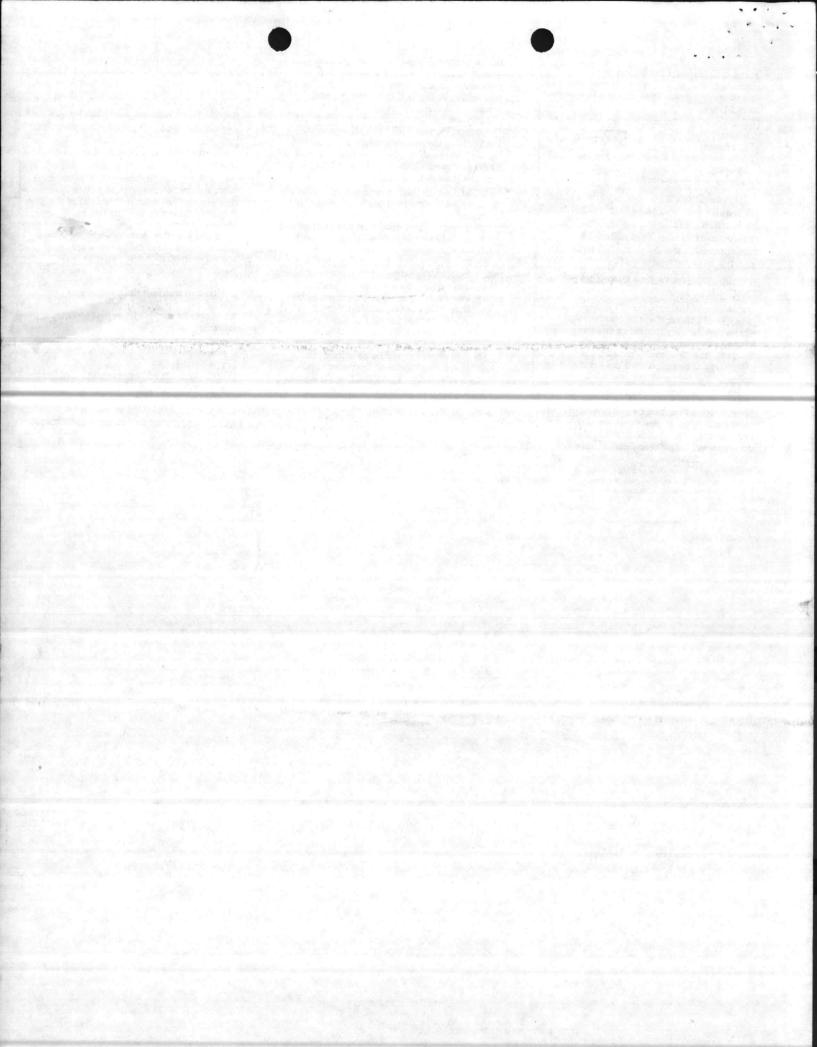
I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of authorized representative of Insurer]

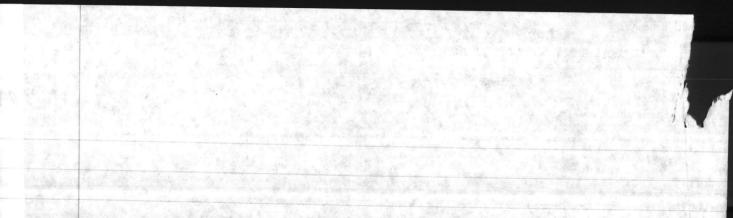
[Type name]

[Title]. Authorized Representative of [name of Insurer]

[Address of Representative]



# This Letter is submitted in accordance with instructions Virging. Norman Stewart of your office. This is a resubmission of a request to your the Satur sept 23. which was apparently lest during transmittal.



Department of Social and Health Services

MAIN/DDS/th 6240 SEP 2 3 1982

Bills Radiation Control Section Mail Stop 19-11 LF-13 Olympia, Washington 98504

Dear Sir:

Marine Corps Base, Camp Lejeune, is attempting to dispose of a quantity of low-level radioactive waste which consist of 493 "betta-buttons" (see attached description), contaminated soil, and animal bones. The items are currently packaged in 4-mil polyethylene bags, cushioned in vermiculite and contained in 6 steel 55-gallon drums (DOT Specifications 17H-Steel Drum, Federal Stock Number 8110-00-823-8121).

The purpose of this letter is to request permission (see attached DSHS form) to dispose of the material at the Richland, Washington Site operated by U. S. Ecology, Louisville, Kentucky.

Disposal of the waste will be accomplished through a commercial waste disposal firm: Southwest Nuclear Company, 906 Montgomery Street, Laurel, Maryland, 20810, in cooperation with the Naval Supply Center, Norfolk, Virginia.

Questions regarding this matter should be forwarded to Mr. Julian Wooten. Director, Natural Resources and Environmental Affairs Branch, (919) 451-5003.

Sincerely,

Col Warshall

R. F. CALTA Lieutenant Colonel, U. S. Marine Corps Base Maintenance Officer By direction of the Commanding General

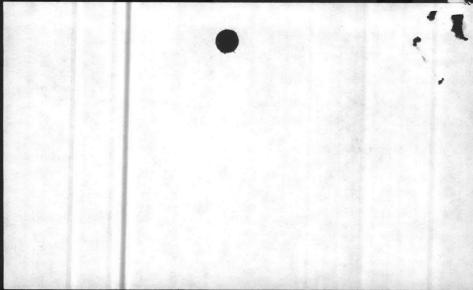
Encl



Bmo #S ABROKAL NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS BRANCH BASE MAINTENANCE DIVISION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542 9-2-82 Date From: Director To: BMO 1. attached provides additional info on contaminated soil at Bldg 712 Julia

MREA Reterned-

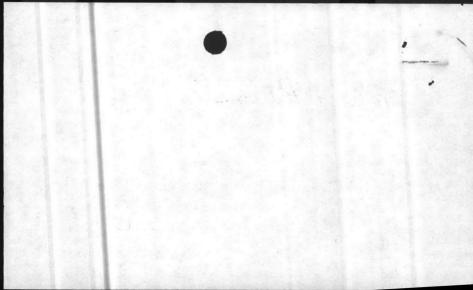
Pany, 9-13-82 Note and Return - Purtain Hg Worte. Antia DPS

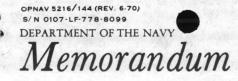


BASE MAINTEN DIVISION Marine corps Base Camp Lejeune, North Carolina 28542 9-3-82 Assistant Base Maintenance Officer From: To: Subj: DMO I comme with Whe Worten's recommendation. Will take action to motify maint. personnel located at MCMS, il vjon agree. I le egy of NREA memo to col marshall adrild ansever chis quotion, bare

MREA Ceturned and fer discussion BUE 1.

Dany, 9-13.82 nole + Return for file puba DDS





MAIN/DDS/th 6240 DATE: 8 Sep 1982

Director, Natural Resources and Environmental Affairs Branch FROM

Base Maintenance Officer TO

Reporting of Hazardous Material/Oil Spills aboard MCAS(H), New River; SUBJ responsibilities and procedures for

#### (1) BO 6240.5 Encl:

(2) BO 11090.1B

(3) Excerpts from MCBCLNC/MCAS(H)NR Logistic Support Consolidation Agreement

(4) CO MCAS(H)NR memo 222/MW/mc 6280 of 12 Aug 1982

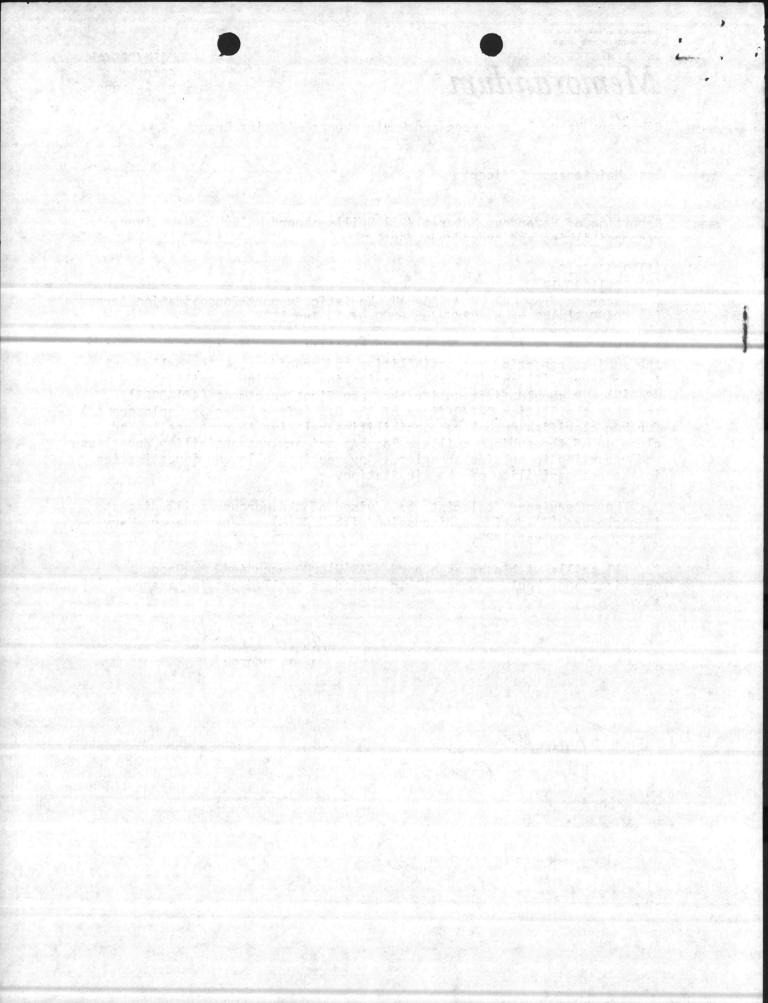
1. This memo is in response to AC/S Facilities recent inquiry regarding the subject reporting responsibilities and procedures. As spelled out in enclosures (1) and (2), the organization reporting a spill aboard MCAS(H), NR should first notify the Base Fire Department (451-3333) and then the Station S-4/Officer of the Day (after hours). Enclosure (3) further clarifies mutual responsibilities relative to response to and clean up of the subject spills. Basehas primary responsibility for cleanup and reporting to outside agencies. Any routine follow-up investigation is the responsibility of the Air Station.

2. The supervisory ecologist was advised of the mercury spill discussed in enclosure (4) during a discussion with MCAS(H) safety manager, Mary Wheat, on 3 August 1982.

3. All spills within areas aboard MCAS(H), NR occupied by Base organizations should be promptly reported as spelled out in paragraph (1) above.

A. d Woot

Thomks.





UNITED STATES MARINE CORPS MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542

> BO 6240.5 MAIN/DDS/th 22 Jun 1982

## BASE OPDER 6240.5

- Commanding General From: Distribution List
- To:
- Subj: Hazardous Material Disposal Program
- (a) Resource Conservation and Recovery Act (Pub No. 94-580) (42 USC 6901-6987) (NOTAL) Ref: (b) Environmental Protection Agency Regulations contained in Code of Federal Regulations, Title: 40 Parts 260-265 (NOTAL)
  - (c) Dept of Transportation Regulations contained in Code of Federal Regulations, Title: 49 Parts 100-179 (NOTAL)
  - (d) MCO 4570.24A (NOTAL)
  - (e) MCO P11000.8A (f) BO 11090.1B

  - (g) BO 11350.2 (h) MCO 5100.25
  - (i) BO 11320.1G
  - (j) AS(H)0 6280.1 (NOTAL)
- (1) Hazardous Waste Labeling Instructions Encl: (2) Hazardous Material Disposal Procedures

1. Purpose. To publish responsibilities for disposal of hazardous material and hazardous waste regulated by references (a), (b) and (c) and to establish uniform disposal procedures as outlined in enclosures (1) and (2).

2. Policy. It is the policy of the Commanding General that compliance with hazardous material and hazardous waste disposal regulations will be accomplished through a centralized program committed to maximizing re-utilization and recycling so as to minimize impact on the environment. Final disposal (i.e., burial, incineration, etc.) and long term storage (i.e. for over 90 days) of hazardous waste are prohibited aboard Camp Lejeune and Marine Corps Air Station (Helicopter), New River, except with the specific written permission of the Commanding General, Marine Corps Base.

### 3. Background

a. On 19 November 1980, comprehensive federal legislation (reference (a)), which was implemented by reference (b), placed stringent legal requirements on the management of hazardous material and hazardous waste. Civilian and Civilian and military personnel failing to follow established procedures may be subject to both civil and criminal penalties. Violations of these procedures may consist of acts of commission, such as mishandling hazardous material as well as acts of omission, such as failing to report to proper authorities observed mishandling of hazardous material or other violations of reference (a). Strict adherence to the procedures contained in this Order is necessary to avoid imposition of civil and/or criminal penalties.

b. Subpart D of Part 261 of reference (b) lists specific items which generally must be disposed of as hazardous waste. Enclosure (1) identifies types of waste commonly generated aboard military installations which are listed in Subpart D of reference (b).

c. Department of Defense (DOD) and Marine Corps policy related to the subject program is outlined in references (d) and (e). Reference (f) provides installation policy and guidelines for hazardous substance spill prevention, containment, reporting and cleanup. Reference (g) identifies the types of solid waste which can be disposed of in the base refuse collection and disposal system. Reference (h) outlines DOD and Marine Corps policy on the collection and dissemination of health and safety information related to the procurement, receipt, storage, handling, issue, transportation, use and disposal of hazardous materials. Reference (i) provides information relative to local fire prevention and protection requirements applicable to hazardous materials. Keterence (1) provides information relative to local f established procedures for hazardous waste management applicable to Commands located at Marine Corps Air Station (Helicopter) (MCAS(H)), New River.

## 4. Responsibilities

a. Organizational Commanders will:

(1) Implement procedures and guidelines established by this Order for hazardous material and waste disposal and related handling, labeling, packaging, storage and transportation.

(2) Maintain copies of this Order and reference (f) at work sites where hazardous material and waste are routinely handled, stored or generated and ensure that personnel are familiar with the contents thereof.





B0 6240.5 22 Jun 1982

(3) Inform newly assigned personnel of the characteristics and special handling requirements of hazardous material and waste used or generated at the work site.

(4) Report all hazardous material and hazardous waste spills to the Base Fire Department at telephone 451-3333. Commands at MCAS(H), New River will additionally report all spills at Station S-4 Office, telephone 455-6506/6068. Reference (f) pertains.

(5) Provide weekly inspections of all areas used to store hazardous waste and take action required to prevent and correct leaks, spills and other discrepancies. Maintain a log of these inspections showing the following:

(a) Date and time of the inspection

(b) Name(s) of the inspector(s)

(c) Notation of discrepancies observed

(d) Date and nature of corrective action taken.

Note: Reference (b) requires inspection records to be retained for three years.

b. Officer in Charge of Preservation, Packaging and Packing (PP&P) will:

(1) Upon request from Hazardous Material Disposal Coordinators inspect hazardous material and/or waste requiring disposal and provide such technical assistance and material support as required to package material and waste for disposal.

(2) Make appropriate transportation certifications as required by the Department of Transportation and the Environmental Protection Agency.

c. Defense Property Disposal Officer (DPDO), Camp Lejeune will:

(1) Accomplish disposal and related long-term storage of hazardous material and waste in accordance with reference (b) and applicable DOD regulations.

(2) Determine which items generated aboard this installation will be disposed of as hazardous waste (either on a case-by-case basis or by publishing listings of specific items).

(3) Publish DPDO procedural and administrative requirements for turn-in of hazardous material and hazardous waste.

(4) Notify cognizant officers of changes in DPDO policy which would affect implementation of the subject program.

(5) Maintain records of DPDO hazardous material and waste disposal activity in accordance with reference (b).

(6) Inspect hazardous material and waste for which DPDO has accepted accountability and take action required to correct deficiencies as required for compliance with reference (b).

d. Assistant Chief of Staff, Manpower will: Develop and implement a program to provide training and related recordkeeping required by reference (b).

e. Base Safety Officer will:

(1) Provide technical assistance on matters dealing with personnel safety related to hazardous material and waste management.

(2) Include hazardous material and waste disposal considerations in routine safety inspection programs.

f. Assistant Chief of Staff, Logistics will:

(1) Develop and implement a hazardous waste manifesting system and related recordkeeping system required by references (b) and (c).

(2) Prepare the following reports for Marine Corps Base, Camp Lejeune, for submission to the appropriate regulatory agency(ies)

(a) Hazardous Waste Generator's Annual Report and Exception Report as required by Section 262.4 of reference (b).

(b) Facility Annual Report and Unmanifested Waste Reports required by Section 264.7 of reference (b).

(3) Serve as point of contact between Marine Corps Base and DPDO on matters dealing with hazardous material and waste disposal and related storage and handling.

(4) Negotiate necessary agreements between Marine Corps Base and DPDO on matters dealing with hazardous material and waste disposal and related storage and handling.



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(5) Provide properly equipped vehicles and trained operators for transportation of hazardous waste (when private contractor is utilized, ensure that the transporter is properly registered with the Environmental Protection Agency).

(6) Assume overall responsibility for operating long-term hazardous waste storage facility at Building TP-451 in accordance with standards contained in Part 265 of reference (b) until such time as the DPDO assumes this responsibility.

(7) Provide a hazardous material disposal coordinator to perform duties outlined in paragraph 4K of this Order with respect to disposal of hazardous material/waste by Marine Corps Base organizations.

g. Assistant Chief of Staff, Facilities will:

(1) Inform cognizant officers of federal, state and military environmental regulations and policies applicable to the subject program.

(2) Provide environmental monitoring and related followup of existing and past hazardous waste storage or disposal sites as required by reference (b).

(3) Initiate projects to provide required hazardous material spill prevention, control and countermeasures facilities.

h. Public Works Officer will:

(1) Provide engineering support and related technical assistance pertaining to hazardous material and hazardous waste storage and handling facilities.

(2) Include hazardous material and waste disposal and related management considerations in contracts as required to effect compliance with references (a) through (d).

(3) Enter pollution abatement deficiencies into the Naval Environmental Protection Support Service (NEPSS) information system and develop appropriate pollution abatement projects in accordance with reference (e).

i. Base Fire Chief will:

(1) Provide routine inspection of hazardous material and waste storage areas as required to identify spill and fire hazards.

(2) Provide initial response to hazardous material spills in accordance with reference (f).

j. Base Maintenance Officer will:

(1) Monitor ongoing activities as required to identify, evaluate and provide up-channel reporting of environmental deficiencies related to the subject program.

(2) Provide laboratory support required for identification of hazardous material and waste.

(3) Provide point of contact with federal and state regulatory agencies on environmental matters pertaining to the subject program.

(4) Upon request, provide on-site technical assistance as required to enable Organizational Commanders to evaluate compliance with this Order and applicable environmental regulations.

k. Hazardous Material Disposal Coordinator (HMDC) will:

(1) Ensure Command compliance with the procedures in enclosure (2).

(2) Inform organizations within the HMDC's cognizance of changes in hazardous material/waste storage handling and disposal procedures.

(3) Identify training requirements for personnel within the HMDC's cognizance routinely handling hazardous material or waste.

5. Action

a. Major Commands (i.e., MCAS(H), New River; 2d Marine Division, Naval Regional Medical Center, Naval Regional Dental Center and 2d Force Service Support Group) will:

(1) Designate a Hazardous Material Disposal Coordinator to serve as point of contact on matters related to implementation of this Order.

(2) Monitor all aspects of this disposal program internal to their Command to ensure compliance with this Order.

b. Battalion/Aircraft Group/Separate Company Commanders 2d Marine Division, 2d Force Service Support Group and Marine Corps Air Station (H). New River will:





(1) Ensure that organizations within their cognizance comply with requirements of paragraph 4a(1)-(5) of this Order.

(2) Implement inspection and recordkeeping requirements of paragraph 4a(5) of this Order for organizations within their cognizance.

c. Commanders procurring hazardous material outside the Federaly Supply System will: require the manufacturer/ distributor to provide the information shown on enclosure (2) of reference (h) and will furnish a copy of the information to the Base Safety Officer and Air Station Safety Manager.

6. <u>Applicability</u>. Having received the concurrence of the Commanding Generals, 2d Marine Division, FMF; 2d Force Service Support Group, (Rein), FMFLANT; 2d Marine Aircraft Wing, FMF, Atlantic and the Commanding Officers of the Marine Corps Air Station (Helicopter), New River and tenant units; Naval Regional Medical Center and Naval Regional Dental Center, this Order is applicable to those Commands.

I. R. FRIDELL Chief of Staff

DISTRIBUTION: A BMAINO (100)



HAZARDOUS WASTE LABELING INSTRUCTIONS

(See Note #1)

	RDOUS
WA	STE
FEDERAL LAW PROHIB	TS IMPROPER DISPOSAL
OR THE NEAREST POLICE. C	E FIRE DEPARTMENT AT 451-3333. IR PUBLIC SAFETY AUTHORITY. NTAL PROTECTION AGENCY
PROPER D.O.T. SHIPPING NAME _ See Note #2	UN OR NA#
GENERATOR INFORMATION: NAME NORTH CAROLINA 28542. EPA ID NO.	MARINE CORPS BASE, CAMP LEJEUNE NC6170022580
NAME OF SUBUNIT GENERATING WAS	STE:
	EPA (Leave Blank)
ACCUMULATION START DATE Sec Note #3	MANIFEST (Leave 31ank)
	WITH CARE!

- Note #1: The depicted label shall be put on all hazardous waste storage containers used on board Marine Corps Base. Organizations on board MCAS(H), New River will use labels provided by Air Station S-4 Office. See next page for examples of hazardous wastes.
- Note #2: If known, insert name and UN or NA# listed in 49CFR Part 172, otherwise enter NSN and common/trade name used locally to identify item.

1

Note #3: Insert the date that filling of container begins. This date must be entered prior to use of container.

B0 6240.5 22 Jun 1982

## List of Pre-Determined Hazardous Waste (See Notes #1 and #3)

1. The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1, 1, 1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons.

2. The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1, 1-trichloroethane, chlorobenzene, 1, 1, 2-trichloro-1, 2, 2-trifluoroethane, ortho-dicholorobenzene and trichlorofluoromethane.

3. The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohezanone and methanol.

4. The following spent non-halogenated solvents: cresols and cresylic acid and nitrobenzene.

5. The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol and pyridine.

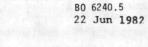
6. Spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions. See Note #2).

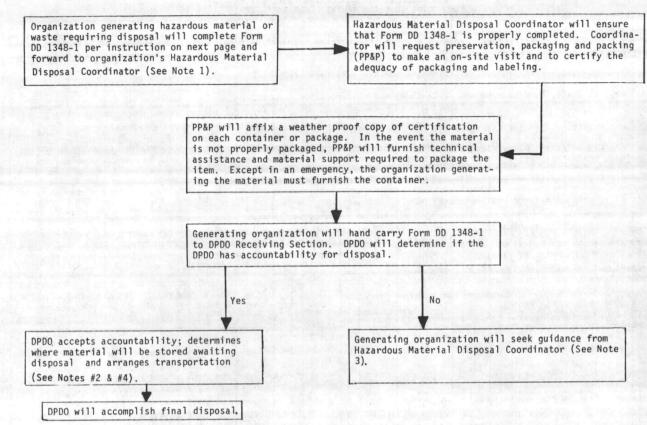
7. Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions. See Note #2).

8. Spent cyanide bath solutions from mineral metals recovery operations.

- Note #1: This is a partial listing and is subject to change. Discarding these items into waste oil collection tanks is prohibited.
- Note #2: These solutions and sludges are turned in for processing under the Precious Metals Recovery Program and should be turned in as HM.
- Note #3: Waste contained in this listing is limited to those items specifically identified in subpart D of part 261 of reference (b). The local Defense Property Disposal Officer is responsible for identifying items which although not specifically identified by reference (b), must be disposed of as hazardous waste.

## HAZARDOUS MATERIAL DISPOSAL PROCEDURES





- Note 1: Organization having physical custody of material awaiting disposal will conduct weekly inspections in accordance with paragraph 4(a)(5) of this Order, if the item is hazardous waste.
- Note 2: If an item to be transported is a hazardous waste subject to RCRA, the Traffic Management Officer will transport. A North Carolina Hazardous Waste Shipping Manifest prepared prior to transporting, will be attached to DD-1348-1 and will be carried by driver of vehicle used to transport waste.
- Note 3: These items will be disposed of on a case by case basis utilizing procedures developed in accordance with applicable regulations. Assistant Chief of Staff, Facilities, Marine Corps Base, will coordinate development of appropriate procedures.
- Note 4: The material will not be moved without prior concurrence of DPDO unless required by an emergency, in which case, DPDO will be informed as soon as possible.

B0 6240.5 22 Jun 1982

> INSTRUCTIONS FOR COMPLETING DD FORM 1348-1 BY MARINE CORPS BASE AND MARINE CORPS BASE TENANTS (SEE NOTE 1)

The following modifications/changes are to be incorporated into all disposal turn-in documents for hazardous materials or hazardous waste.

Block A - Name of Organization (telephone number) - NC 61700 22580

Block B - MCB; Camp Lejeune, NC (451-1634) - NC 61700 22580

Block C - Mark for (normally left blank): Insert HM (if turn-in is hazardous material) or HW (if turn-in is hazardous waste). See enclosure (1) for listing of HW commonly generated aboard military installations.

Block U - Freight Classification nomenclature: Add characters (two alpha, four numeric) identification number as shown in 49 CFR, Part 172. If unable to identify material or waste leave this block blank (See Note 2).

Block Y - Use this block (in lieu of Blocks AA through EE) for the Deposit Account Number.

Block AA and BB: MCB, Camp Lejeune, NC - NC 6170022580

Block CC: Have transporter (identified in Blocks AA and BB) sign and date for shipment received)

Blocks DD, EE, FF and GG: Insert the following statement in these blocks (Note: Rubber stamp, typewritten or machine produced copy required): "This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of DOT and EPA." (See Note 3).

(Signature)

(Date)

- Note 1: Marine Corps Air Station (H), New River and tenants shall complete DD Form 1348-1 in accordance with Air Station Order 6280.1.
- Note 2: Hazardous Material Disposal Coordinator will request Base Maintenance Officer representative (telephone 5977) to accomplish sampling and analysis of item(s), as required, to complete Block U.
- Note 3: Certification will be signed by authorized representative of generating organization. It is recommended that person signing have first hand knowledge of or supervisory responsibility for items being disposed of.



# UNITED STATES MARINE CORPS MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542

BO 11090.1B MAIN/DDS/th 28 May 1981

ENC(2)

## BASE ORDER 11090.1B

From: Commanding General To: Distribution List

Subj: Oil Pollution Prevention and Abatement and Oil and Other Hazardous Substances Spill Contingency, Plan

Ref: (a) MCO P11000.8A

- (b) Resource Conservation and Recovery Act (RCRA) of 1976 (NOTAL)
- (c) Clean Water Act (NOTAL)
  - (d) 0il Spill Prevention Control and Countermeasure Plan of 10 June 1978, Camp Lejeune, NC (NOTAL)

Encl: (1) Oil and Hazardous Material Spill Prevention, Containment, Cleanup and Disposal Guidelines (2) Oil and Other Hazardous Material Spill Contingency Plan

1. <u>Purpose</u>. To revise existing oil and other hazardous material related pollution abatement and prevention procedures for Marine Corps Base, Camp Lejeune and Marine Corps Air Station (Helicopter) (MCAS(H)), New River and to assist the Commanding General in the implementation of reference (a) with respect to pollution abatement.

## 2. Cancellation. BO 11090.1A.

3. Policy. It is the continuing policy of the Commanding General to actively participate in environmental pollution abatement, to take positive planning and programming action to abate and correct oil and other hazardous materials, related pollution problems and to incorporate appropriate pollution control and prevention facilities in all new construction aboard this installation. The intent of this policy is to carry out the applicable measures of references (a), (b), (c) and (d) and to prohibit the discharge of oil, oily mixtures and other hazardous substances except in designated areas by authorized personnel.

### 4. Responsibilities

a. Base Maintenance Officer has overall responsibility for:

(1) Maintenance of water pollution abatement facilities and the central storage and related collection and transportation of waste petroleum products.

(2) Providing personnel required for routine monitoring, surveillance, upchannel reporting and enforcement of unauthorized discharges of oil and other hazardous materials and related significant environmental problems of an ongoing nature involving the handling and disposal of petroleum products and other hazardous materials regulated by references (a), (b) and (c).

b. Commanding Officers/Area Commanders are charged with the responsibility of preventing spillage and other unauthorized discharge of oil and other hazardous materials within their own areas and will develop and implement plans and procedures which are consistent with applicable regulations and enclosures (1) and (2) for preventing, reporting, containing and cleaning up such spillage or unauthorized discharge.

c. Director, Natural Resources and Environmental Affairs Division, Base Maintenance Department or his representative will assume responsibility of On-Scene Coordinator (OSC) upon arrival at the scene of an oil or other hazardous material spill in accordance with procedures outlined in references (a) and (b) and enclosure (2).

d. Base Fire Chief or his senior representative will provide initial response and other assistance with any spill of oil or other hazardous material as outlined in enclosure (2), until a verification is made that the reported spill has occurred in an aircraft operating area aboard MCAS(H), New River. If the latter situation exists, the Base Fire Chief will provide a standby crew to assist, if the crash crew MCAS(H), New River is unable to contain the spill within the aircraft operating area.

e. Crash Crew, MCAS(H), New River will develop and implement a written procedure for the initial response to and containment and cleanup of oil and other hazardous materials spills in aircraft operating areas aboard MCAS(H), New River. Procedures will be consistent with applicable regulations and enclosure (2).

5. <u>Action</u>. Discharge of oils or other hazardous materials on or into the grounds and streams of this installation is prohibited. Cognizant officers will take necessary action to assure compliance. Commanding Officers/Area Commanders shall conform to the standards and criteria set forth in enclosures (1) and (2).

(See Page 2 of enclosure (2) for reporting spills





# BO 11090.1B

# 28 MAY 1981

6. <u>Applicability</u>. Having received the concurrence of the Commanding Generals, 2d Marine Division, FMF; 2d Force Service Support Group, (Rein), FMFLANT; and the Commanding Officers of the Marine Corps Air Station (Helicopter), New River and tenant units; Naval Regional Medical Center; and Naval Regional Dental Center, this Order is applicable to those Commands.



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## OIL AND HAZARDOUS MATERIAL SPILL PREVENTION, CONTAINMENT, CLEANUP, AND DISPOSAL GUIDELINES

1. The prevention of oil and hazardous-material spills and the resultant environmental damage is the responsibility of all Commanders.

2. All Commanders and Department Heads will publish and prominently post directives setting forth detailed policies and procedures for the control and prevention of oil and hazardous-substance pollution specifically applicable to their organization.

3. All Commanders and Department Heads will take the following actions:

a. Take positive measures to prevent spills of oil and hazardous substances to include a review of the Command's maintenance and operational procedures.

b. Conduct frequent inspections of areas and facilities assigned to ensure compliance with published procedures.

c. Establish immediate action procedures for the amelioration of pollution which may result from oil and hazardous-substance spills, to include the stocking of materials required to carry out the procedures.

d. Ensure that all personnel within their Command are thoroughly indoctrinated regarding the environmental impact of oil and hazardous substance spills and proper disposition of oil and hazardous substances.

e. Encourage maximum reuse of technically contaminated fuels by multifuel-engine powered tactical vehicles.

4. The following guidelines are generally applicable to garrison operations:

a. Contaminated fuels which cannot be burned in tactical vehicles and other used petroleum products, except gasoline, will be collected in a tank of at least 250-gallon capacity equipped with a funnel, strainer and cover to prevent entrance into the tank of trash, water and other foreign matter. When the container requires emptying, the Officer in Charge (OIC) will notify the Base Maintenance Department (Telephone 5909). The Base Maintenance Department will dispatch a vehicle to remove the waste oil. In the event of an emergency 55-gallon drums may be used as a temporary expedient storage container for waste oil.

b. Waste lubrication grease will be collected, stored in suitable containers and disposed of in accordance with instructions provided by Base Maintenance Department representative. Send request via Chain of Command to the Base Maintenance Officer.

c. Oil-saturated soil in the vicinity of oil and petroleum storage areas should be removed to the sanitary landfill and replaced with fresh earth.

d. To dispose of contaminated gasoline contact the Base Fire Department (Telephone 3004).

e. Disposal of hazardous waste and other hazardous substances such as acids, poisons and solvents through any drainage system to include sinks, wash racks, storm drains and natural drainage systems is specifically prohibited. These products will be segregated and stored in suitable containers and will be disposed of in accordance with instructions provided by Commanding General, Marine Corps Base, Camp Lejeune.

f. Petroleum products containers will be disposed of at the sanitary landfill, or recycled, if appropriate, with the exception of 55-gallon drums and durable metal containers which will be disposed of through the Defense Property Disposal Officer, Building 906.

g. Personnel changing private owned vehicle (POV) oil on Base will use established Base Special Service facilities and deposit waste oil in one of the authorized collection tanks on Base and the Air Station.

h. Oil and gasoline storage containers larger than 550-gallon capacity will be diked to include a drainage line and valve which will be locked. The latter will be operated only by personnel authorized by the Unit Commander.

5. Field operations will comply with the guidance enumerated in the following subparagraphs:

a. All tactical refueling systems installed on Base must first be approved by the Base Maintenance Officer.

b. Fuel stored in tactical refueling systems will be properly diked, as required by current regulations. As a general rule, the dike must be capable of containing at least the volume of the container stored within it.

c. When using fuel tanker vehicles:

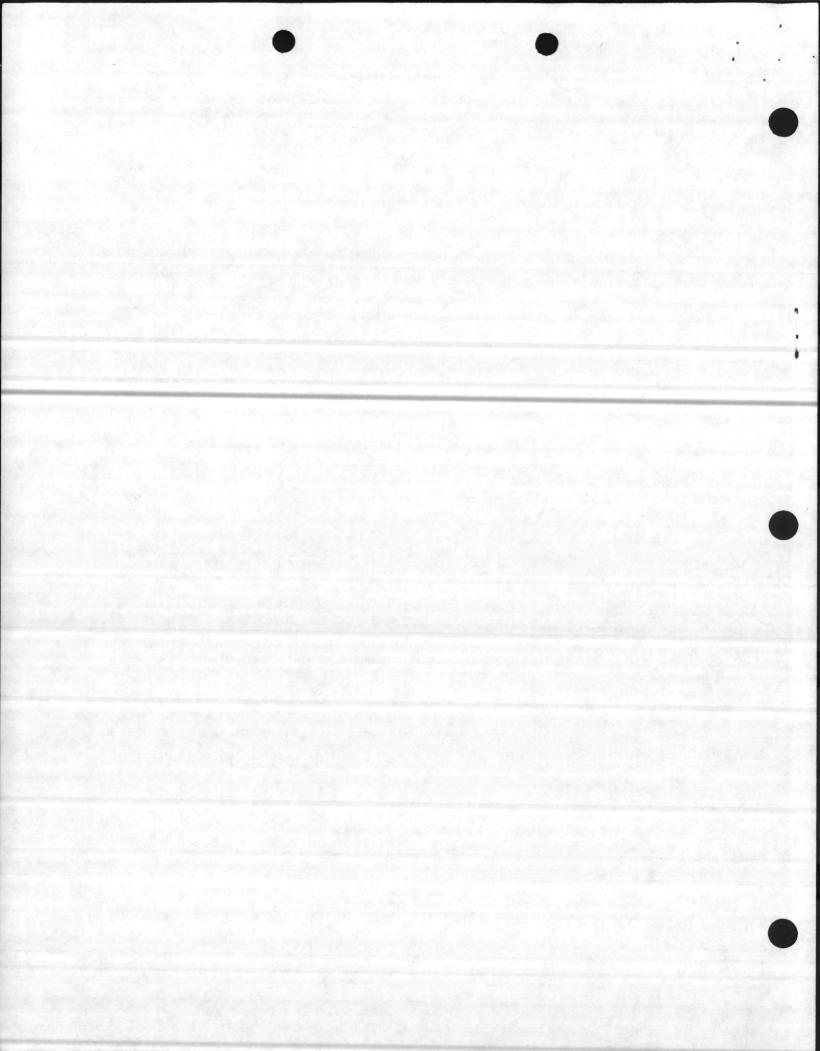
(1) Hoses, nozzles and connections will be checked frequently for serviceability to avoid leakage of fuel.

(2) Refueler operators will stay with the vehicle during refueling operations.

(3) Tanker vehicles containing fuel will be parked in such a manner as to avoid the possibility of spilled fuel entering natural or man-made drainage systems.

(4) During recirculation operations, nozzles will be secured to the vehicle.

(5) All waste petroleum products generated during field exercises will be stored (55-gallon drums, etc.) and disposal instructions obtained from the Director, Natural Resources Division, Base Maintenance Department (451-5003).





BO 11090.18

OIL AND OTHER HAZARDOUS MATERIAL SPILL CONTINGENCY PLAN

FOR

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA MARINE CORPS AIR STATION (HELICOPTER), NEW RIVER, JACKSONVILLE, NORTH CAROLINA MARINE CORPS HELICOPTER OUTLYING FIELD, OAK GROVE, JONES COUNTY, NORTH CAROLINA

PREPARED

OCTOBER 1980

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BO 11090.1B

# 88 MAY 1981

## 1. Reporting Spills of Oil and Other Hazardous Substances

a. Materials Classification - The following products are examples of oil compounds or hazardous substances which must be reported if spilled on the ground or water in any amount:

Gasoline Hydraulic Fluid	Organic Solvents
Kerosene Acids	Cleaning Solutions
Lube Grease No. 2 Fuel Oil	Poisonous Chemicals

b. Reporting Procedures - All spills of oil or hazardous materials shall be reported immediately to the Base Fire Department Phone 3333 (on base) or 451-3333 (off base). The report shall include location (Building Number) of spill, substance spilled and the approximate amount. All spills occurring at Marine Corps Air Station (Helicopter), New River will also be reported to the Station S-4 (455-6068 - 455-6518) during normal working hours and to the Station Officer of the Day after normal working hours (455-6111).

c. Posting of Oil Spill Procedure - Signs shall be posted in every building, tank location and field service location where oil or hazardous materials are used. The sign shall have a yellow background with black lettering indicating the following information:

## IN CASE OF AN OIL OR HAZARDOUS MATERIAL SPILL CALL BASE FIRE DEPARTMENT ON BASE 3333/OFF BASE 451-3333 NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY

d. Initial Containment Procedure - Remain in area - - - Do Not Wash Down With Water - - - Keep Personnel Out of the Area - - - Block Runoff with Earth Materials to Prevent Spreading, when possible.

## 2. Response to Spill

a. Fire Department - Fire Department shall dispatch a regular fire fighting unit to the scene of a reported spill. The Base Fire Chief or his senior representative shall report to the scene as soon as possible. Dispatcher will immediately notify the Base Fire Chief or his senior representative who will perform the following duties:

(1) Assume the role of On-Scene Coordinator (OSC).

(2) Take all necessary immediate steps to contain the spill, eliminate any fire hazards and protect all personnel from exposure and request the assistance of the Base Safety Officer, if required (See page 4, Enclosure (2)).

(3) Notify the Natural Resources and Environmental Affairs Director (Telephone 5003) of the spill location and the nature and quantity of spilled materials.

(4) Evaluate the spill situation and request necessary logistical support from the Base Maintenance Officer to contain the spill and facilitate the cleanup and recovery of the spilled materials.

(5) OSC duties shall transfer to the Director, Natural Resources and Environmental Affairs upon his arrival at the scene. (See page 4, Enclosure (2) for Personnel and Public Safety Coordination).

b. Base Maintenance Officer

(1) Base Maintenance Officer shall maintain the inventory of materials and equipment as established in Appendix A of enclosure (2).

(2) Base Maintenance personnel shall respond immediately to the request of the OSC with men and equipment requested.

(a) Direct supervision shall be from the OSC.

(b) Maintenance personnel shall remain at the spill scene until authorized to depart by the OSC.

c. Natural Resources and Environmental Affairs Division

(1) The Director or his authorized representative shall proceed to the scene and assume the duties of the OSC. The duties shall include the following categories:

(a) Direct all containment and cleanup activities.

(b) Report oil spills that discharge into the inland waters or coastal waters to the following: Base Maintenance Officer; Assistant Chief of Staff, Facilities, Marine Corps Base; Marine Safety Officer, U. S. Coast Guard, Wilmington, North Carolina and the Environmental Regulatory Agencies, as required.

(c) Request U. S. Coast Guard assistance for spills into waters that cannot be contained promptly by joint efforts of the Fire Department and Base Maintenance crews.





(2) The Natural Resources and Environmental Affairs Division Director or his representative shall remain at the scene of the spill until all contaminant is properly contained and the danger of oil contamination of water-ways is eliminated.

(3) At the conclusion of all cleanup operations, the official report submitted to the Environmental Protection Agency (EPA), Region IV, shall be prepared in accordance with requirements of Federal Water Pollution Control Act and EPA regulations in effect at the time. The report shall be transmitted to EPA through the directives of the Commanding General.

## 3. Spill Containment and Cleanup

a. Small Spills (less than one gallon)

(1) Cause: Gasoline or fuel oil spills at fueling locations occur by overfilling or blow back from the tank receiving the fuel.

(2) Reporting: This type of spill requires reporting to the Office of Natural Resources and Environmental Affairs (Phone 1-919-451-5003). The fuel spill must be promptly cleaned up by the person at the scene.

(3) Containment Procedures:

(a) DO NOT FLUSH INTO STORM SEWER OR DRAINAGE DITCH.

(b) Cover entire spill with sand or absorbent material from storage bin or container. Add material as liquid appears in the surface of the sand or absorbent material.

(c) Cleanup contaminated sand or absorbent material with broom and shovel placing it in a container (metal) for disposal or possible reuse. The container shall be labeled "Waste Oil Refuse".

(d) If storage bin of sand or absorbent material is less than one-half full after using, call Base Maintenance Department (3001) to inform them of the location needing additional material.

(e) Reapply a second coat of sand or absorbent material in a very light layer to assure all gasoline or fuel oils have been blotted up. Brush material back and forth over the area and then sweep up completely. This material can be replaced in the fresh storage bin rather than depositing it in the "Waste Oil Refuse" container.

b. Spills on Concrete Aprons (more than one gallon)

(1) Reporting: Call Base Fire Department

(2) Containment Procedures:

(a) DO NOT FLUSH INTO STORM SEWER OR DRAINAGE DITCH.

(b) The person on-site shall erect a two-to-three inch high sand or earth dam on the concrete or at the edge of the concrete below (downstream) the direction that the spill is flowing. This is the first step in containment.

(c) Apply sand or absorbent materials that are available around the perimeter of the spill until the Fire Department arrives. Keep other personnel away from the area.

(d) Fire Department shall continue abatement methods using equipment available until the Director of Natural Resources and Environmental Affairs Division or his representative arrives to determine further containment and cleanup requirements.

(e) Base Maintenance personnel shall install dams, straw barriers, pumping equipment and other abatement or cleanup equipment as directed by the OSC.

c. Spills on Ground (more than one gallon)

(1) Reporting: Call Base Fire Department

(2) Containment Procedures:

(a) DO NOT FLUSH INTO STORM SEWER OR DRAINAGE DITCH.

(b) The person on-site shall erect a minimum three-inch high sand or earth dam below (downstream) the direction that the spill is flowing. The dam should be made higher if the liquid pool behind the temporary dam rises to within two inches of the top. A trench or sump may be used in lieu of a dam. This is the first step in containment that must be taken promptly to prevent spreading into surface waters.

(c) Apply sand or absorbent materials that are available around the perimeter of the spill until the Fire Department arrives. Keep other personnel away from the area.

(d) Fire Department shall continue abatement methods using equipment available until the Director of Natural Resources and Environmental Affairs Division or his representative arrives to determine further containment and cleanup requirements.

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BO 11090.18 88 MAY 1981

(e) Base Maintenance personnel shall install dams, straw barriers, absorbents, pumping equipment and other abatement or cleanup equipment as directed by the OSC.

d. Spills Entering Storm Drainage System

(1) Reporting: Call Base Fire Department and emphasize that the liquid has entered a catch basin, manhole, drainage ditch, or any structure (pit) below ground.

(2) Containment Procedures:

(a) DO NOT ADD WATER TO FLUSH OUT STORM SEWER OR STRUCTURE.

(b) The person on-site shall attempt to erect a sand or earth dam around or cover with polyethylene or other plastic materials the manhole or catch basin to prevent further entrance of liquid into the structure. This is the first step in containment that must be taken promptly to minimize the quantity of liquid that will be discharged into surface waters.

(c) The person on-site shall apply sand or absorbent materials that may be available around the perimeter of the spill and at the manhole or catch basin until the Fire Department arrives.

(d) Base Maintenance personnel shall place oil booms across storm drains to prevent further discharge. Public Works Department will develop maps of drainage systems required for siting booms. After spill is contained, cleanup will be initiated. Action may include the following:

1 Inspect downstream manholes for evidence of oil progression toward discharge. If storm system has a very low flow, install straw barrier or absorption dam inside manhole.

2 Where practical, install plug in upstream side of manhole, to contain in the pipe system.

 $\frac{3}{100}$  If the drainage system has an open ditch, install straw bale dams or aborption dam to collect spilled materials.

4 Isolate streets with contaminated manhole to prevent fires or explosions.

(e) The Director, Natural Resources and Environmental Affairs Division, or his representative shall determine further containment and cleanup requirements after arriving on the scene.

(f) Base Maintenance personnel shall install dams, straw barriers, aborbents, pumping equipment and other abatement and cleanup equipment as directed by the OSC.

e. Spills Entering Surface Waters

(1) Reporting: Call Base Fire Department and emphasize that the liquid was discharged directly into the surface waters.

(2) Containment Procedure:

(a) Person at the site should check the source of discharge to be assured that no further discharge can occur. Close valves, remove hose, or isolate the source from causing any further release of materials.

(b) Do not allow boats or equipment to enter the surface waters where the spill has occurred. If surface type oil absorbents are available, begin spreading this material wherever an oil skim is observed. Do not enter the water to apply this material until the Fire Department arrives.

(c) Fire Department shall continue abatement methods using equipment available until the Director of Natural Resources and Environmental Affairs Division, or his representative arrives to determine further containment and cleanup requirements.

(d) Base Maintenance personnel shall install booms, skimmers, pumps and other abatement or cleanup equipment as directed by the OSC.

## 4. Responsibilities for Ensuring Personnel and Public Safety

a. Overall responsibility for ensuring the safety of personnel involved in the containment and cleanup of hazardous material spill is assigned to the Base Fire Chief or his senior representative. The Base Fire Chief representative shall continue to monitor the situation and will provide required standby personnel and equipment. The Base Fire Chief representative will request the assistance of the Base Safety Officer as needed. The Base Fire Chief representative shall keep the OSC informed of any safety considerations affecting the containment and cleanup of the spill. In the event of imminent hazard to personnel involved in the spill cleanup or to the public, Base Fire Chief representative shall take appropriate action. The OSC shall assist the Base Fire Chief representative implement safety procedures required.

b. Base Safety shall dispatch a safety representative to the spill scene upon request from the Base Fire Chief representative. The Base Safety representative will remain at the scene until advised by the Base Fire Chief representative that assistance is no longer required. Base Safety representative will monitor all activity at or near the spill and make appropriate recommendations to the Base Fire Chief representative.

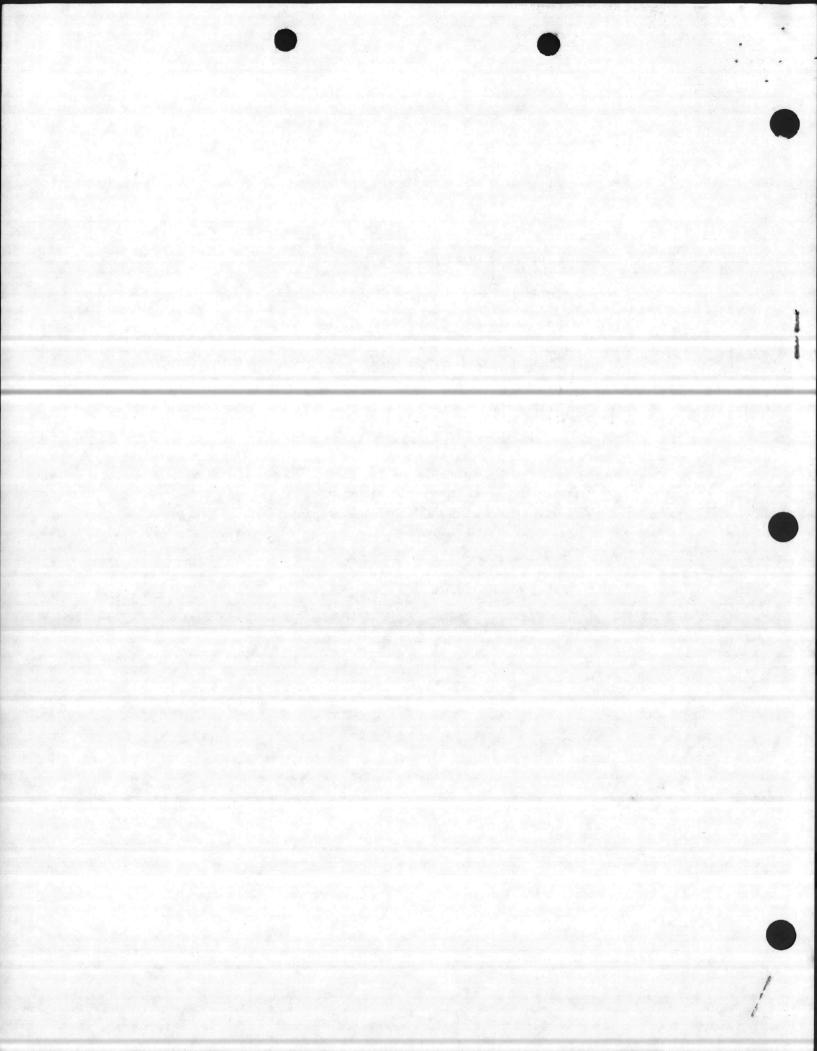
# MATERIALS AND EQUIPMENT FOR OIL SPILL CONTAINMENT AND COUNTERMEASURE

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Item No.	Description	Quantity
1.	Gasoline engine driven (portable) trailer mounted diaphragm pump with sectional suction and discharge hose - minimum capacity 25 gallons per minute.	2
2.	Sectional aluminum oil boom	
3.	Inflatable oil barrier, Whittaker Expandi self-inflating	300 L. F.
4.	Collapsible bag for field filling of collected oil-250 gallon capacity	2
5.	Oil skimmer (portable)type for water floating oil pick-up	1
6.	Baled hay or straw with wire or nylon baling (located at strategic areas)	200 Bales
7.	Steel fence stakes (6 feet long)	50 each
8.	Woven wire mesh (chicken wire) 3ft. width 4ft. width	200 L.F. 100 L.F.
9.	Sledge hammer - 10 lb. 5 lb. $2^{3}\overline{2}$ lb.	3 5 5
10.	Shovels - Long handle round point Long handle flat blade Short handle round point Short handle flat point	5 5 5 5 5
11.	Oil Absorbent Compound - for water spill clean up	2000 165.
12.	Oil Absorbent Compound for ground spill clean up - Randustrial P-218 Oil Absorbent (55-gallon drum)	25 drums
13.	Nylon rope - ¼" diameter ½" diameter 3/4" diameter	200 L.F. 400 L.F. 400 L.F.
14.	Oil Sorbent Material - 3M, Conwed or Grefco	500 lb.

Appendix A



# SUPPORT FUNCTION

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15. Hazardous Material Environmental Management Program

# MCB, CAMP LEJEUNE

Designate an activity focal point regarding hazardous material and waste management and disposal.

Register with the Environmental Protection Ágency and North Carolina (EPA & NC) as a long-terf'storer and transporter of all hazardous wastes generated by MCAS(H), New River, which are subject to the Resource Conservation and Recovery Act (RCRA). Obtain all permits required by EPA and NC for storage of hazardous wastes.

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Provide guidance/material support (including laboratory analytical assistance) to ensure proper short term (less than 90 days) storage, packaging and labeling of hazardous waste: Provide laboratory support to identify hazardous waste. Provide material and supervisory support required to repackage and label hazardous materials/waste, as well as inspectors to certify the adequacy of packaging and labeling required by hazardous materials/ waste regulations.

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# MCAS(H), NEW RIVER

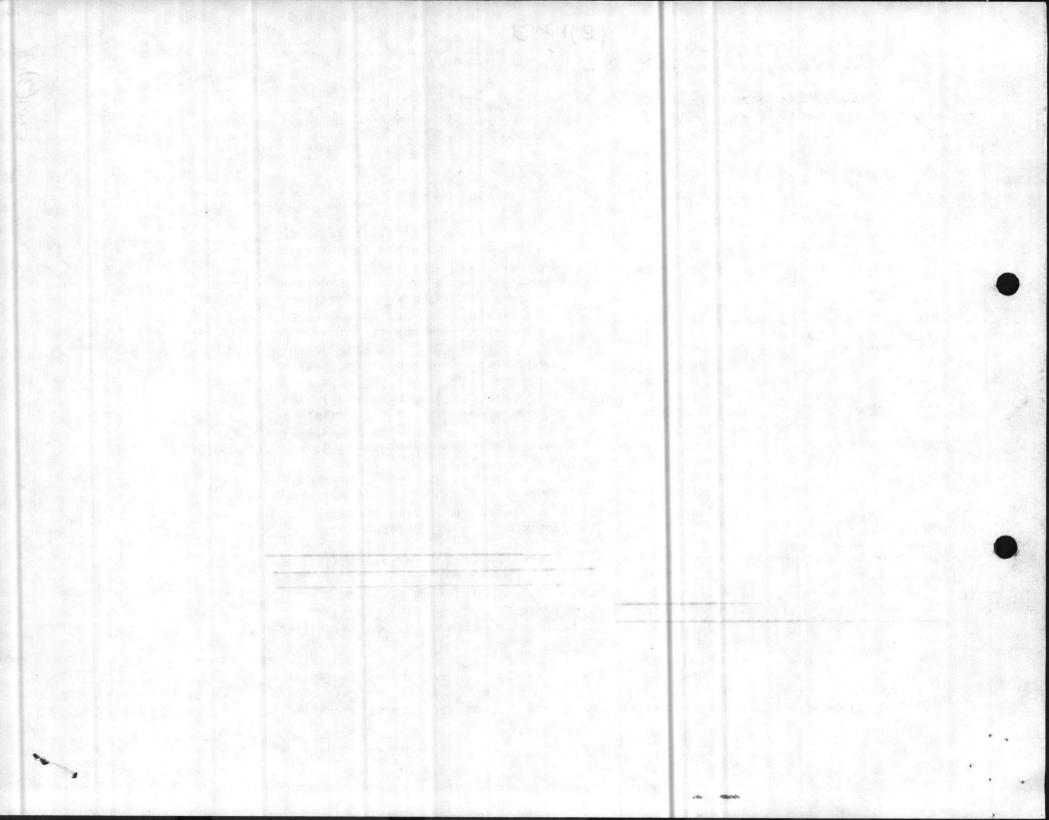
Designate a Hazardous Material Dispon-Coordinator to serve as an activity for point regarding hazardous material and waste management.

Register with EFA and NC as a hazardous waste generator. Will ensure that all units and tenants properly collect, segregate and containerize hazardous waste in accordance with EPA and NC regulations applicable to hazardous waste generators, utilizing materials and supervisors provided by MCB.

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Ensure that hazardous wastes are properly identified. Provide short-term storage (less than 90 days) when required.

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# SUPPORT FUNCTION

Hazardous Material Environmental Management Program (continued)

# MCB, CAMP LEJEUNE

Include MCAS(H), New River in an areawide oil hazardous material spill contingency plan. Furnish material support required and a basic level of personnel and equipment to handle routine spills. Make required reports to regulatory agencies and CMC. Provide an on-scene coordinator for spill containment and clean-up at MCAS(H), New River.

Provide long-term (more than 90 day) storage and final disposal of all hazardous wastes generated by MCAS(H) New River subject to RCRA, through facilities operated by and services provided by DPDO, Camp Lejeune, provided the wastes are properly packaged and documented. Maintain appropriate records of long-term storage and disposal of hazardous wastes accepted from MCAS(H). New River through the interservice support agreement with DPDO, Camp Le jeune, and submit all related reports required of hazardous waste storers and transporters to EPA and NC. Provide technical assistance to MCAS(H), New River on record-keeping reporting.

Provide technical assistance and environmental protection support to MCAS(H), New River regarding spill prevention control and countermeasure plan (SPCC) and hazardous material disposal.

Provide training for key personnel at MCAS(H), New River in hazardous material and hazardous waste management.

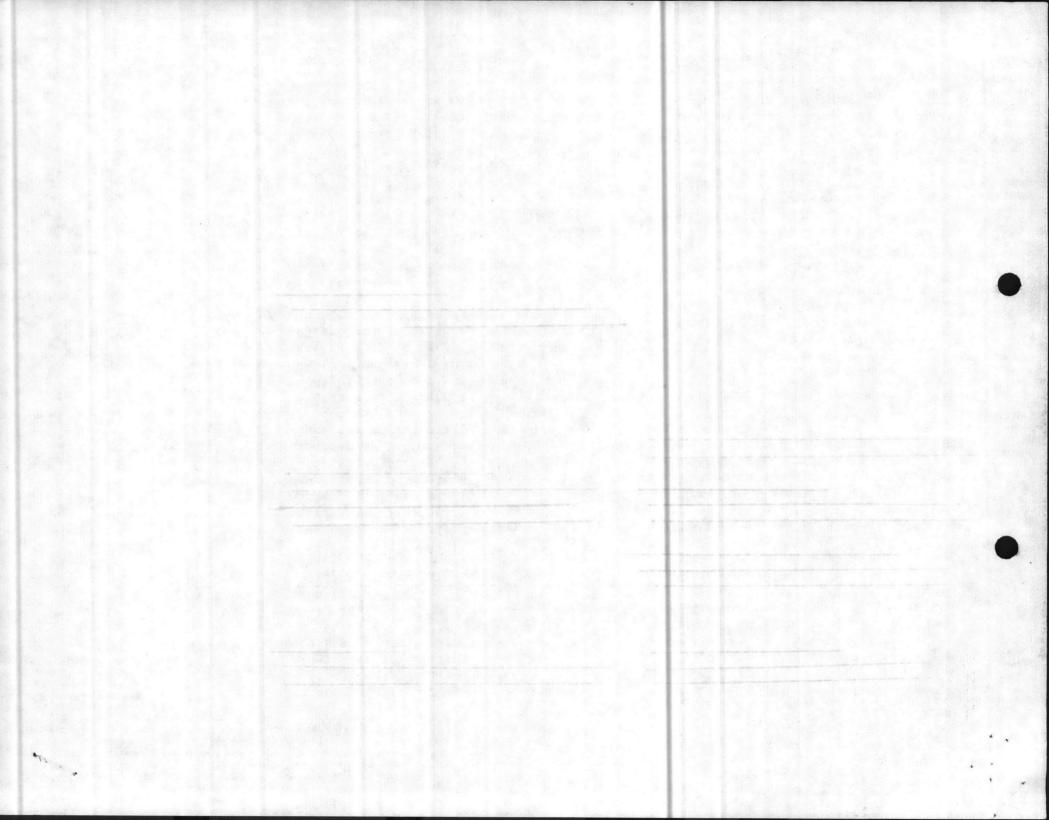
## MCAS(H), NEW RIVER

Assist, as required, in implement an area-wide oil/hazardous materia spill contingency plan, including not limited to furnishing manpower requested by on-scene coordinator for spill containment and clean-up at HCAS New River. Conduct investigations of spills and submit appropriate reports thereof to MCB, Camp Lejeune.

Prepare all documents required to transport and deliver wastes to long-term storage and disposal. Maintain appropriate records of waste generation and shipments and submit all reports required of hazardous waste generators to the EPA and NC.

Develop and implement an SPCC plan for hazardous waste generation and hazardous material and waste storage sites MCAS(H), New River.

Provide training for tenants and units at MCAS(H), New River in hazardous material/ hazardous waste management.



# Support Function

Real Property Maintenance (contd)

### MCB Camp Lejeune

Formulate and execute a long range natural resources management and environmental control program. Include a forest management program for timber production and harvest, site preparation, prescribed burning, forest pest control, and forest fire control: a fish and wildlife program for control of fishing and hunting. fish pond management, wildlife habitat manipulation and protection of rare and endangered species; and environmental protection program which provides for a system of collection and disposal of waste petroleum products, monitoring for water and air pollution.

Special requirements required for hunting and fishing on or near MCAS(H) will be incorporated in all directives and programs.

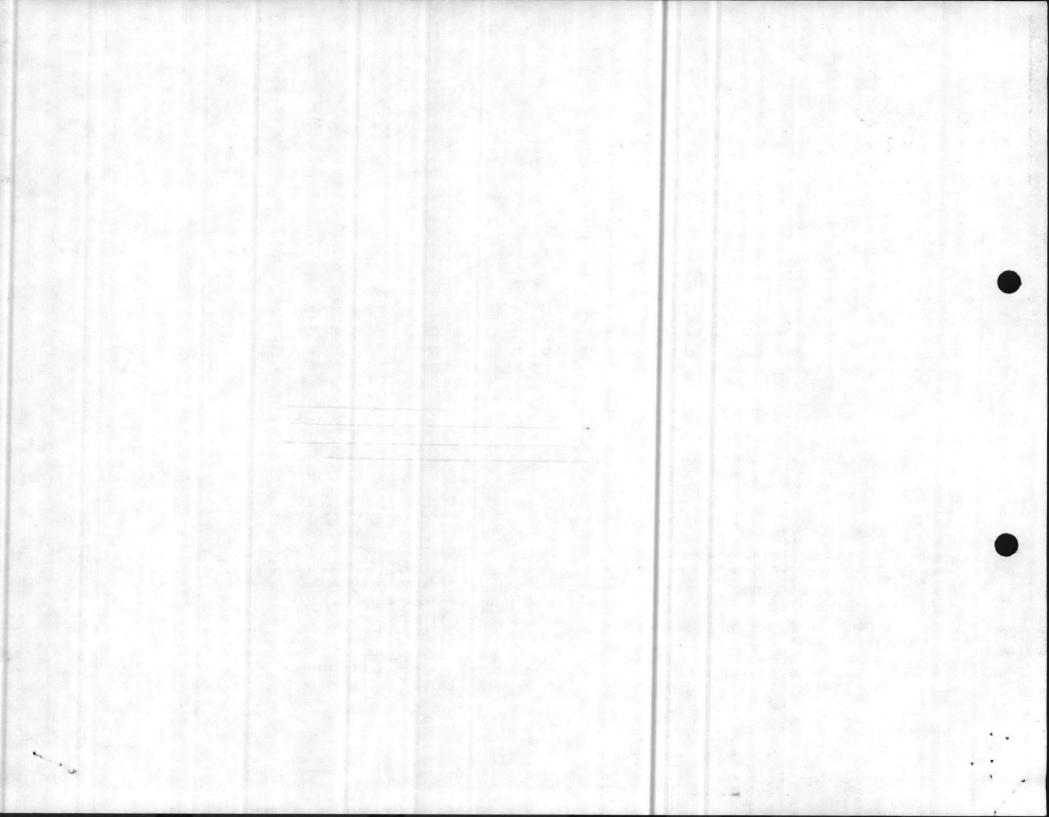
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## MCAS(H) New River

Furnish special requirements for incorporation into the natural resources management and environmental program, as appropriate.

Provide station Environmental Affairs Officer (collateral duty assignment) liaison with and input to MCB Camp Lejeune for natural resources management and environmental affairs control programs. The station Environmental Affairs Officer will assist the MCB Camp Lejeune Environmental Affairs Officer in a monitoring capacity in the area of MCAS(H) New River, Camp Geiger and the Verona area.

The station Environmental Officer will furnish his Station Game Warden to MCB, Camp Lejeune for utilization in a monitoring and control capacity to satisfy requirements existing in the MCAS(H) New River/Camp Ceiger/ Verona area.





MEMORANDUM OF UNDERSTANDI

MEMORALDUM OF UNDERSTANDING between Brigadier General D. B. BARKER, Commanding General, Marine Corps Base, Camp Lejeune, North Carolina, and Colonel D. C. HEIM, Commanding Officer, Marine Corps Air Station (H), New-River, Jacksonville, North Carolina.

Ref: (a) MCB CLNC/MCAS(H) NR Logistic Support Consolidation Agreement of 29 April 1977

1. <u>Background</u>. Since the promulgation of reference (a), certain questions have been raised concerning the responsibilities and roles of the two commands concerning the Wildlife Management Program at Marine Corps Helicopter Outlying Landing Field, Oak Grove. In order to resolve those questions, the below signed parties hereby agree to the following points in order to prevent misunderstandings.

2. Understandings

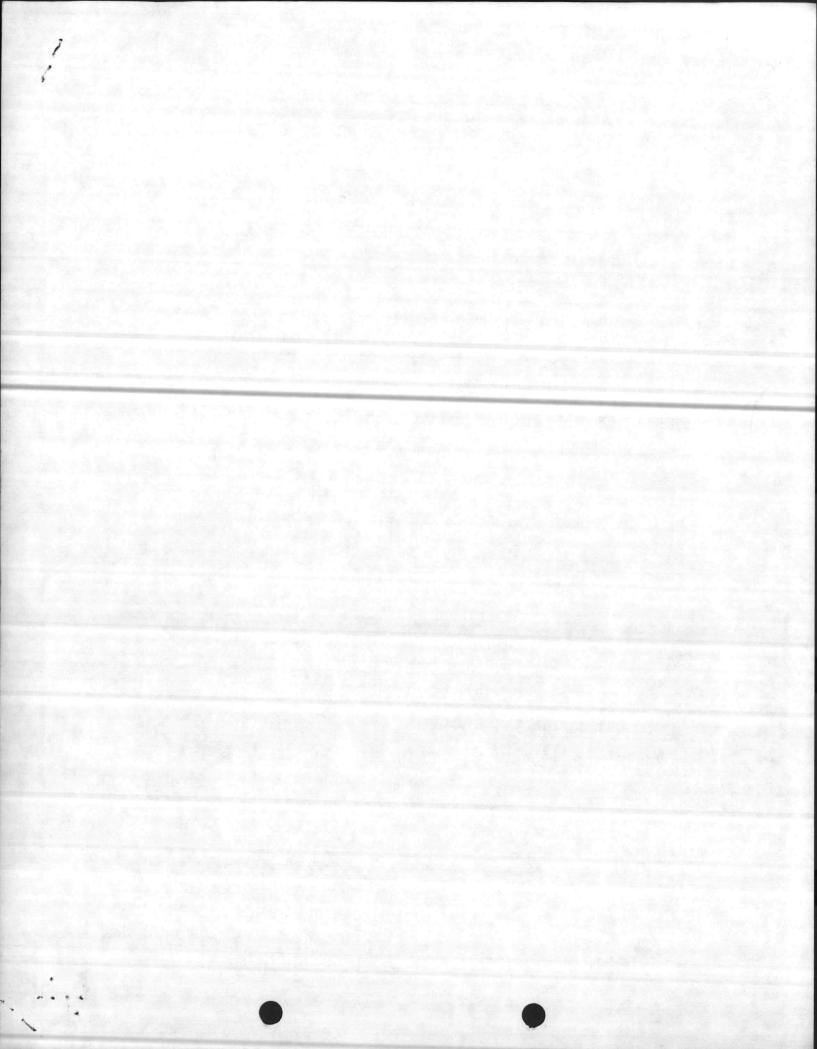
a. Marine Corps Air Station (H) will assign and supervise game wardens at Marine Corps Air Station (H) and Marine Corps Helicopter Outlying Landing Field, Oak Grove.

b. Marine Corps Air Station (H), New River is recognized as the enforcement agency for the consolidated fish and wildlife program at Marine Corps Air Station (H), New River and Marine Corps Helicopter Outlying Landing Field, Oak Grove.

c. Marine Corps Air Station (H) shall furnish the Marine Corps Base, Camp Lejeune, with a copy of the action taken on all fish and wildlife citations.

D. B. BARKER, BGen, USMC Commanding General Marine Corps Base Camp Lejeune, North Carolina

D. C. HEIM, Col, USAC Commanding Officer Marine Corps Air Station (H), New River Jacksonville, North Carolina



OPNAV 5216/144 (REV. 6-70) S/N 0107-LF-778-8099 DEPARTMENT OF THE NAVY

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TO

To !

SUBJ

Ref:

Memorandum

MAIN/RTS/th 6240 DATE: 31 Aug 1982

FROM Director, Natural Resources & Environmental Affairs Branch

Base Maintenance Officer C AC/S FACILITIES Lithium Batteries Disposal

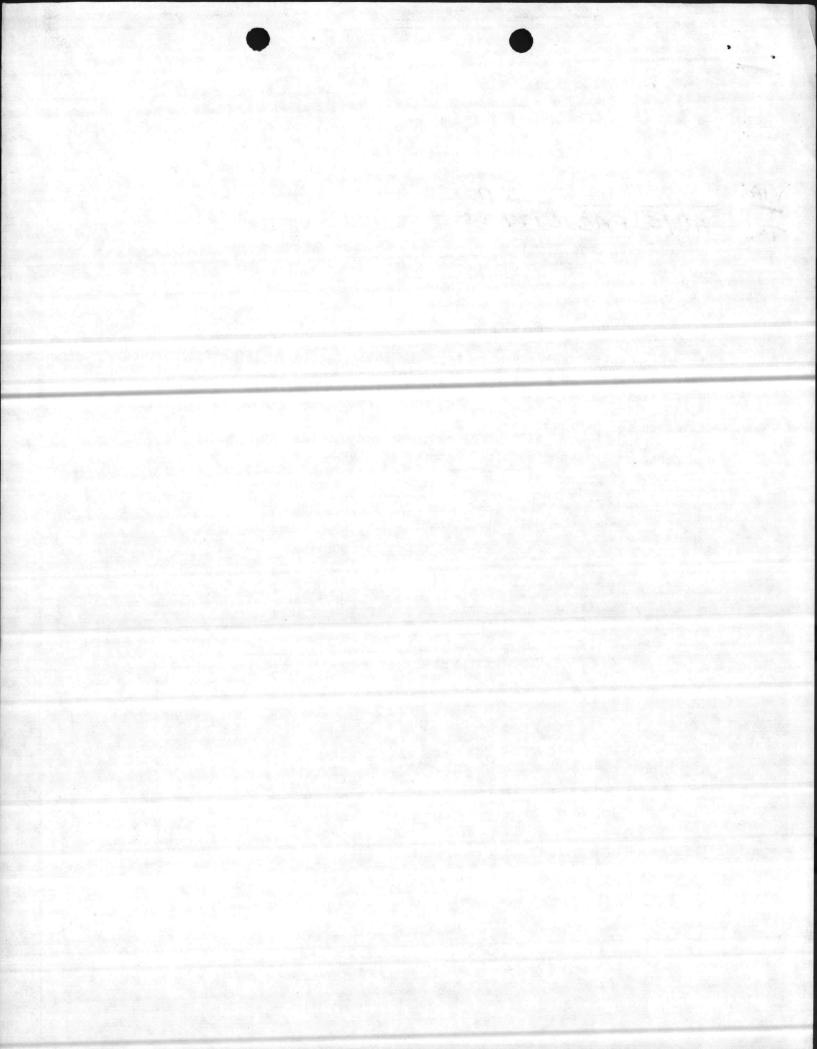
(a) AC/S FAC memo FAC/JTM/hf 6280 of 23 Aug 1982
(b) B0 6240.5

Encl: (1) CG 2dMARDIV msg 161946Z Aug 1982

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1. As requested by reference (a), the following information is provided. Base has issued guidance (reference (b)) concerning hazardous material disposal that satisfactorily applies to lithium batteries. Recently, 2dMARDIV issued a message (see enclosure (1)) describing more specific guidance for the handling, storage and disposal of lithium batteries. 2dFSSG readdressed the 2dMARDIV message and has therefore issued identical guidance. It is not considered necessary for the AC/S FAC to publish additional guidance at this time. NREAB will continue to monitor the subject disposal.

J. I. Woolin J. I. WOOTEN



OPNAV 5216/144 (REV. 6-70) S/N 0107-LF-778-8099 DEPARTMENT OF THE NAVY

Memorandum

MAIN/DDS/th 6240 DATE: 31 Aug 1982

FROM Director, Natural Resources and Environmental Affairs Branch

Base Maintenance Officer

# Sitter Service Facility, Bldg 712; chemical contamination of

Ref:

SUBJ

TO

- (a) ABMO memo of 18 Aug 1982
- (b) AC/S FAC memo of 30 Jul 1982
- (c) BO 6240.5
- Encl:

(1) Excerpts from Initial Assessment Study of Camp Lejeune of 9 Aug 1982

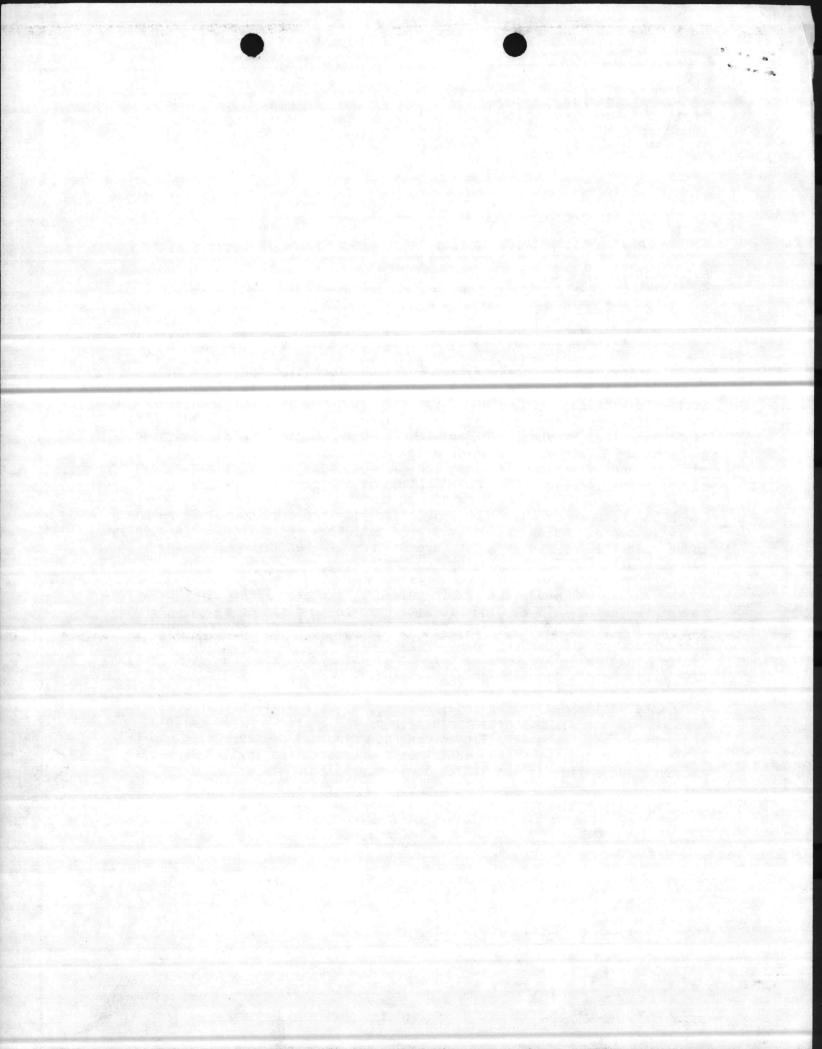
1. A review of references (a) and (b) and information contained in the attached package indicate that a decision has been made to reopen the Sitter Service Facility, Bldg 712 as soon as the upper four inches of contaminated soil in the playground area are removed and replaced. Also, it appears that Preventive Medicine Unit, Naval Regional Medical Center, guidance on how to accomplish decontamination of the subject facility and surrounding grounds is vague and fails to address post cleanup testing to determine adequacy of decontamination of the area.

2. NREAB recommends that the subject facility and grounds not be reopened until inspected and certified by appropriate Navy or public health agency to be suitable for use as a Day Care Center. The enclosure provides recommendation on testing at the subject site.

3. Mr. Jerry Wallmeyer, LANTDIV, advised by phone on 27 August 1982 that the contaminated soil at Bldg 712 will have to be disposed of as hazardous waste. There are no authorized disposal areas on base. The contaminated soil should be disposed of in accordance with reference (c). Mr. King advised that while DPDO may be able to assist with arranging a contract, base would be responsible for all funding.

4. State public health personnel have expressed a willingness to visit Camplejeune to discuss decontamination of the Sitter Service building and grounds and the possibility of on base disposal of the subject soil. It is recommended the state public health personnel be invited to visit the base and advise on the Sitter Service problem.

J. U. Wooli



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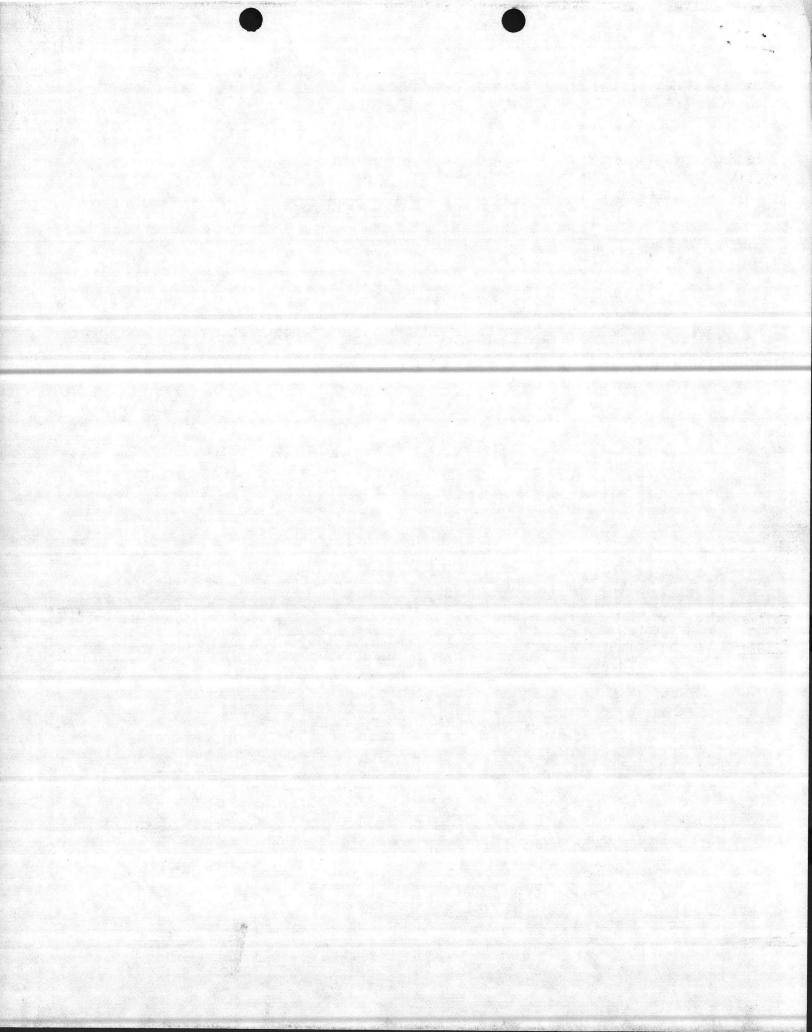
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[IAS-CLJ.7]4/REC.6 8/9/82

Site No. 2: Problem: Nursery/Day-Care Center at Building 712 This building was formerly the pesticide storage and handling facility. Residual pesticides in soils and the building may pose health risks to supervisory personnel and small children. Preliminary sampling results are shown in Table 2-2. An adjacent drainage creek (ditch) probably received washout and spills. A playground, an old wash pad, an old mixing area, and an old storage area are involved. Determine types and amounts of pesticides in the playground area and building, remainder of area, and in creek sediments. Determine if pesticides have migrated to nearby wells.

Approach:

Goal:

Collect cores from three sites in the playground. Conduct a thorough inspection of other outdoor areas (both inside and outside fence) where mixing and handling occurred and obtain three additional soil samples. Examine building thorougly and sample for pesticide residue or volatile Chlordane. Sample creek sediments. Collect samples from water supply wells nearby.

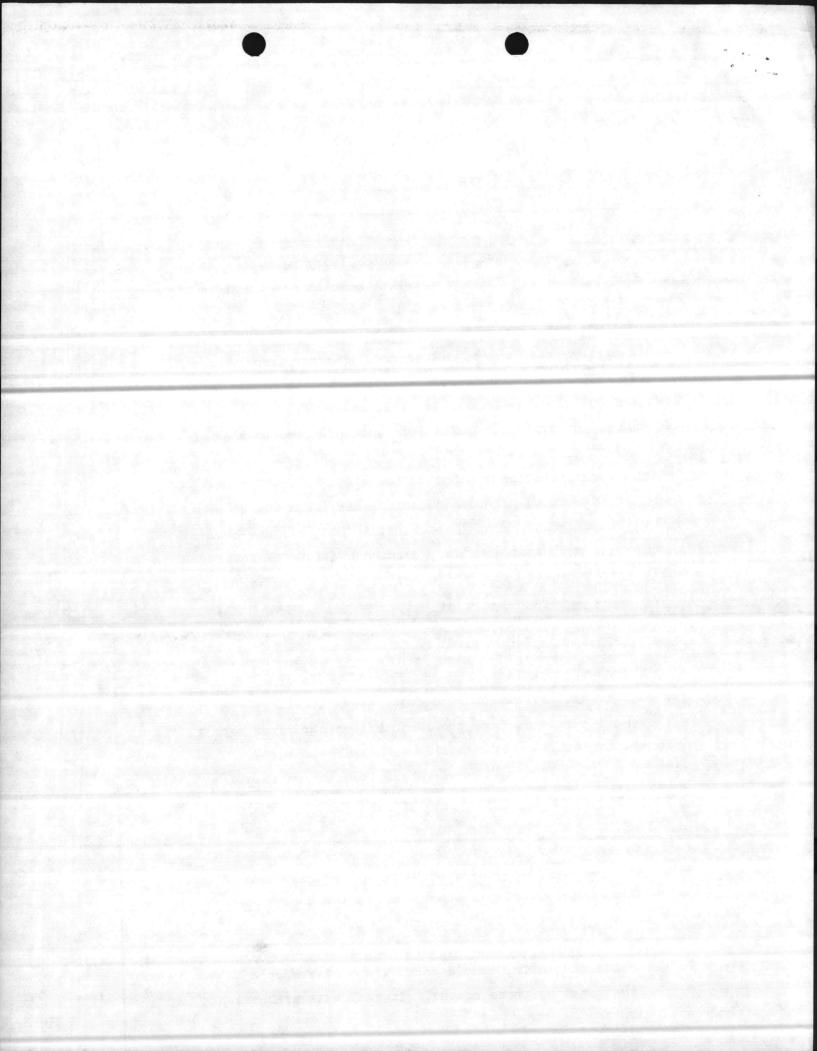
Wells: Samples: Existing Well Nos. 645, 646, 647, 616

In playground, take 18-inch-deep cores of soils from three separate locations. In other outdoor areas (washing, mixing, and storing), take one 18-inch-deep core from each (See Section 4.4.1). From building, sample air for volatiles plus, from most used rooms, the residue samples from places likely to harbor fugitive substances, e.g., behind moldings. In creek, take sediment samples at four places: immediately downstream of site, about 1,400 feet downstream near Well No. 646, about 4,000 feet downstream above confluence with Overs Creek, and in Overs Creek upstream of creek widening at Northeast Creek. In wells, sample each well.

Frequency:

In sediments and soils, sample once. In wells, sample twice, separated by three months. If residuals are present,

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[IAS-CLJ.7]4/REC.7 8/10/82

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then further intensive sampling to determine extent and distribution of contamination is needed.

Analyses:

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For soils, sediments, well, and residues, test for organochlorine pesticides, including DDT-R, phenoxy alkanoic acid herbicides (including 2,4,5-T), malathion, diazinon. For air, test for volatile Chlordane.

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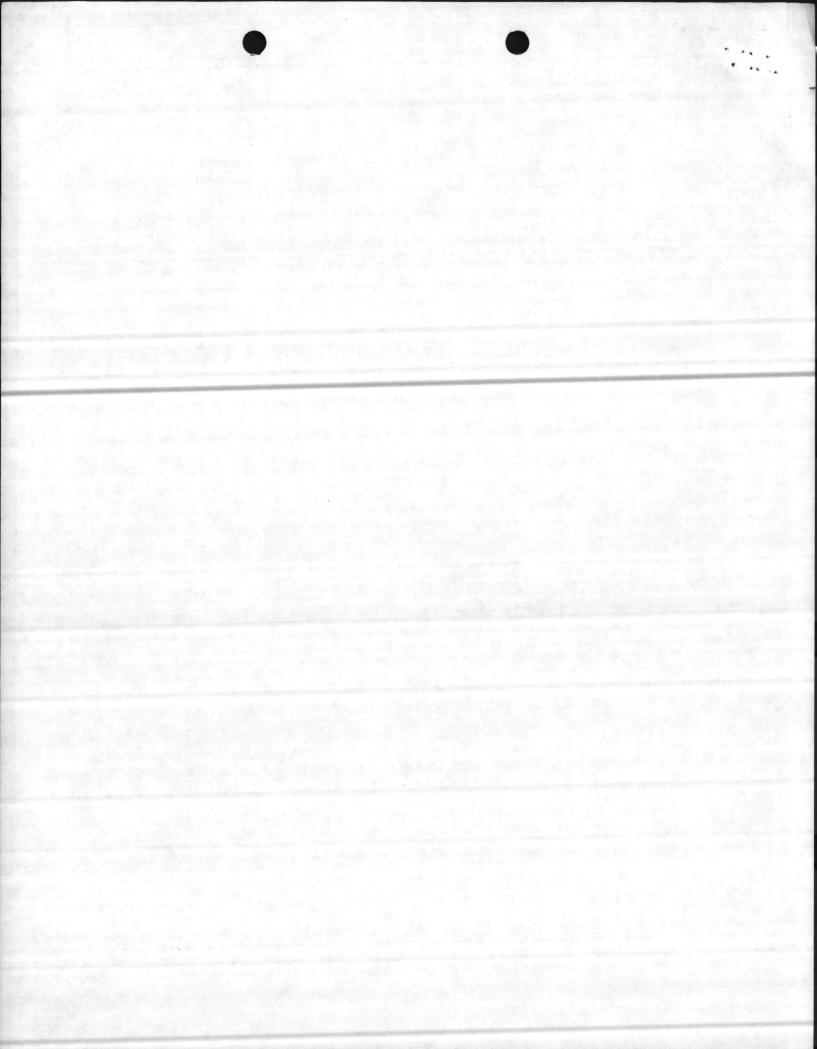
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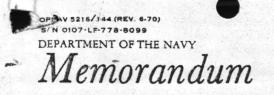
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MAIN/DDS/th 6240 DATE: 27 Aug 1982

FROM Director, Natural Resources and Environmental Affairs Branch

TO Base Maintenance Officer

SUBJ Reporting of Hazardous Material (HM)/0il

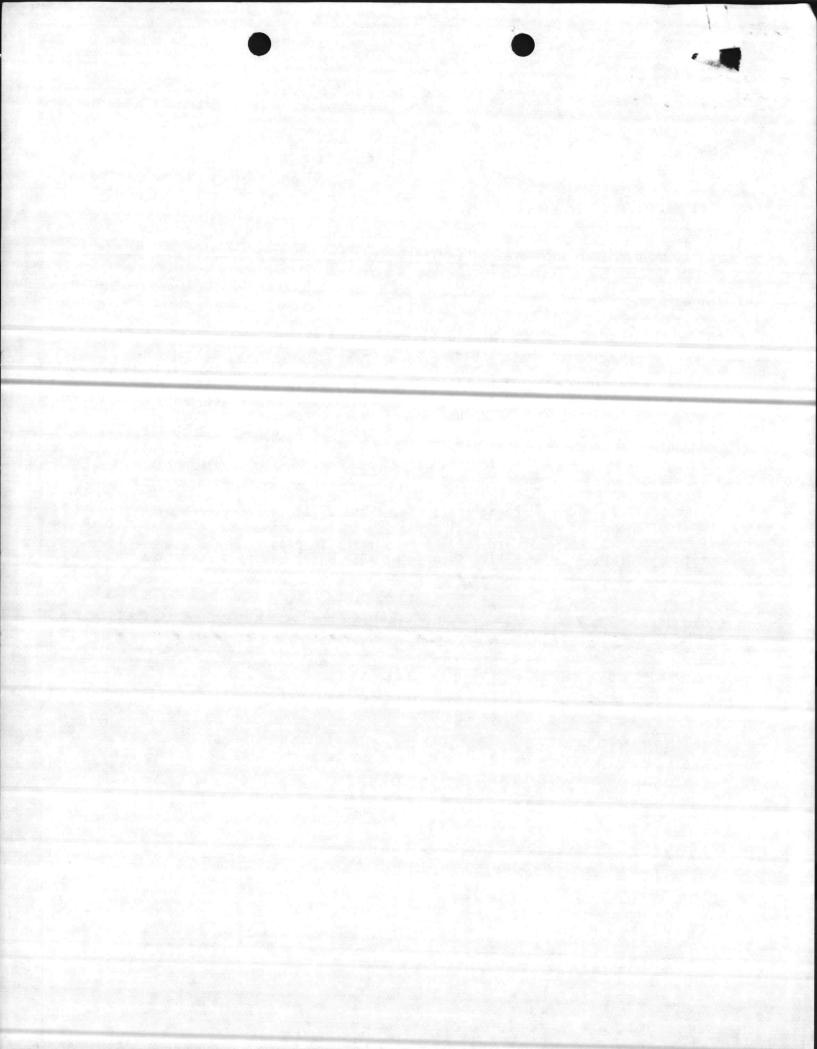
Ref: (a) BO 11090.1B (b) BO 6240.5

(1) CO MCAS(H) NR memo 222/MW/mc 6280 of 12 Aug 1982 Encl: (2) CO MCAS(H) NR msg 101715Z Aug 1982

> 1. The supervisory ecologist was advised of the mercury spill discussed in enclosure (1) during a discussion with MCAS(H) safety manager. Mary Wheat, on 3 August 1982. NREAB had become aware recently that MCAS(H) organizations were not following reporting procedures for subject spills as provided by references (a) and (b). After discussions with representatives of the MCAS(H) S-4 office, it was agreed that MCAS(H) would publish a clarification. Consequently, enclosure (2) was recently published.

2. MCAS(H) requested in paragraph 3 of enclosure (1) is consistent with the requirements of references (a) and (b). It is recommended that all Base Maintenance shops aboard MCAS(H) be advised to report HM and oil spills immediately to Base Fire Department (451-3333) and to Station S-4 Office or Officer of the Day as appropriate.

4. Il Woot 1. T. WOGTEN





UNITED STATES MARINE CORPS MARINE CORPS AIR STATION (HELICOPTER) NEW RIVER, JACKSONVILLE NORTH CAROLINA 28545

> 222/MW/mc 6280 12 Aug 1982

BNO

From: Commanding Officer To: Commanding General (AC/S, Facilities], Marine Corps Base, Camp Lejeune, North Carolina 28542

Subj: Reporting of Hazardous Material Spills

Ref: (a) BO 11090,1B

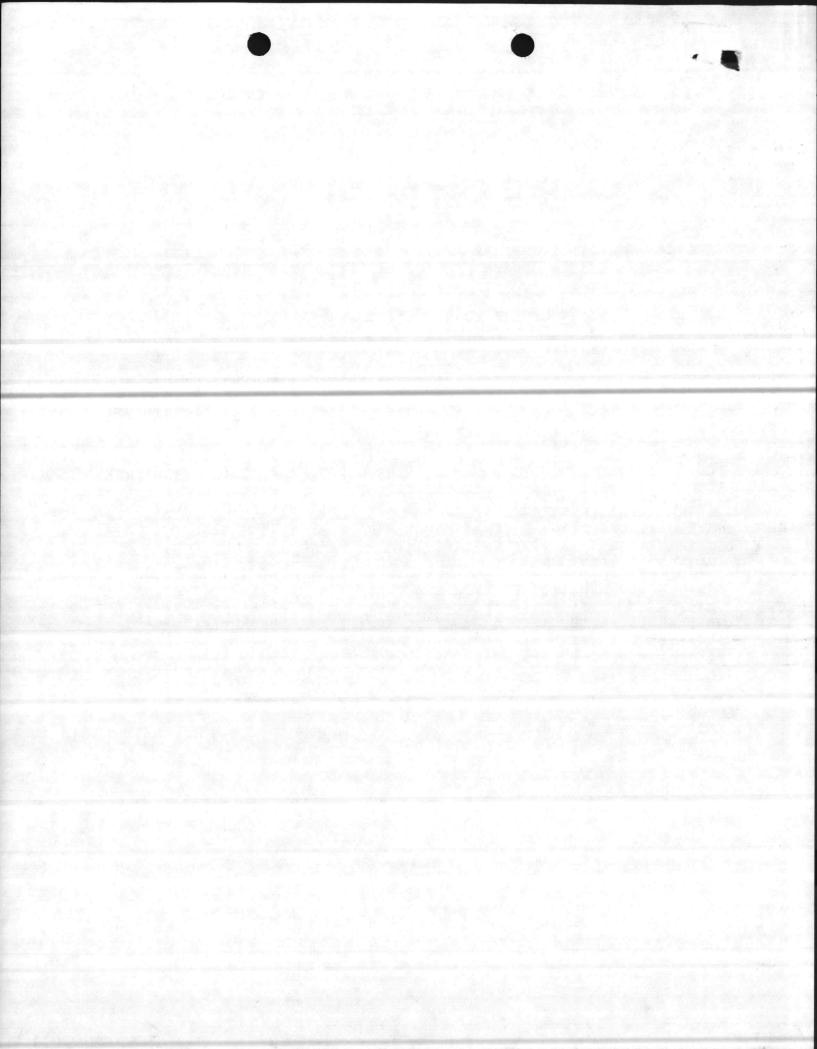
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2. While it is recognized that the heating plant is under the cognizance of the Base Maintenance Officer, it is perceived that being within the confines of the Air Station, the Commanding Officer, under the Resource Conservation and Recovery Act, remains responsible for hazardous waste operations and incidents on the Station.

3. It is requested that in the event future spills occur within Marine Corps Base operations aboard the Air Station, they be reported to the Station S-4 Office during working hours, or the Station Officer-of-the-Day after working hours, as set forth in enclosure (2) of the reference.

W. MARVEL

Copy to: Base Maintenance Officer



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ENCLOSURE (2)

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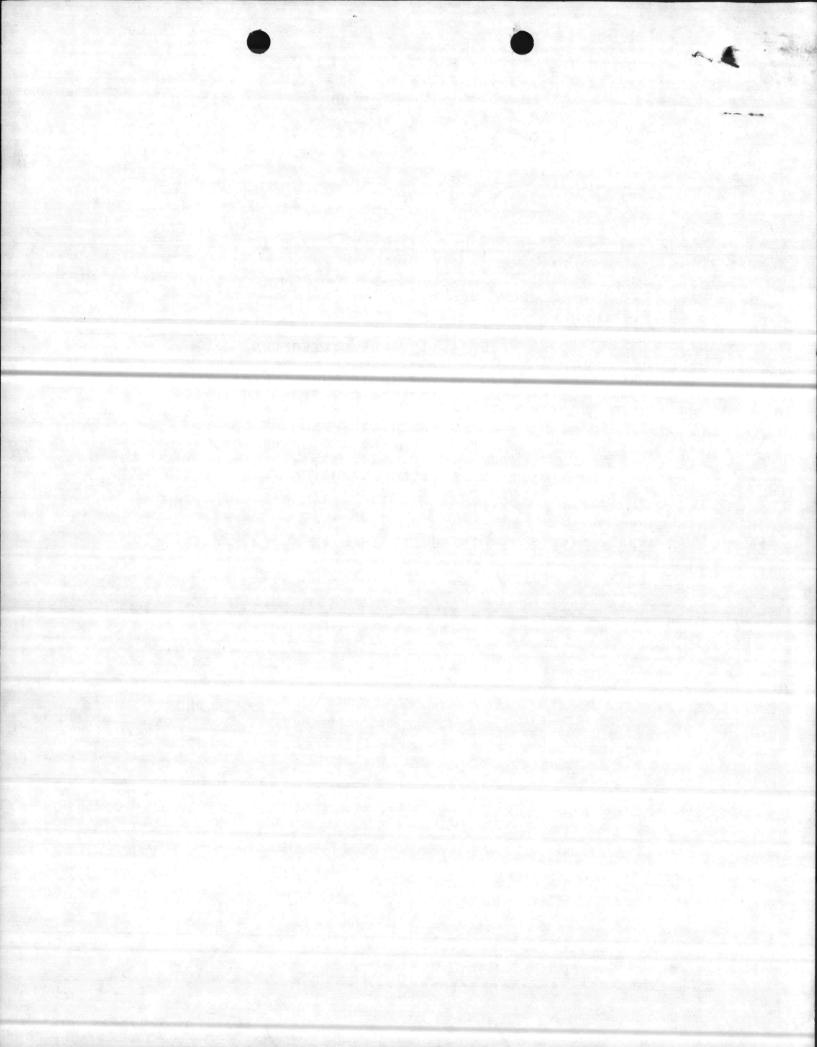
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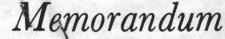
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OPNAV 5216/144 (REV. 6-70) S/N 0107-LF-778-8099 DEPARTMENT OF THE NAVY



MAIN/DDS/th 6240 DATE: 27 Aug 1982

FROM Director, Natural Resources and Environmental Affairs Branch

TO Base Maintenance Officer

SUBJ Reporting of Hazardous Material (HM)/0il

(a) BO 11090.1B Ref: (b) BO 6240.5

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J. I. WOOTEN

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ENCLOSURE (2)

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PT UNCLES //N11000// SUBJ: REPORTING OF HAZAPHOUS MATERIAL (HM) OR OIL SPILLS

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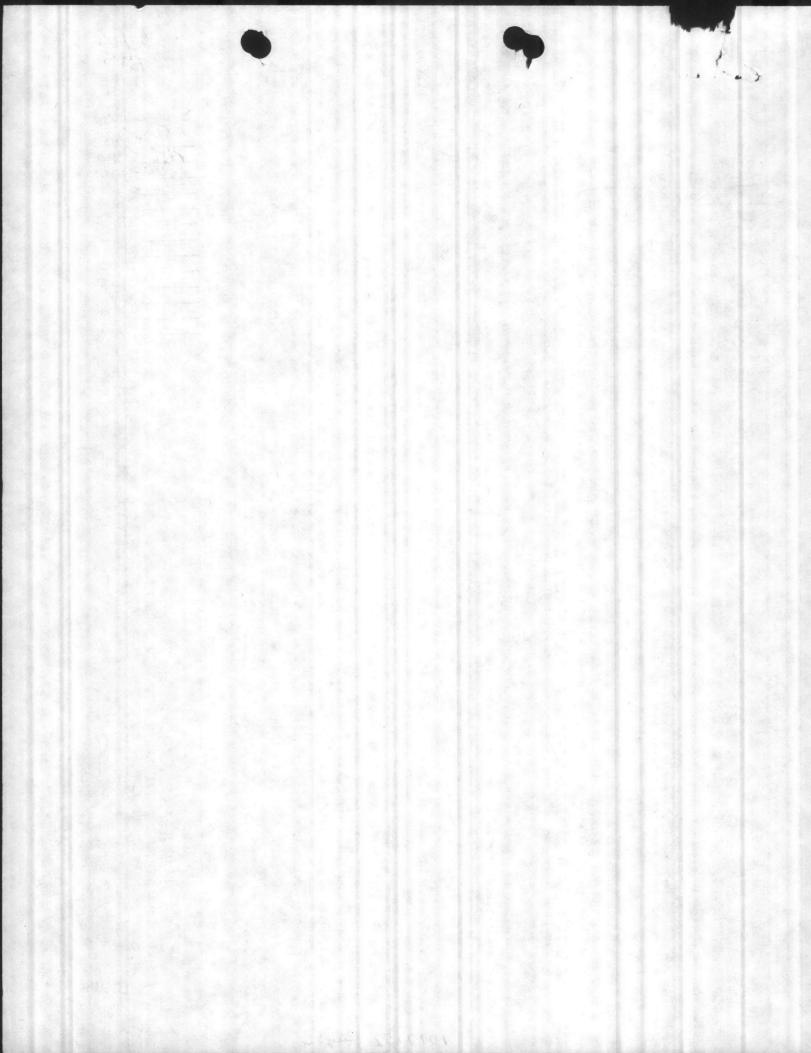
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### SUPPORT FUNCTION

15. Hazardous Material Environmental Management Program

### MCB, CAMP LEJEUNE

Designate an activity focal point regarding hazardous material and waste management and disposal.

### Munited Forder and the best for the main

Register with the Environmental Protection Agency and North Carolina (EPA & NC) as a long-terr? storer and transporter of all hazardous wastes generated by MCAS(H), New River, which are subject to the Resource Conservation and Recovery Act (RCRA). Obtain all permits required by EPA and NC for storage of hazardous wastes.

Complete Sea more thank and show a

Provide guidance/material support (including laboratory analytical assistance) to ensure proper short term (less than 90 days) storage, packaging and labeling of hazardous waste: Provide laboratory support to identify hazardous waste. Provide material and supervisory support required to repackage and label hazardous materials/waste, as well as inspectors to certify the adequacy of packaging and labeling required by hazardous materials/ waste regulations.

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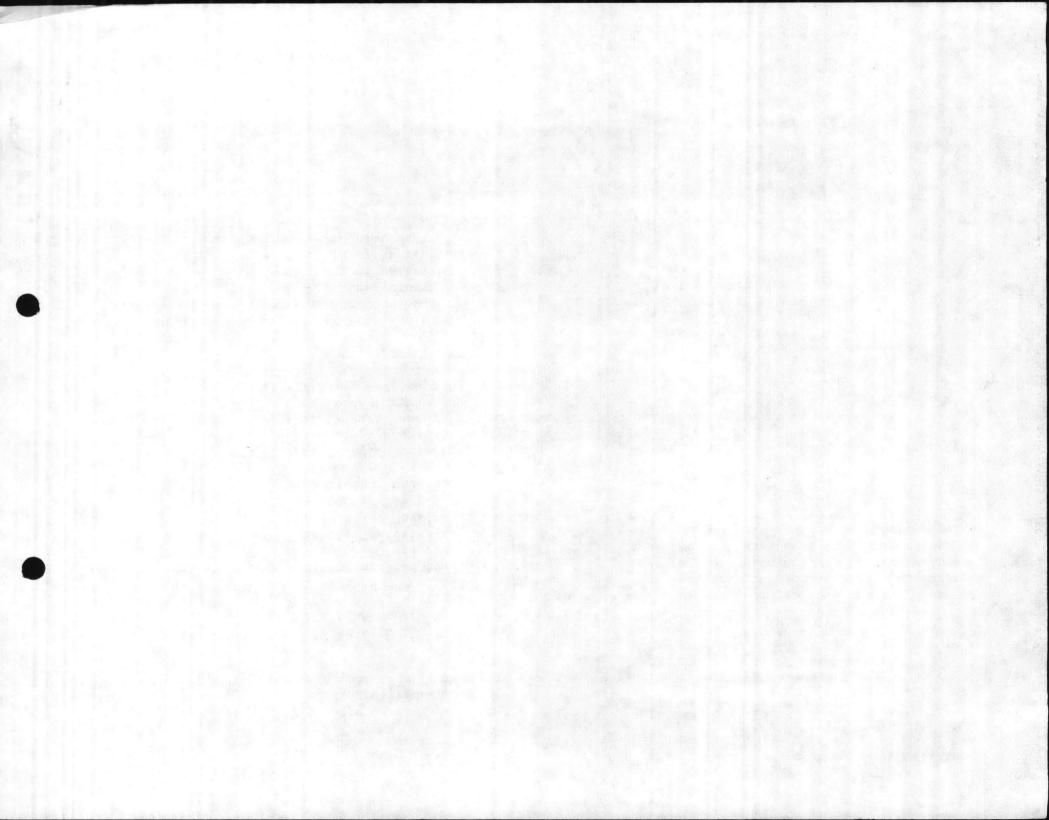
#### MCAS(H), NEW RIVER

Designate a Hazardous Material Disposa Coordinator to serve as an activity foca point regarding hazardous material and waste management.

Register with EPA and NC as a hazardous waste generator. Will ensure that all units and tenants properly collect, segregate and containerize hazardous waste in accordance with EPA and NC regulations applicable to hazardous waste generators, utilizing materials and supervisors provided by MCB.

Ensure that hazardous wastes are properly identified. Provide short-term storage (less than 90 days) when required.

1-12 Ch 3



# SUPPORT FUNCTION

Hazardous Material Environmental Management Program (continued)

#### MCB, CAMP LEJEUNE

Include MCAS(H), New River in an areawide oil hazardous material spill contingency plan. Furnish material support required and a basic level of personnel and equipment to handle routine spills. Make required reports to regulatory agencies and CMC. Provide an on-scene coordinator for spill containment and clean-up at MCAS(H), New River.

Provide long-term (more than 90 day) storage and final disposal of all hazardous wastes generated by MCAS(H), New River subject to RCRA, through facilities operated by and services provided by DPDO, Camp Lejeune, provided the wastes are properly packaged and documented. Maintain appropriate records of long-term storage and disposal of hazardous wastes accepted from MCAS(H), New River through the interservice support agreement with DPDO, Camp Lejeune, and submit all related reports required of hazardous waste storers and transporters to EPA and NC. Provide technical assistance to MCAS(H), New River on record-keeping reporting.

Provide technical assistance and environmental protection support to MCAS(H), New River regarding spill prevention control and countermeasure plan (SPCC) and hazardous material disposal.

Provide training for key personnel at MCAS(H), New River in hazardous material and hazardous waste management.

### MCAS(H), NEW RIVER

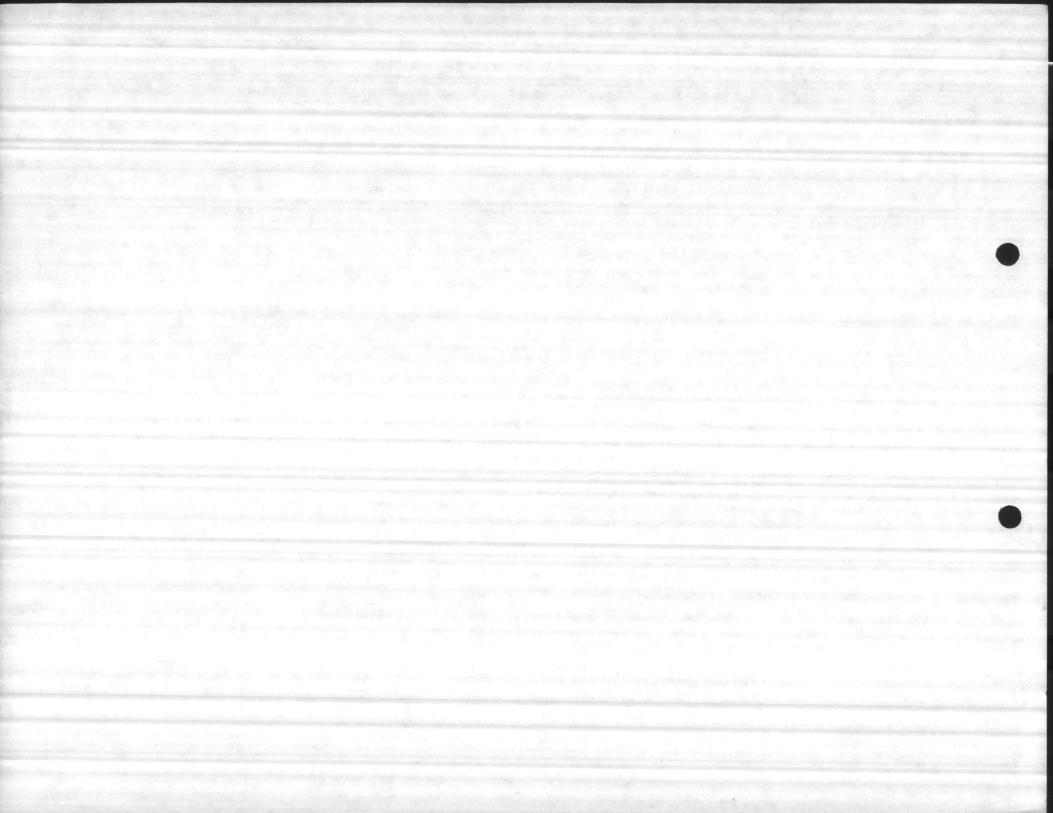
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Assist, as required, in implementing an area-wide oil/hazardous material spill contingency plan, including but not limited to furnishing manpower requested by on-scene coordinator for spill containment and clean-up at MCAS(M New River. Conduct investigations of spills and submit appropriate reports thereof to MCB, Camp Lejeune.

Prepare all documents required to transport and deliver wastes to long-term storage and disposal. Maintain appropriate records of waste generation and shipments and submit all reports required of hazardous waste generators to the EFA and NC.

Develop and implement an SPCC plan for hazardous waste generation and hazardous material and waste storage sites MCAS(H), New River.

Provide training for tenants and units at MCAS(H), New River in hazardous material/ hazardous waste management.



## Support Function

Real Property Maintanance (contd)

## MCB Camp Lejeune

Formulate and execute a long range natural resources management and environmental control program. Include a forest management program for timber production and harvest, site preparation, prescribed burning, forest pest control, and forest fire control: a fish and wildlife program for control of fishing and hunting. fish pond management, wildlife habitat manipulation and protection of rare and endangered species; and environmental protection program which provides for a system of collection and disposal of waste petroleum products, monitoring for water and air pollution.

Special requirements required for hunting and fishing on or near MCAS(H) will be incorporated in all directives and programs.

T-4

### MCAS(II) New River

Furnish special requirements for incorporation into the resources management and environmental program, as appropriate.

Provide station Environmental Affairs Officer (collateral duty assignment) liaison with and input to MCB Camp Lejeune for natural resources management and environmental affairs control programs. The station Environmental Affairs Officer will assist the MCB Camp Lejeune Environmental Affairs Officer in a monitoring capacity in the area of MCAS(II) New River, Camp Geiger and the Verona area.

The station Environmental Officer will furnish his Station Game Warden to MCB, Camp Lejeune for utilization in a monitoring and control capacity to satisfy requirements existing in the MCAS(H) New River/Camp Geiger/ Verona area.



MEMORALDIM OF UNDERSTANDING between Brigadier General D. B. BARKER, Commanding General, Marine Corps Base, Camp Lejeune, North Carolina, and Colonel D. C. HEIM, Commanding Officer, Marine Corps Air Station (H), New-River, Jacksonville, North Carolina.

MORANDUM OF UNDERSTANDI

Ref: (a) MCB CLNC/MCAS(H) NR Logistic Support Consolidation Agreement of 29 April 1977

1. <u>Background</u>. Since the promulgation of reference (a), certain questions have been raised concerning the responsibilities and roles of the two commands concerning the Wildlife Management Program at Marine Corps Helicopter Outlying Landing Field, Oak Grove. In order to resolve those questions, the below signed parties hereby agree to the following points in order to prevent misunderstandings.

2. Understandings

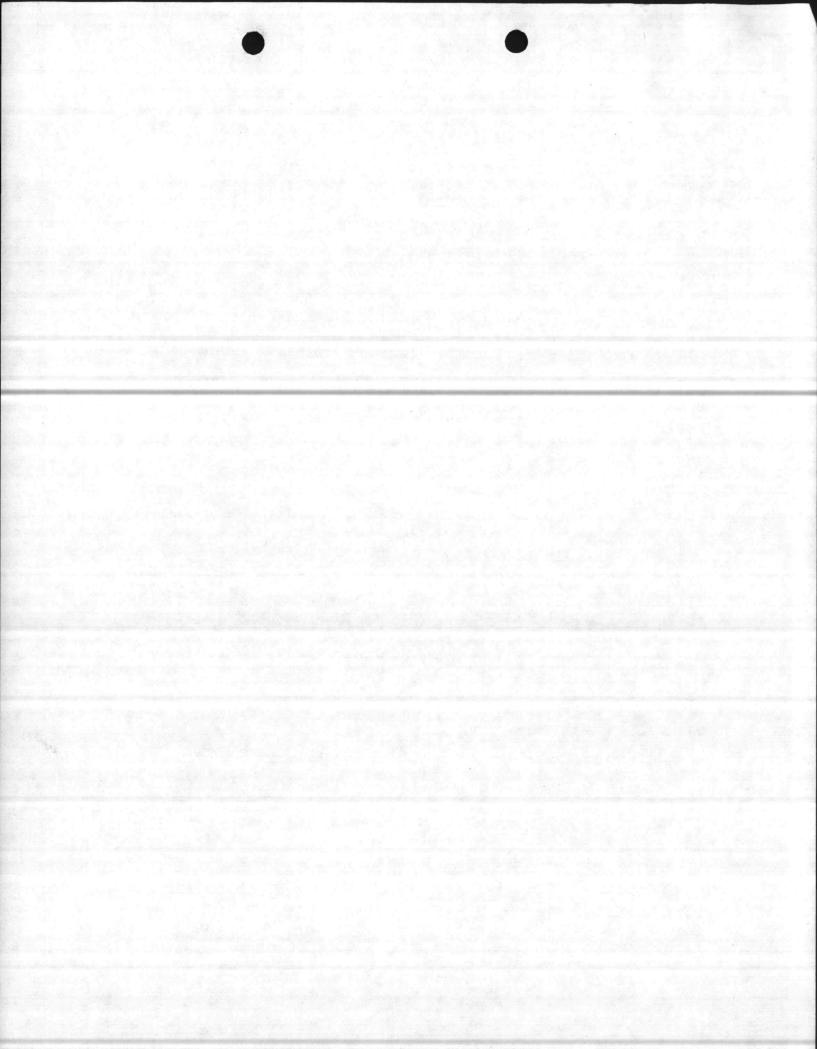
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c. Marine Corps Air Station (H) shall furnish the Marine Corps Base, Camp Lejeune, with a copy of the action taken on all fish and wildlife citations.

D. B. BARMER, BGen, USMC Commanding General Marine Corps Base Camp Lejeune, North Carolina

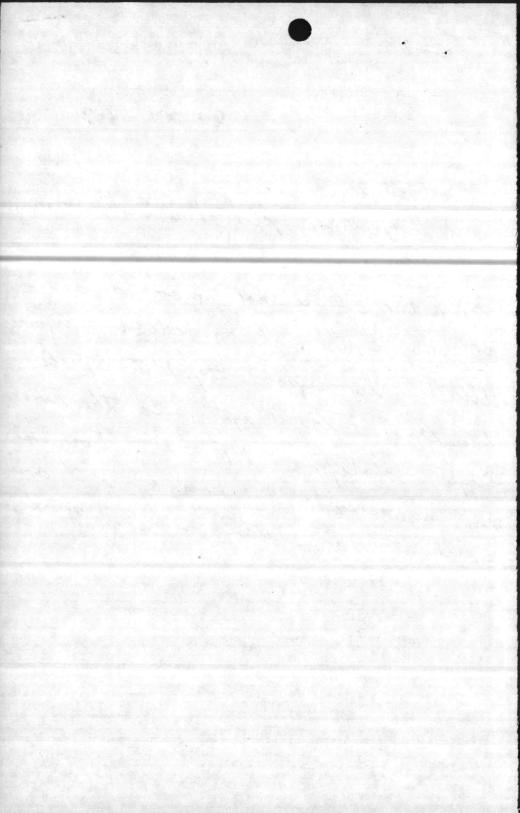
D. C. HEIM, Col, USAC Commanding Officer Marine Corps Air Station (H), New River Jacksonville, North Carolina

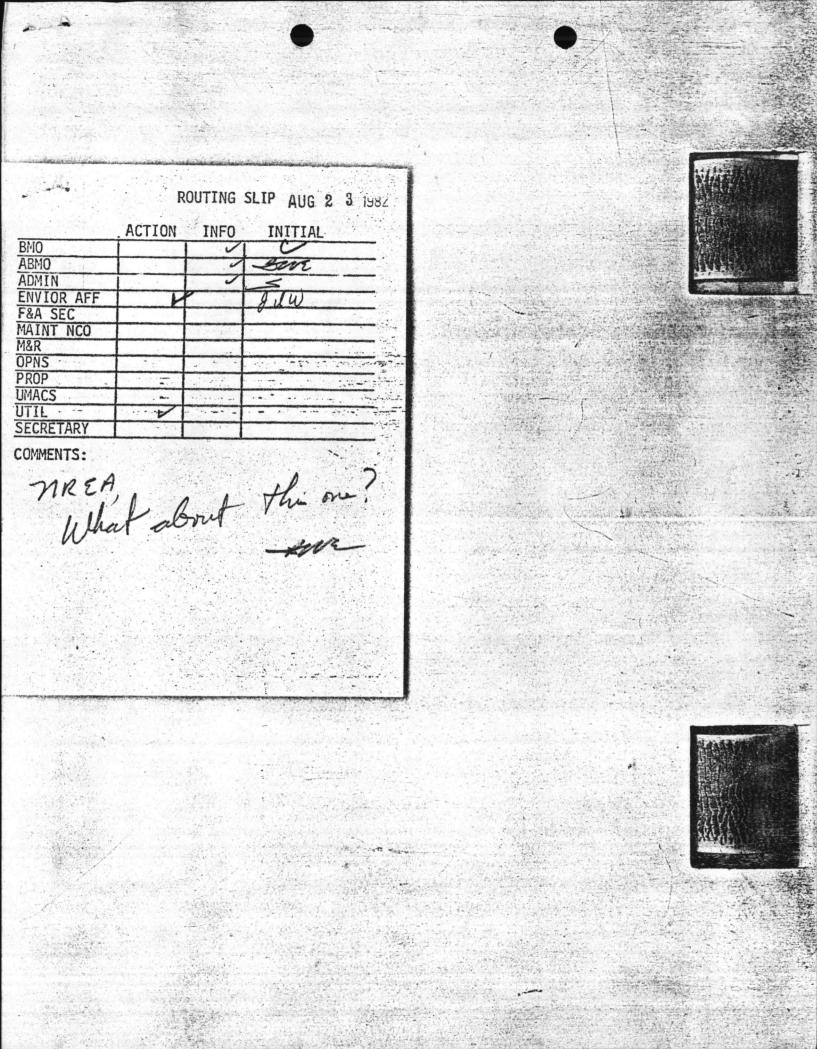


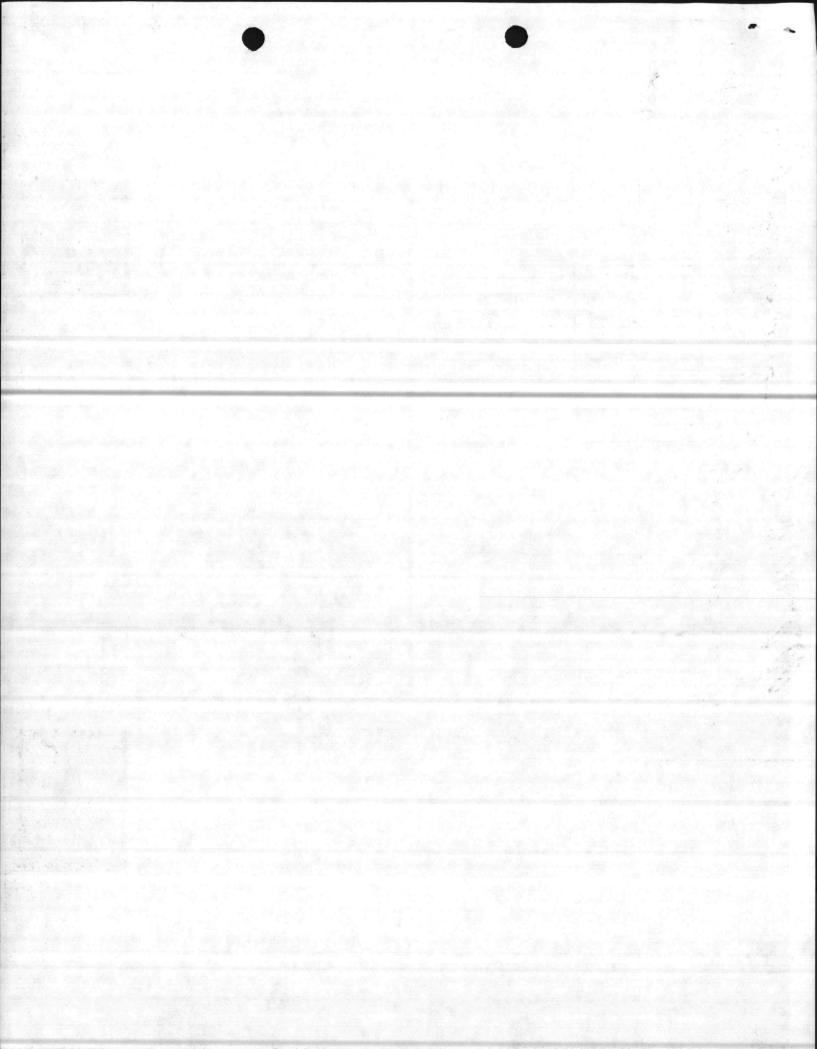
## NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS BRANCH BASE MAINTENANCE DIVISION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542

7-24-82 Date

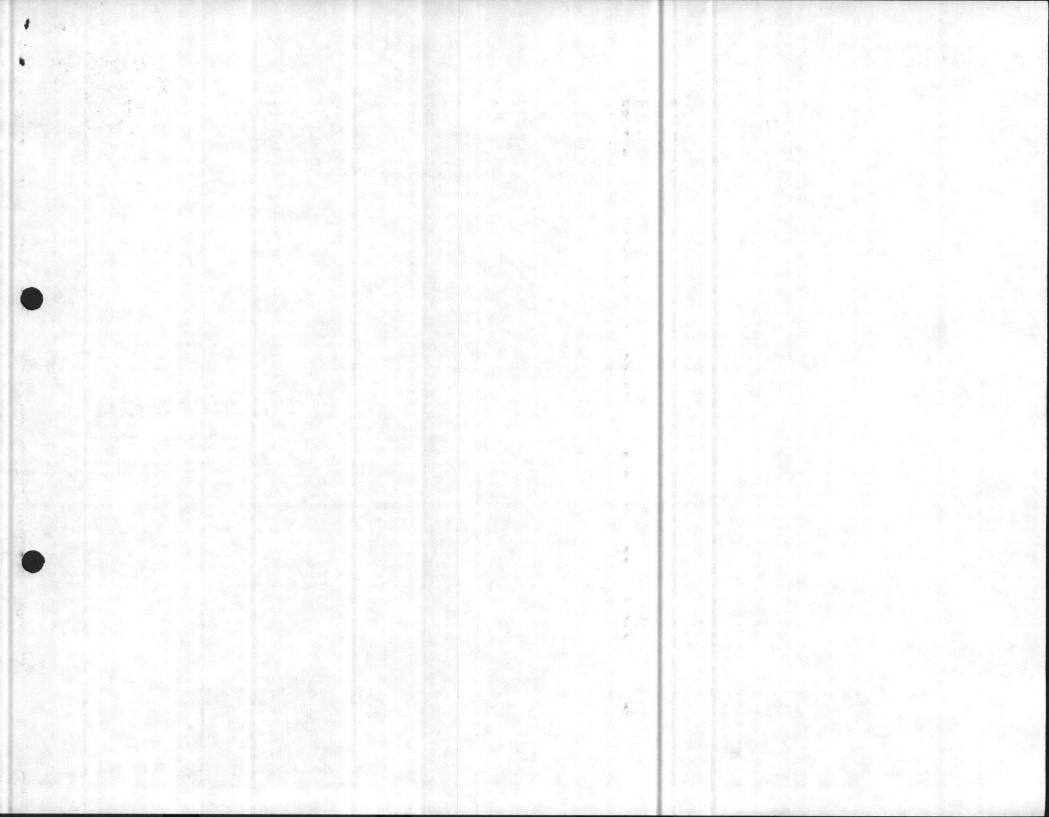
From: Director To: ABMO Subj: Hay, Mat. Spill at air Station Heating 1. DP A 1. plant, NREA was not made aware of subj Spill. Regulations require Wilities to report Hy. Mats Spille to Base Fire Dept. and the Fire Dept notifier NREA. Fire Dupt has no neard in 200 of a Moreury Spill at Air Station on 19 July 82.







20 F13B82 OPNAV 5216/144 (REV. 6-70) S/N-0107-778-8097 DEPARTMENT OF THE NAVY Memorandum AC/SFAC FROM: Bmo SUBJ: Reporting of HW Spills RON: I was under the impression that we had this total responsibility for both Base and MCAS and if anything they should note fer es of any spille. Can spece enlighten me as who is doing what to whom? J I Manhall





UNITED STATES MARINE CORPS MARINE CORPS AIR STATION (HELICOPTER) NEW RIVER, JACKSONVILLE NORTH CAROLINA 28545

> 222/MW/mc 6280 12 Aug 1982

BNU

From: Commanding Officer

To: Commanding General (AC/S, Facilities], Marine Corps Base, Camp Lejeune, North Carolina 28542

Subj: Reporting of Hazardous Material Spills

Ref: (a) BO 11090.1B

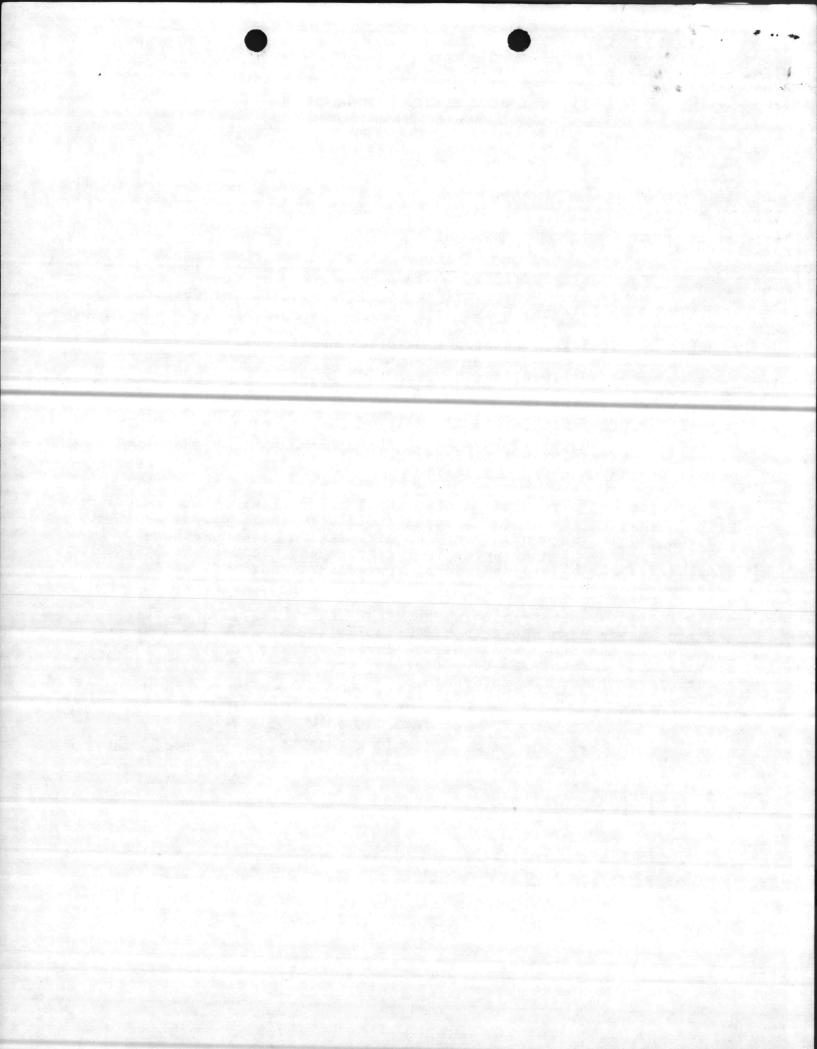
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W. MARVEL

Copy to: Base Maintenance Officer



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PT UNCLAS //MIIOPO// SUBJ: REPORTING OF HAZAPPOUS MATERIAL (HM) OR OIL SPILLS

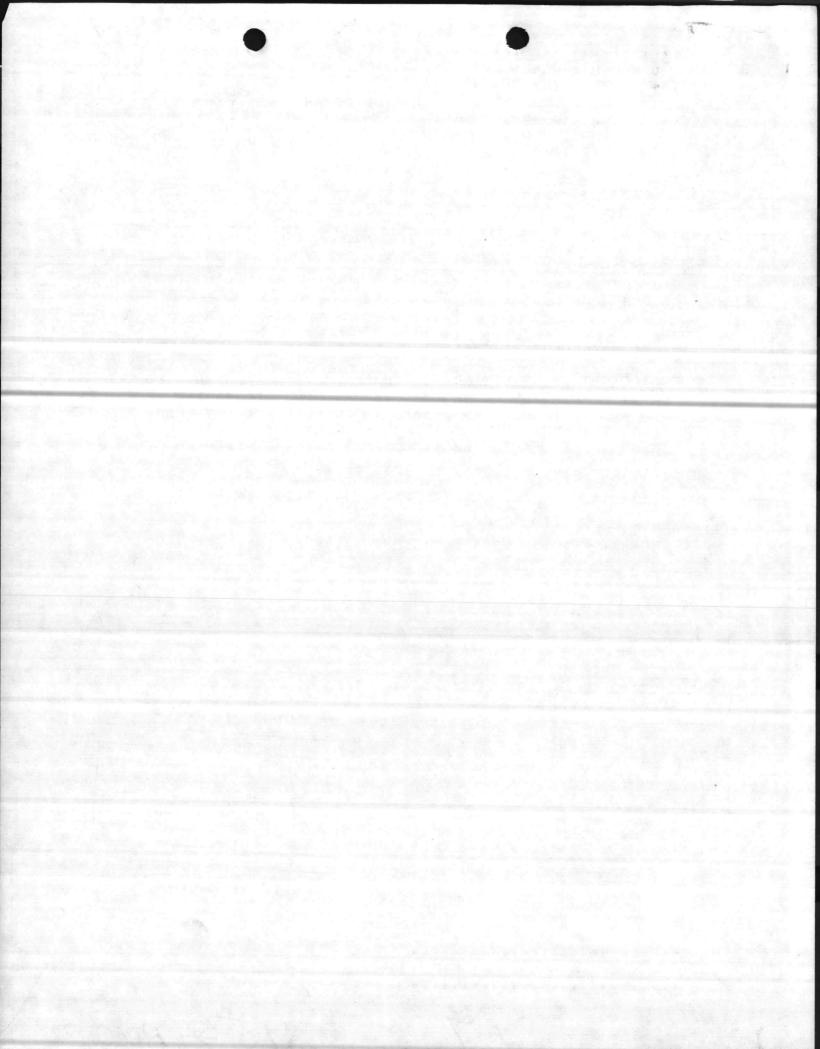
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222/20557

ROUTTME

PAGE 01 DISTRIBUTION n BMO -ABMO ALW KREAD Admin D. Oper D. M&R D. Unil D. FEA O. Prop O. MME Maint NCO Secretary





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FAC ROUTING INT INF D ACTION FACO 14 43 40 40 4.5 4LC NREA. Com to

11 AUG 1982

NN NN INFOS TRNG BFAC 1137

#3221

PAGE 02 RULSSGR3221 UNCLAS DRAL HORKING HOURS. REQUEST WIDEST DISSEMINATION OF THIS MESSAGE.

IFIED

A BO 11000.1P 1. IAN THE PEE, ALL SPILLS OF GIL OR HM. TO INCLUDE THOSE OCCURPING IN AIRCRAFT OPERATING APEAS. WILL BE IMMEDIATELY PEPORTED TO THE BASE FIPE OF PARTMENT DISPATCHER, 454-3333. THE REPORT SHALL INCLUDE LOCATION, SUBSTANCE SPILLED, AND THE APPROXIMATE AMOUNT SPILLED. 2. SPILLS OCCURRING IN ATHORAFT OPERATING AREAS WILL BE REPORTED IMMEDIATELY THEREAFTER TO THE CRASH CREW. EXT. 6333, OF IN OTHER AREAS. TO THE STATION S-4 OFFICER, EXT. 6686, DURING MORMAL WORKING HOURS: OR TO THE STATION OFFICER OF THE DAY. EXT. 6111: AFTER

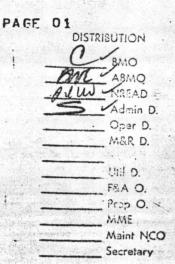
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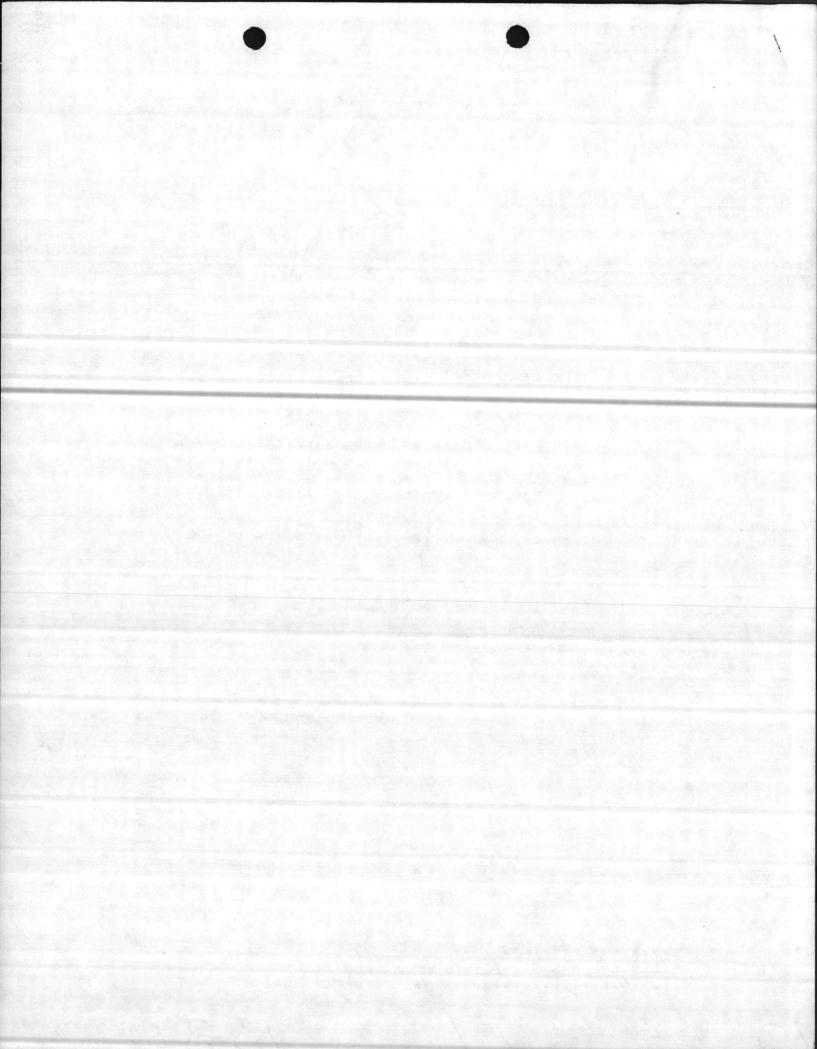
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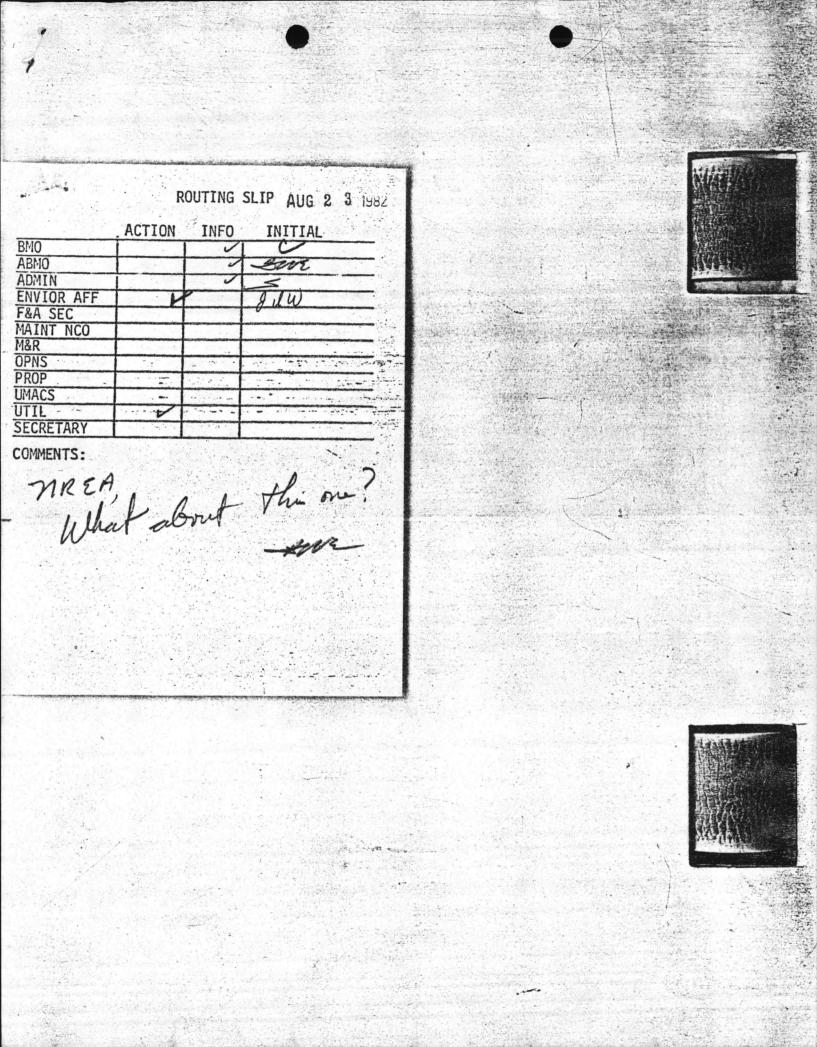
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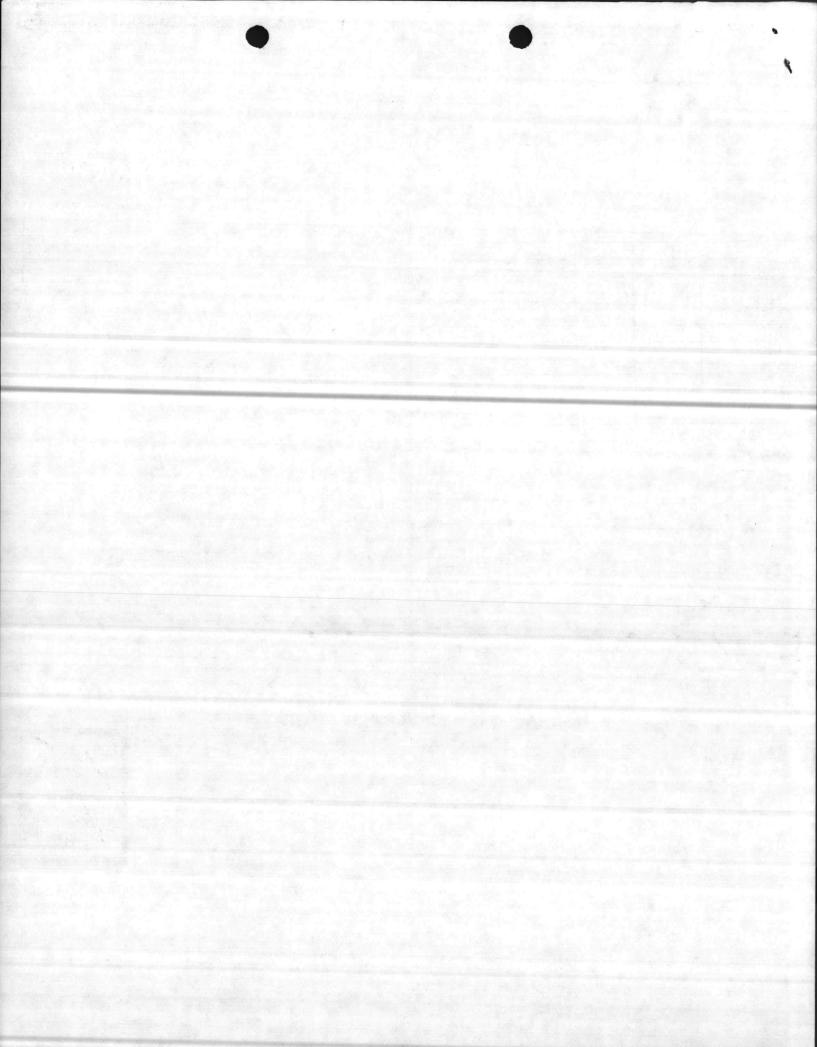
ROUTIME

\* U N C L A S' S T F T E D \*

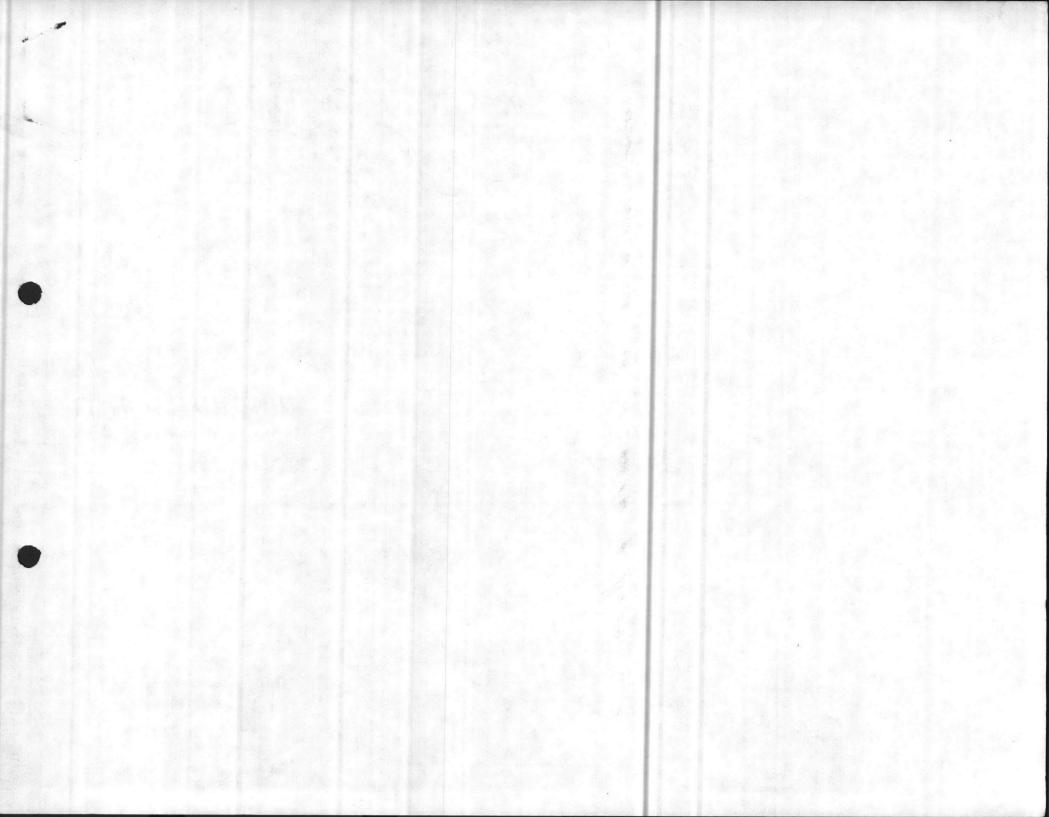








20 F13B82 OPNAV 5216/144 (REV. 6-70) 5/N-0107-778-8097 DEPARTMENT OF THE NAVY Memorandum AC/SFAC FROM: Bmo TO: SUBJ: Reporting of HW Spills Row: I was under the impression that we had this total responsibility for both Base and MCAS and if anything they should note feg led of any spille. Can you enlighten me as who is doing what to whom?





UNITED STATES MARINE CORPS MARINE CORPS AIR STATION (HELICOPTER) NEW RIVER, JACKSONVILLE NORTH CAROLINA 28545

> 222/MW/mc 6280 12 Aug 1982

BNO

#### From: Commanding Officer To: Commanding General (AC/S, Facilities], Marine Corps Base, Camp Lejeune, North Carolina 28542

Subj: Reporting of Hazardous Material Spills

Ref: (a) BO 11090,1B

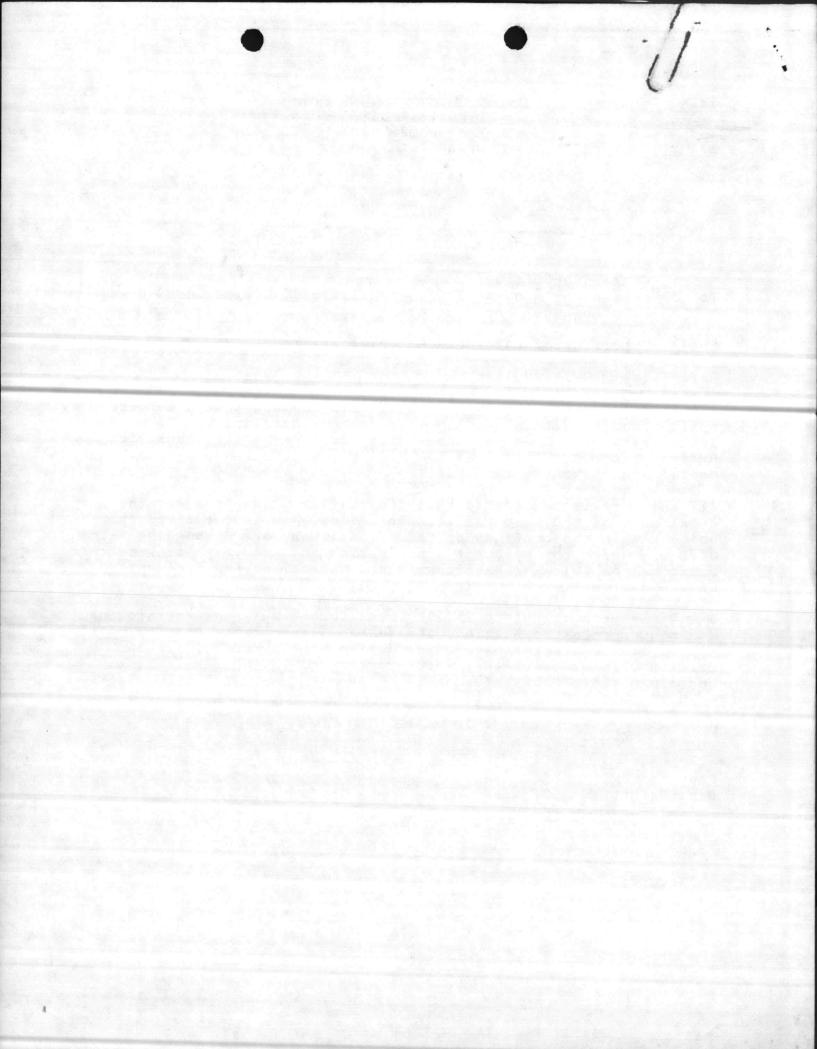
1. It has come to the attention of this Command that a mercury spill occurred within the Air Station heating plant on 19 July 1982. Personnel from the Base Safety Office and the Industrial Hygiene Section, Naval Regional Medical Center, responded to contain and clean up the spill.

2. While it is recognized that the heating plant is under the cognizance of the Base Maintenance Officer, it is perdeived that being within the confines of the Air Station, the Commanding Officer, under the Resource Conservation and Recovery Act, remains responsible for hazardous waste operations and incidents on the Station.

3. It is requested that in the event future spills occur within Marine Corps Base operations aboard the Air Station, they be reported to the Station S-4 Office during working hours, or the Station Officer-of-the-Day after working hours, as set forth in enclosure (2) of the reference.

W. MARVEL

Copy to: Base Maintenance Officer



MAIN/JIW/th 6240

AUG 2 5 1982

From: Commanding General To: Commanding Officer (Attn: Preventive Medicine Officer) Naval Regional Medical Center, Camp Lejeune, North Carolina 28542

Subj: Hazardous Waste Disposal at Camp Lejeune

Encl: (1) Initial Assessment Study of Marine Corps Base, Camp Lejeune. North Carolina of August 1982

1. The enclosure provides information on hazardous material disposal sites at Camp Lejeune and is submitted for your review from a public health position. Particular attention is invited to the Nursery/Day Care Center comments, figure 6-4, page 6-39.

> R. F. CALTA By direction

## 1982 8 900

AL APPENDED

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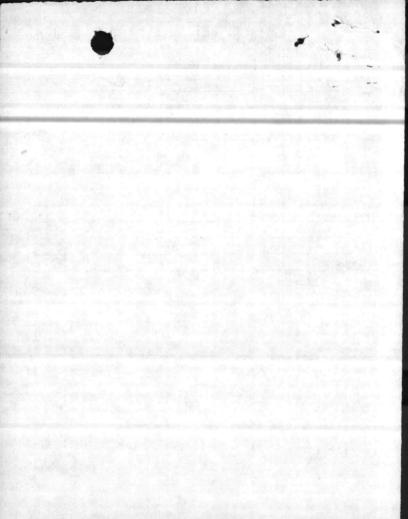
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ROUTING SLIP **2** 3 1982 ACTION INFO INITIAL BMO ~ ABMO ene 4 ADMIN 1 ENVIOR AFF U F&A SEC MAINT NCO M&R **OPNS** PROP -UMACS . UTIL 10 SECRETARY

COMMENTS:

What about this one MREA



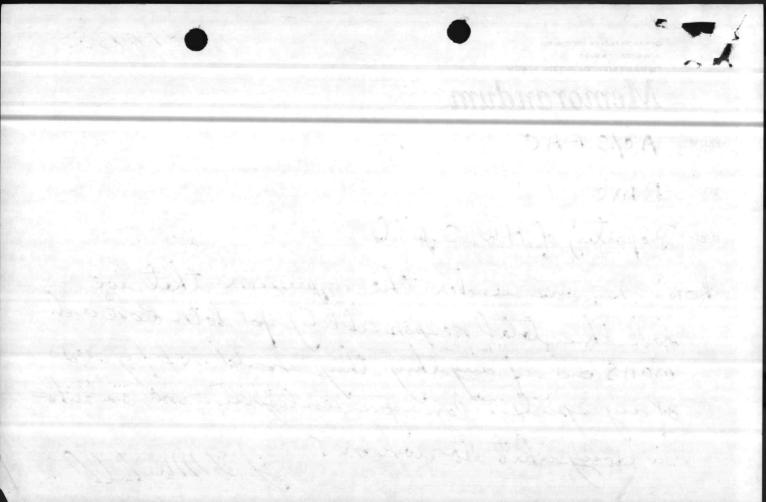
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OPNAV 5216/144 (REV. 6-70) 5/N-0107-778-8097 DEPARTMENT OF THE NAVY Memorandum

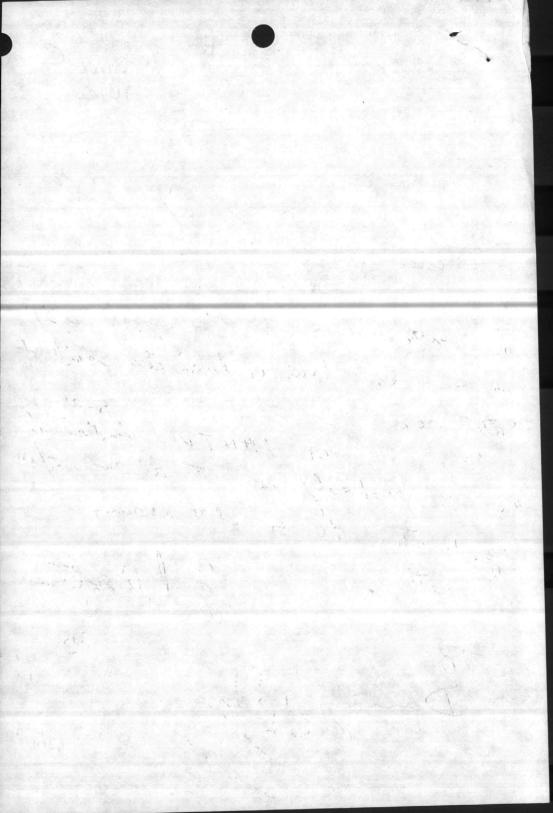
FROM: AC/SFAC

TO: BMO

SUBJ: Reporting of HW Spills Kon: I was under the impression that we had this total responsibility for both Base and MCAS and if anything they should notefy led of any spille. Can you enlighten me as who is doing what to whom ? I I Mauhull



-1Le NATURAL RESOURCES AND ENVIRONTAL AFFAIRS BRANCH BASE MAINTENANCE DIVISION MARINE CORPS BASE Bmo = CAMP LEJEUNE, NORTH CAROLINA 28542 ABMO BM2 8-23-82 Date From: Director To: BMO Subj: Hay. Mat. Disposal attached for your info. Mr King DPDO Camp Lijeme indicated he could not find disposal of DDT - - Chlordone contaminated soil at LANTDIU indicated Sitter service : Serry Wallineyer we will probably have to dispose of or is still looking into hag worth. He J. d. Woot the matter. To Dam DDA



TO MR. ShAPEK

### COPY

#### OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 2030]

MANPOWER RESERVE AFFAIRS AND LOGISTICS

From: DPDO (MIN King)

DEFENSE ENVIRONMENTAL QUALITY PROGRAM POLICY MEMORANDUM (DEQPPM) 81-3

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (IL&FM) ASSISTANT SECRETARY OF THE NAVY (MRA&L) DEPUTY UNDER SECRETARY OF THE NAVY ASSISTANT SECRETARY OF THE AIR FORCE (MRA&I) ASSISTANT SECRETARY OF THE AIR FORCE (RD&L) DIRECTORS OF DEFENSE AGENCIES

SUBJECT: Department of Defense Hazardous Material Disposal Policy

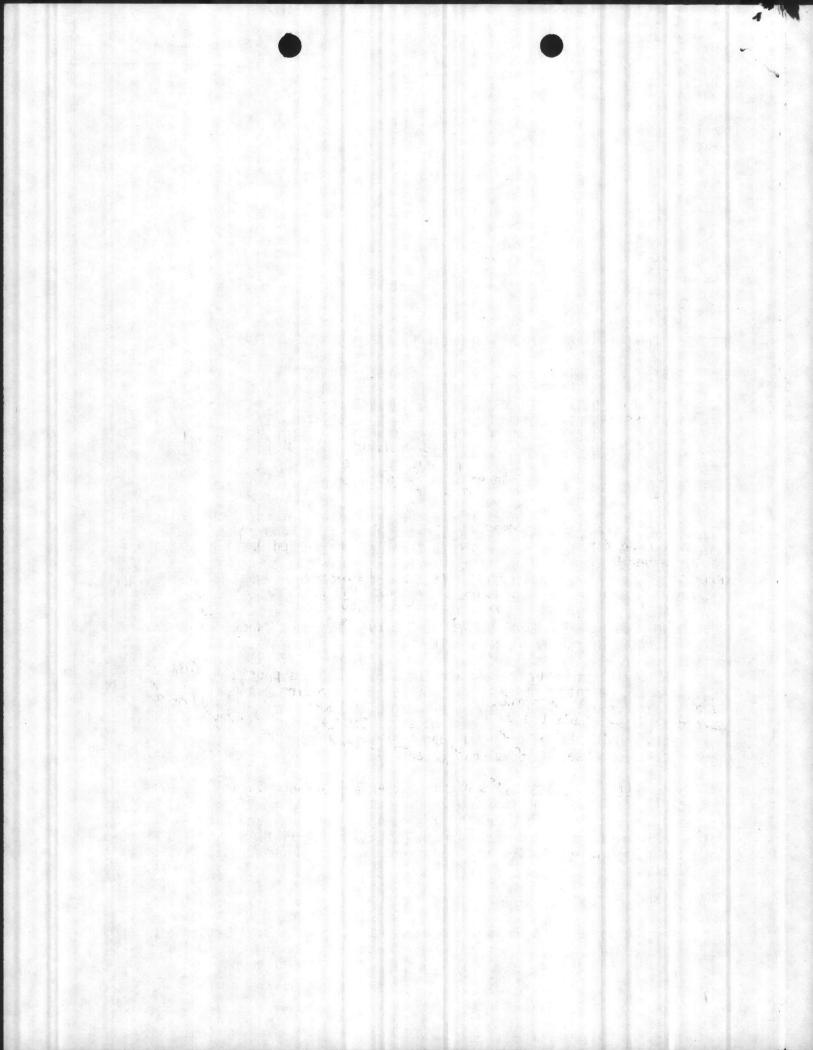
<u>PURPOSE</u>: This is to provide additional Department of Defense (DoD) policy guidance on the disposal of hazardous materials. This memorandum supplements policy published in DEQPPM 80-5, "Department of Defense Material Disposal Policy," of May 13, 1980; DEQPPM 80-8, "RCRA Hazardous Waste Management Regulations," of October 21, 1980; and DEQPPM 80-9, "Department of Defense (DoD) Management of Polychlorinated Biphenyls (PCB's) and PCB Items," of November 10, 1980.

BACKGROUND: On May 13, 1980, DEQPPM 80-5 was published to provide DoD policy on the disposal of hazardous materials. That policy designates the Defense Logistics Agency (DLA) as responsible for the disposal of all hazardous materials except those that specifically remain the other DoD components' responsibilities. On October 21, 1980, DEQPPM 80-8 was published to provide DoD policy on the implementation of the hazardous waste management provisions of the Resource Conservation and Recovery Act (RCRA) of 1976. Finally, on November 10, 1980, DEQPPM 80-9 was published to provide additional DoD guidance on the proper handling, storage, and disposal of polychorinated biphenyls (PCB's) and PCB items.

On March 12, 1981, DLA and the Defense Property Disposal Service (DPDS) briefed the Hazardous Materials Disposal Policy Steering Committee and Working Committee on their progress to implement DEQPPM 80-5, DEQPPM 80-8, and DEQPPM 80-9. The actions, responsibilities and assignments which follow were identified at that briefing.

POLICY: The DoD policy is:

DoD components will fund for hazardous substance spill residue cleanup, spill site restoration, and proper identification, packaging and labeling of



spill residue. DLA should program only for disposal of spill residues for fiscal year 1983 and later years.

DLA will take the lead in a coordinated DLA/DoD component effort to determine conforming storage project requirements to support the DLA assigned disposal mission.

ACTION REQUIRED: DoD components will take the following actions:

The DoD component which has a hazardous material spill will continue to fund for spill cleanup, spill site restoration, and proper identification, packaging, and labeling of spill residue. DLA should program only for disposal of spill residues for FY 83 and later years. DLA will provide, upon request, a spill residue disposal service for the remainder of FY 81 and FY 82 with the DoD components to provide necessary funding. (The DEQPPM 80-5 Interservice Task Group will define the operational procedures and parameters.)

DLA will determine hazardous materials conforming storage requirments to support its assigned disposal mission.

To assist in the preceding DLA effort, the DoD components will, in coordination with DLA, assess the adequacy of present storage capability at each installation. The DoD components are to provide estimates to DLA of the projected generation of hazardous materials.

The total requirement for hazardous material conforming storage facilities will be identified for each installation through a coordinated DLA/DoD component team effort under DLA lead. Where a storage facility is needed at the supporting Defense Property Disposal Office, DLA will program the MILCON or O&M funds required. When a joint use facility will best meet the total DoD requirement for a given installation or geographic region, DLA will work with the DoD component to determine program responsibility for the required MILCON/O&M funds in accordance with the provisions of DoD Directive 7150.5, dated August 26, 1978.

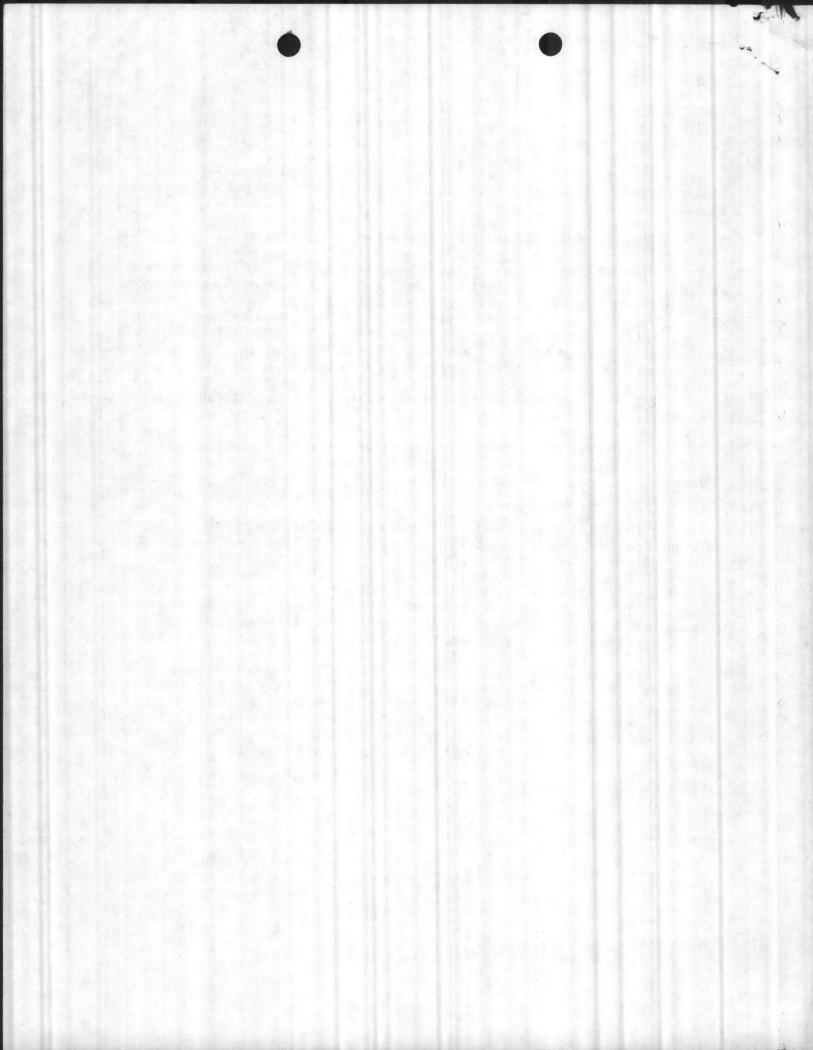
DLA should continue to address installation support problems on a case-bycase basis. The interservice task group that DLA chairs should continue to be used to address issues that may arise in the implementation of DEQPPM 80-5. The Hazardous Materials Disposal Policy Steering Committee will provide assistance on an as-required basis. DLA should report unresolved issues to the Deputy Assistant Secretary of Defense (Energy, Environment and Safety).

IMPLEMENTATION: The provisions of this DEQPPM are effective on this date.

DPDO -- LEJEUNE

RECEIVED

George Marienthal Deputy Assistant Secretary of Defense (Energy, Environment and Safety)



MAIN/JIW/th 6240 19 Aug 1982

From: Base Maintenance Officer To: Distribution List

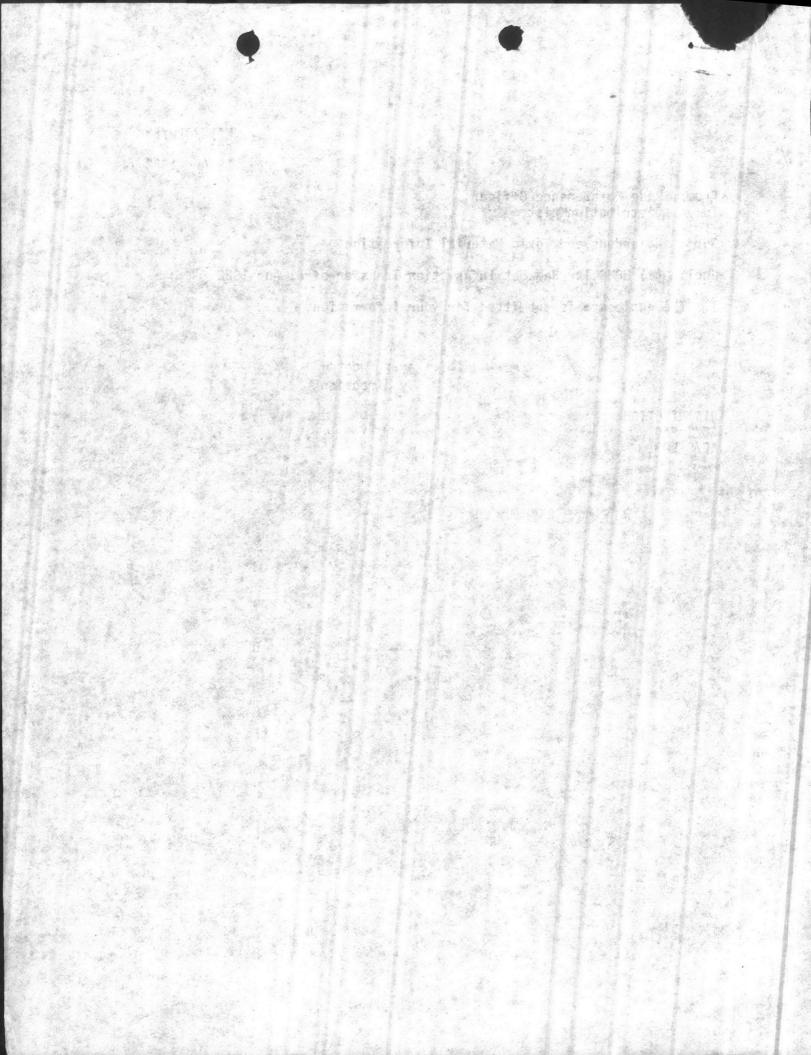
Subj: Hazardous and Toxic Material Information

Encl: (1) HQMC ltr Haz Mat Information Transfer of 11 Aug 1982

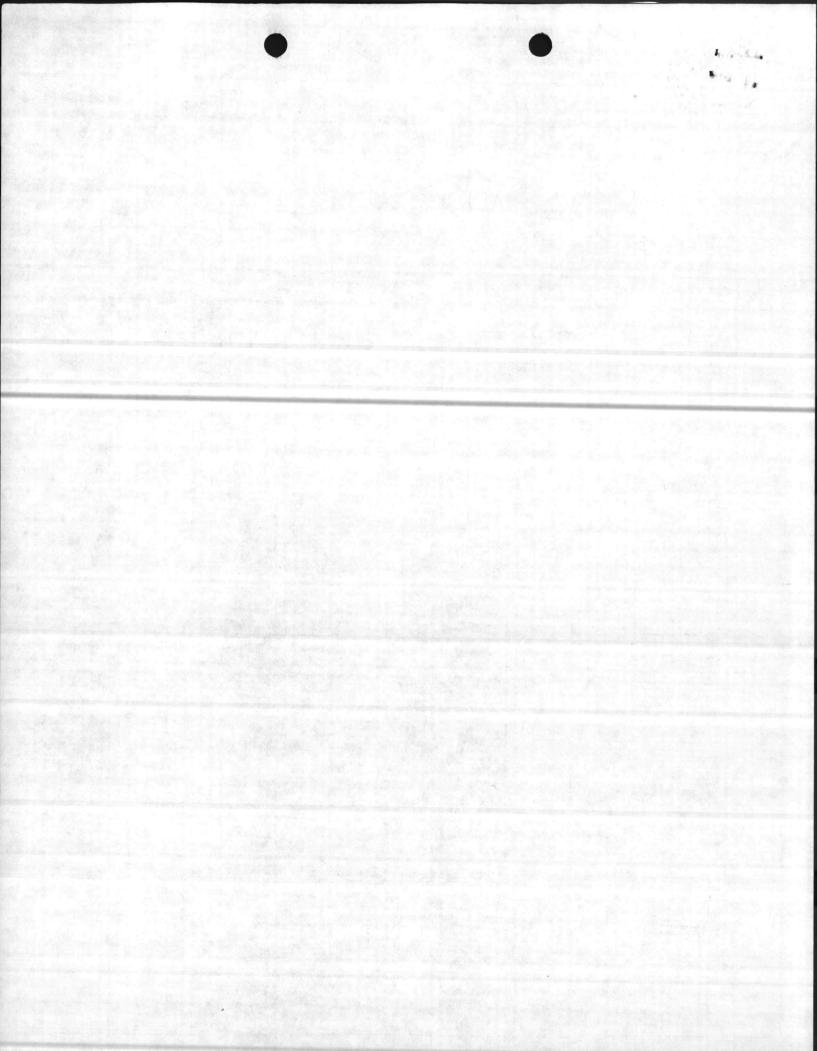
1. The enclosure is submitted for your information.

J. I. WOOTEN By direction

DISTRIBUTION: AC/S FAC AC/S LOG



3 Full World (3) Har pull Bar DATE: 11 Aug 82 8-70 DATE: 11 Aug 82 OPNAV 5216/144 (REV. 6.70) S/N 0107-L F-778-8099 DEPARTMENT OF THE NAVY Memorandum FROM: Paul Hubbell TO: Mr. Julian Dooten, Director Natural Resources SUBJ: Information Transfer (1) DLA Commander's Guidance Statement #8 of 7Jun 82 Enel: (2) Scruba Dubster product literature 1. Enclosure (1) indicates a definite commetment by DPDS to have its Regions and Defense Property Disposed Offices " step forward and fully accept [their] response bility in the disposal of hayandow and toxic materials ". This document may be beneficial to you in dealing with reluctant DPDO'S. 2. As a point of interest, and possible fuilure concern, I recently found out that the DoD philosophy of delaying the designation of an item as a higardons wrote vice a hayardous material (until all avenues for sale or neuse are explored - thus delaging the 90 day storage clock) is now being challenged by certain state (notably TX and CA). 3. you may wish to pass enclosure (2) to the maintenance officer for his information/use.







DEFENSE LOGISTICS AGENO DEFENSE PROPERTY DISPOSAL SERV. FEDERAL CENTER BATTLE CREEK, MICHIGAN 49016

IN REPLY DPDS-D

## COMMANDER'S GUIDANCE STATEMENT (CGS) NO. 8

SUBJECT: Custody of Hazardous and Toxic Material

1. For some time now this Command has been charged with the mission of disposing of hazardous and toxic materials and waste. We have worked diligently to determine our responsibility and to help develop the DoD policy. As I am sure you are aware, the DoD policy concerning who will maintain custody of hazardous and toxic material and waste is clear. In a nutshell that policy is that if the DPDO has conforming storage the DPDO will accept accountability and custody. If the DPDO does not have conforming storage and the generator does; the DPDO accepts accountability and the generator maintains custody. If neither the generator nor the DPDO have conforming storage then whoever has the most nearly conforming storage maintains custody. If agreement cannot be reached as to who has the most nearly conforming storage then the decision will be raised through command channels to DoD for a decision.

2. Having said all of that my concern now is that we may not have made an honest effort to accept custody of hazardous and toxic material when we do in fact have the necessary conforming storage or when our storage is as nearly conforming as the generator. This is becoming a problem between DPDS and the services; as a result, we have agreed that we will develop a check sheet for use at the installation level to determine who has the most nearly conforming storage. It is invisioned that this check sheet will be executed by the installation commander. I support this process because the installation commander is the one responsible for storage of hazardous and toxic materials by all tenants to include the DPDO.

5. Prior to the formal execution of this check sheet which is a few months away, I want each DPDO to reevaluate with his host those items which can be stored safely and without danger of spill in the DPDO area. In those cases where an item is designated by Table 5-5 of DoD Regulation 4145.19-R-1 to be stored in a general purpose warehouse I expect that we will take physical custody unless we do not have a general purpose warehouse.

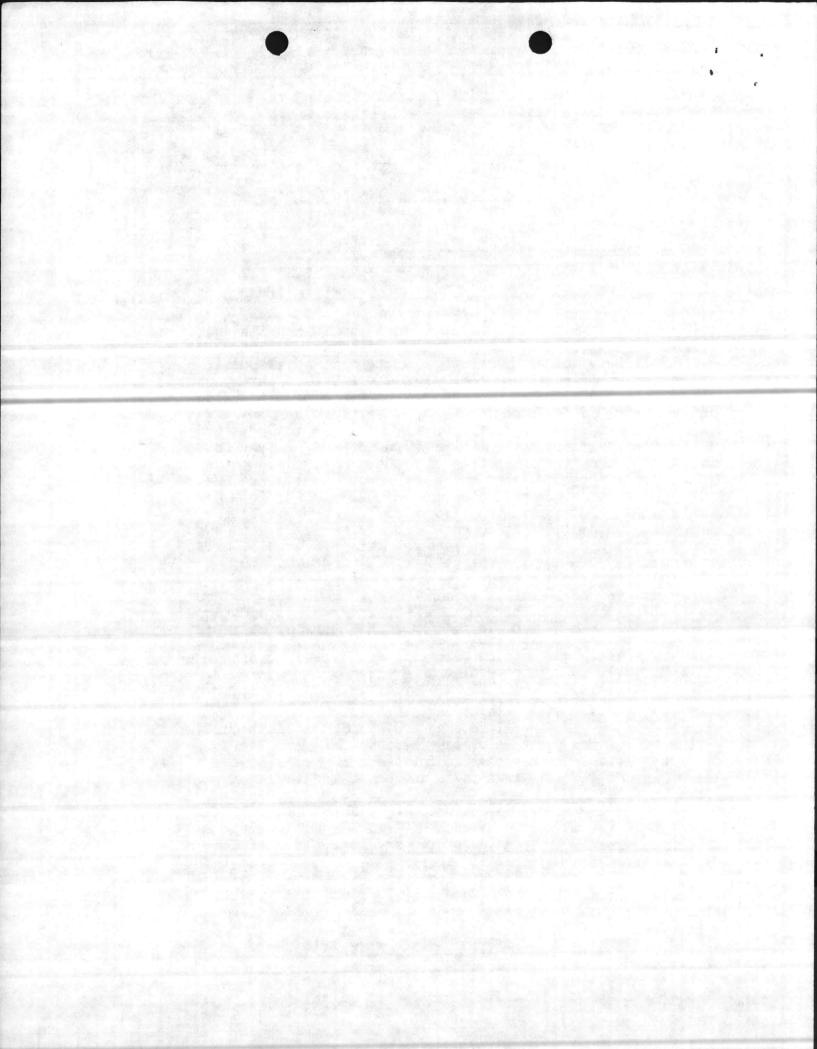
7 June 1982

ACTION

AGENCY

Encl

SUSPENSE



DPDS-D PAGE 2 SUBJECT: Custody of Hazardous and Toxic Material

4. Bottom line is that the time has come for us to step forward and fully accept our responsibility in the disposal of hazardous and toxic materials. Acceptance of physical custody when feasible and possible is critical to identification of the waste stream and help us to learn to properly store this material. One final thought, I am concerned that in some cases when we have accountability but not custody that we lapse into the feeling "out of sight, out of mind" and since the property is not within the DPDO we do not move as quickly as we should to dispose of the property. We need to be sure that is not the case.

5. Directed actions:

a. Development of check sheet.

b. DPDOs should make contact with their host to insure that the attitude of cooperation, not confrontation exists at the PDO level. Problems beyond resolution at the DPDO, DPDR level should be surfaced to DPDS-H.

c. DPDRs should assist DPDOs in making determinations concerning ability to store hazardous and toxic materials.

G. SKEEN

Brigadier General, USA Commander

DISTRIBUTION: B1-B3 DD minus 23

Addendum:

In paragraphs 2 and 4 above whenever I mention hazardous and toxic material it should be understood that waste is also included, i.e., hazardous and toxic material and waste.

7 June 1982

ACTIC.

AGENCY

DPDS-H

DPDO

DPDR

DPDR

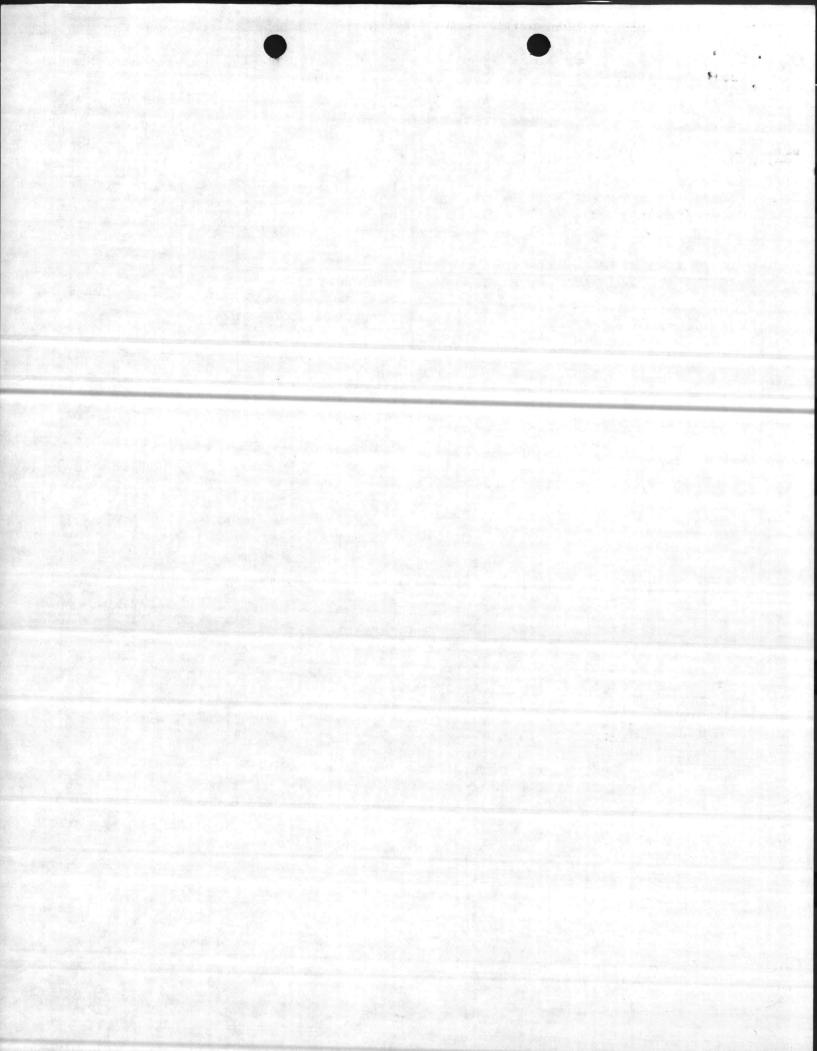
+ SUSPENSE

1 Oct 82

30 Jun 82

Continuous

As Required



J., BANKS HUDSON, INC.

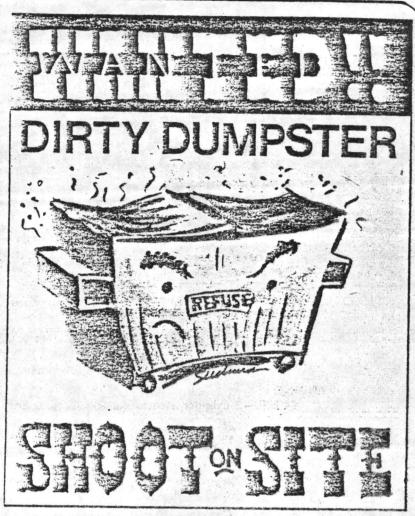
#### BANKS HUDSON (202) 244-7103

4714 SEDGWICK STREET. N. W. WASHINGTON, D. C. 20016

Specifically engineered by the "old pros"...

# Shoots on site for clean dumpster containers

Obviate Container Nuisance Prolong Container Life Enhance Container Cleanliness



ScrubaDubster





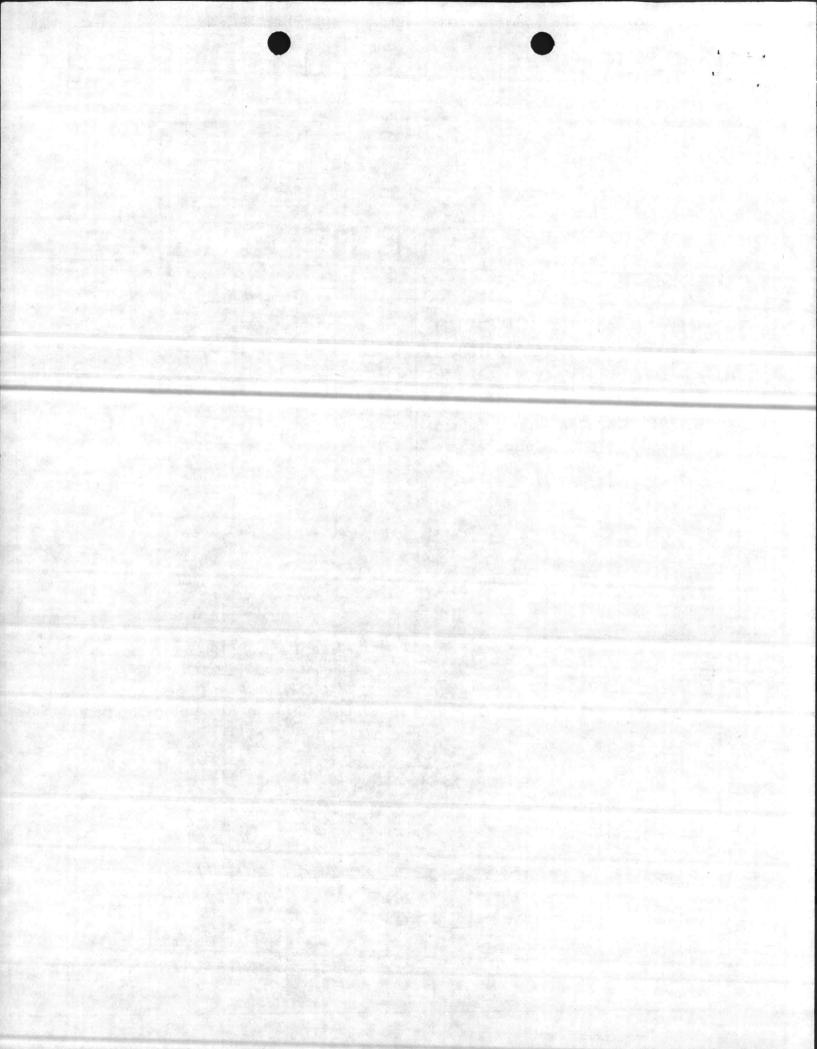


Rear Load (RLP) Containers Front Load (FEL) Containers Hoist Haul (Arm-Chain) Containers Truck Mounted Hauling Equipment Container Sites

USN "FPB" Fast Pay Back

USA "QRIP" Quick Return on Investment Program

USAF "FASCAP" Fast Capital Amortization Program



# ScrubaDubster - Model 1500

SPECIFICATIONS

Transferration grant of

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HAG ATTEM

N. MEBRY

### - At Marka HOT HIGH PRESSURE WASHER:

-

Discharge-5 GPM 300 GPH

AL SAL

Pressure -- 1500 PSI, adjustable

Hose-80" High Pressure Hose standard

Star Anna Spy

1- en .

Pump-Triplex design with lubricated crosshead-withstands extended periods of

no-water useage. Trigger Gun - "Deadman" type, cool grip

Discharge Temperature -- Adjustable to 210°F

Burner-460,000 BTU Input

Ignition-Aircraft magneto, constant

Fuel Type-Kerosene, No. 1 or No. 2 Diesel

Fuel Tank-8 hour capacity

Fuel Consumption - Burner - 3.0 GPH

Chemical Feed-High pressure and low pressure standard, both systems calibrated.

#### ENGINE:

1

art for the water of

24 H.P.-2 cylinder standard, air-cooled gasoline, electric start. (See Options)

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- Carlos and Anna and

The Treener

#### VACUUM SYSTEM:

Air Flow-150 CFM Maximum Vacuum - 27" Mercury Hose Length-50' x 3" I.D. Standard Wand-5' with Three Heads

#### WATER TANKS:

Type-Dual Tank Design Capacity-500 gallons each Interior-Baffled

#### SPECIAL FEATURES:

· Electric clutches permit independent or simultaneous operation of vacuum system and pressure washer.

- All tanks have liquid indicators.
- Pressure hose mounted or hose real.
- · Skid mounted.

#### **OPTIONS:**

Engines - 30 HP 4 Cylinder Gasoline, air-cooled

Diesel engines per customers specifications

Electric motor drives, including availability of all standard voltages, 50 or 60 Hz and explosion proof.

Mounting-Hoist eye for skid mounted units.

Dual axle trailer.

Truck mounted per customer specification.

Tanks -- Fiberglass or stainless steel per customers corrosion requirements.

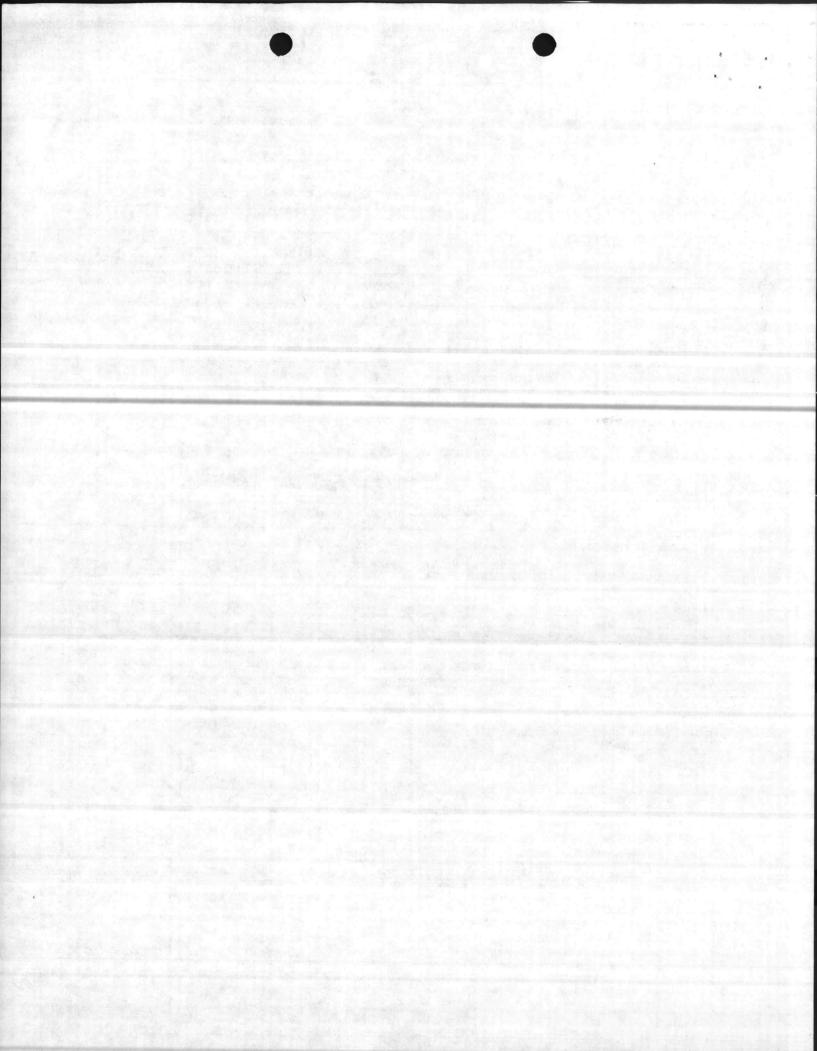
Capacities to customer's specifications, including 8 hour continuous operation capability.

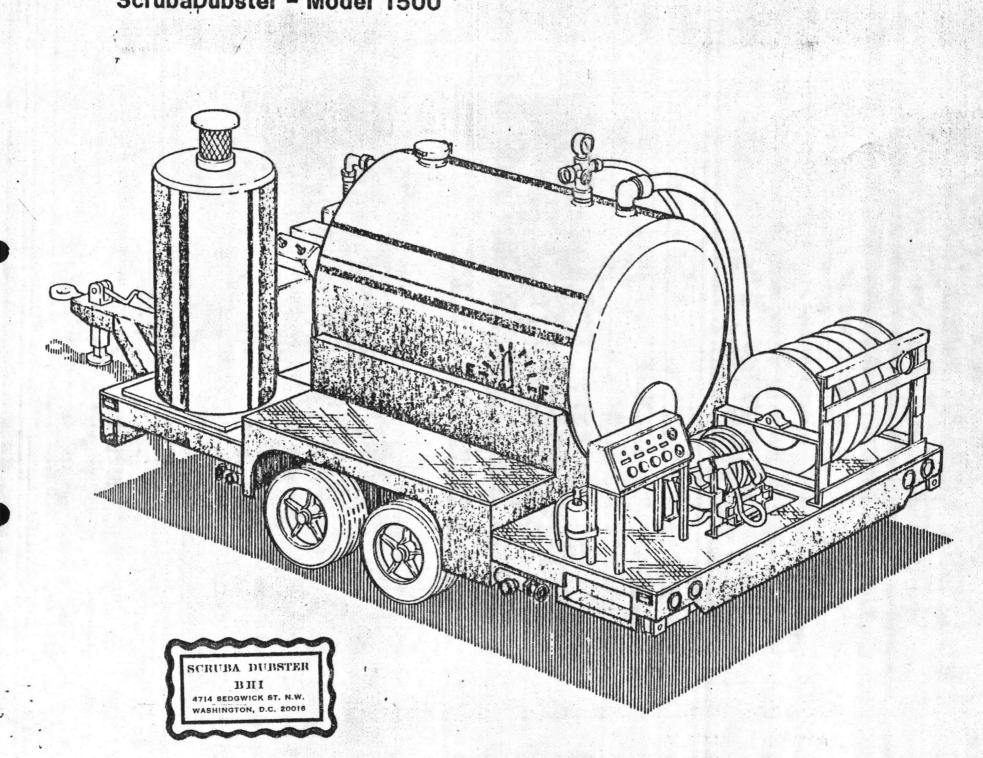
Hose Reel-Suction hose reel-hand crank or electric.

Sand Blast - Liquid sand blasting attachment with sand hopper-100#, 300#, and 800# capacities standard.

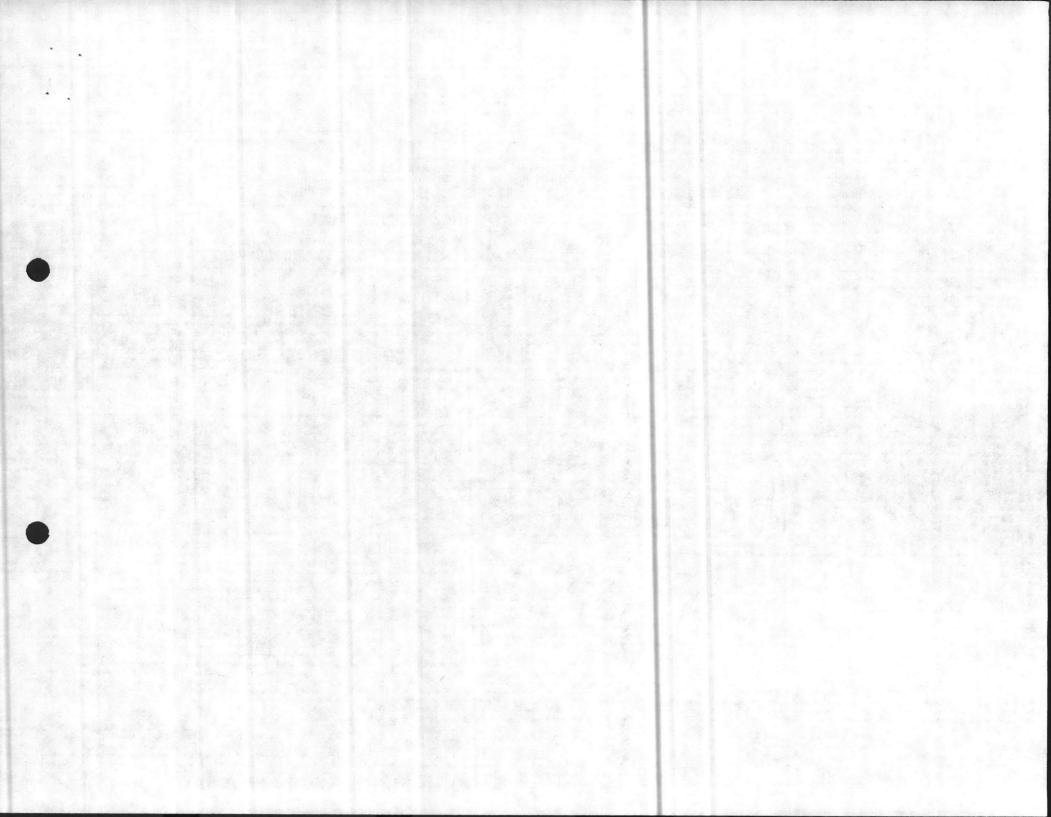
Pressure - To 5,000 PSI available per customer specification.

Volume-To 12 GPM per customer specifications.





ScrubaDubster - Model 1500



# (PROCUREMENT DESCRIPTION FOR ON-SITE CONTAINER CLEANING EQUIPMENT)

The intended primary use of the equipment is to perform the specialized task of cleansing, at their assigned sites, more efficiently, conviently and economically Solid Waste Collection Equipment: dumpster and roll-off containers inside and out, stationary packers and indicated prepared sites. The transporting vehicles and other similar compatible cleansing tasks are also to be accomplished.

It is required that technologies associated with high pressure hot water, vacuum, chemicals and abrasives will be knowledgeably combined and exploited to provide a device able to apply processed cleansing to the Collection Equipment so its operation may continue to the satisfaction of the "customers" dependent on that Collection System.

### HOT HIGH PRESSURE WASHER

Discharge: 5 gpm-300 gph Pressure: 1500 psi adjustable

Hose: 30' high pressure hose on spring rewind reel Pump: Triplex design with lubricated cross head

to withstand extended periods of no water usage Trigger gun: Thermo-plastic dead man type. Wands with grips 24" and 48": extension 36".

> Three nozzles of O degree, 15 degree and 25 degree spray patters, all quick couple.

Discharge temperature: adjustable to 200 degrees. Burner: 46,000 BTU input Ignition: Aircraft Magneto, constant Fuel: Kerosene #1 or #2 diesel Fuel Tank: 9 hour capacity Fuel Consumption: Burner 3.0 gph Chemical Feed: High pressure and low pressure, both systems calibrated.

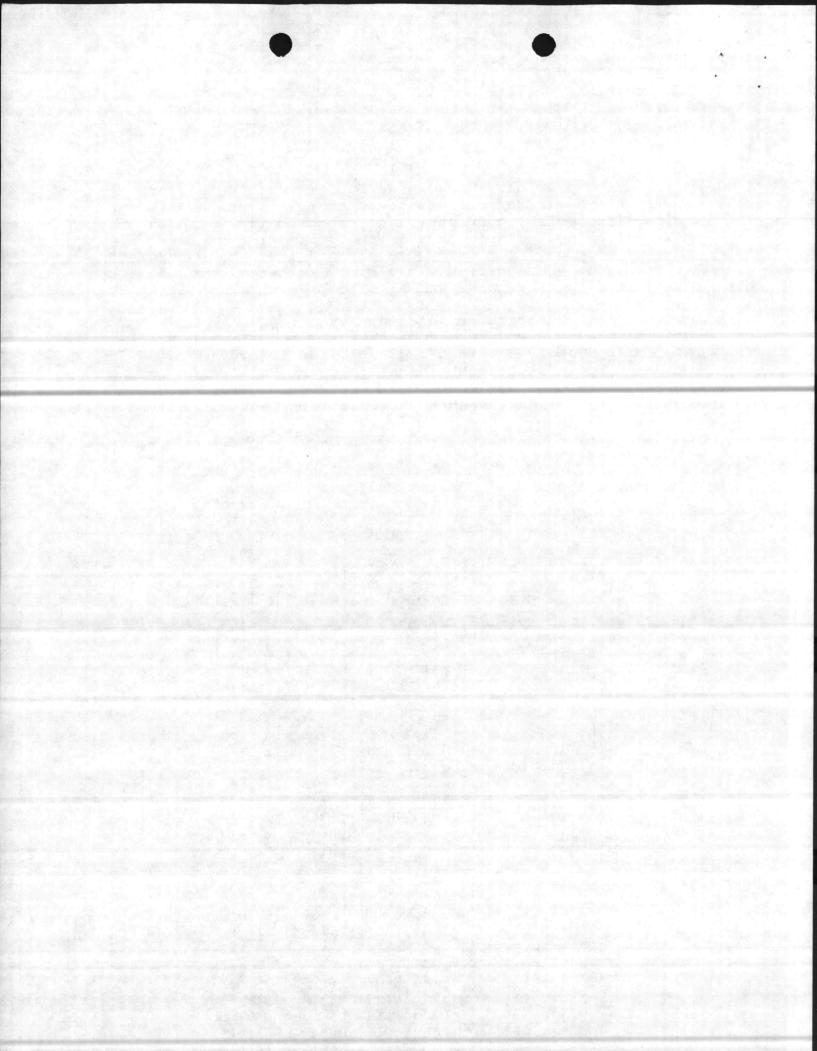
ENGINE

(1)

Diesel: Deutz: power minimum equivalent 24 hp gasoline

VACUUM SYSTEM

Air Flow: 270 cfm @ 15" Hg Blower: direct drive-twin impeller Mose: 30' 3" ID on spring rewind roll Wand: 5' with three heads



### WATER TANKS

1000 gallon total capacity divided by baffle for 500 gallons fresh and 500 gallons waste; equipped with cleanout gate and rapid discharge valve. The former to provide easy manual cleanout and the latter to provide a discharge diameter at least 25% greater than the waste inlet diameter.

#### TRAILER

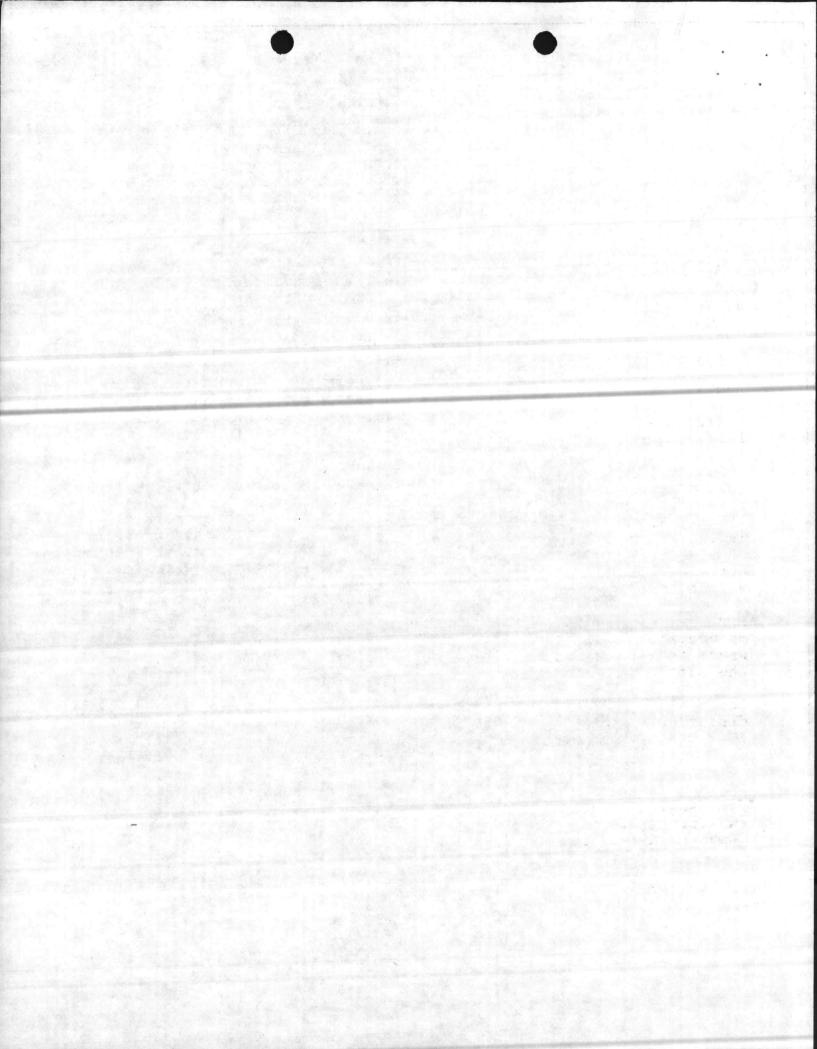
To be mounted on dual axel trailer to withstand rugged service to operate with GAWR of 11000 lbs. minimum: ICC lighting-compatible hitch.

REQUIRED FEATURES

Electric clutches:to permit independent or simultaneous operation of vacuum and water systems. All tanks to have liquid indicators.

Sand blast: liquid sand blasting with 300 lb. capacity sand hopper.

Water concentration device: to enable operator to assemble occassional pools of water in dumpster so vacuum will leave interior moist-dry.



# CONTAINER CLEANSING\* .

In order to incorporate acceptably into the necessary process of waste handling, the specialized task of cleansing refuse containers, stationary packers and hardened sites, must offer the capabilities listed hereinafter.

A System using high-pressure hot water, detergent-deodorant, grit and vacuum must be brought to the containers for use on-site at the regularly assigned locations of the containers.

Each unit of the System shall be able to process-cleanse containers per the subsequent schedule, in the required increments, at a minimum rate of 15 Eight Cubic Yard Containers in eight contiguous hours.

Water temperature must be adjustable to a maximum of 200 degrees Farenheit, pressure adjustable to a maximum of 1500 psi, flow rate at 5 gpm minimum.

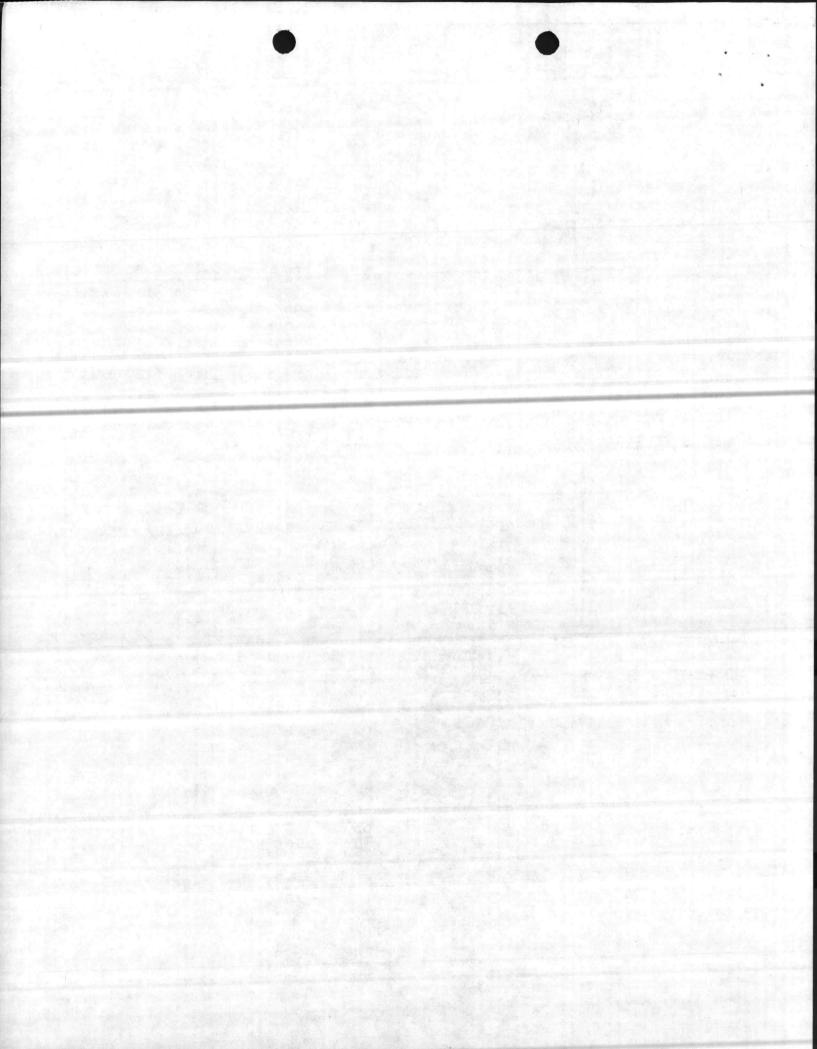
Vacuum at 270 cfm at 15" Hg with capability to vacuum cleanse and leave moist-dry not only the containers, inside and out, but also the hardened sites where certain containers and stationary packers regularly repose.

Detergent-deodorant capability, as well as grit capability, must be a compatible, intergal component of the cleansing system.

For reasons of safety to inhibit explosion and electrical hazards to operators and others who may be in the many sensitive areas where the operation takes place, aircraft magneto is required in the burner chamber.

The System shall neither disrupt the waste handling process nor disturb community life-style.

\*For use to obtain adequate contract service by incorporation in the Invitations to Bid for Refuse Service or as an in-house directive to Government employees when work is performed by the Base's own forces.



## KIT, CONTAINER MAINTENANCE

A stratter in the

Especially developed to case maintenance requirements, prolong the life, and protect the investment in both new and already in-use Refuse Containers, the following describes a developmentby Polymetrics, Inc. of Maitland, Florida, a company long established in problems associated with rail car body maintenance.

Designed particularly for the unique damage control need in Refuse Containers, the Kit provides a System of Polyurethane for the entire Container, inside and out, including especial provision for the vulnerable bottom section, the top lid and end door assemblies. The color incorporated in the System is the customer's choice.

For material costs of about 1/6 that of a new container the use of the Kit anticipates extending the on-line life of a new or in-use.FEL, RLP or RO Refuse Container some 3x. Thus, "2 free containers" for each to which application of the Kit is made.

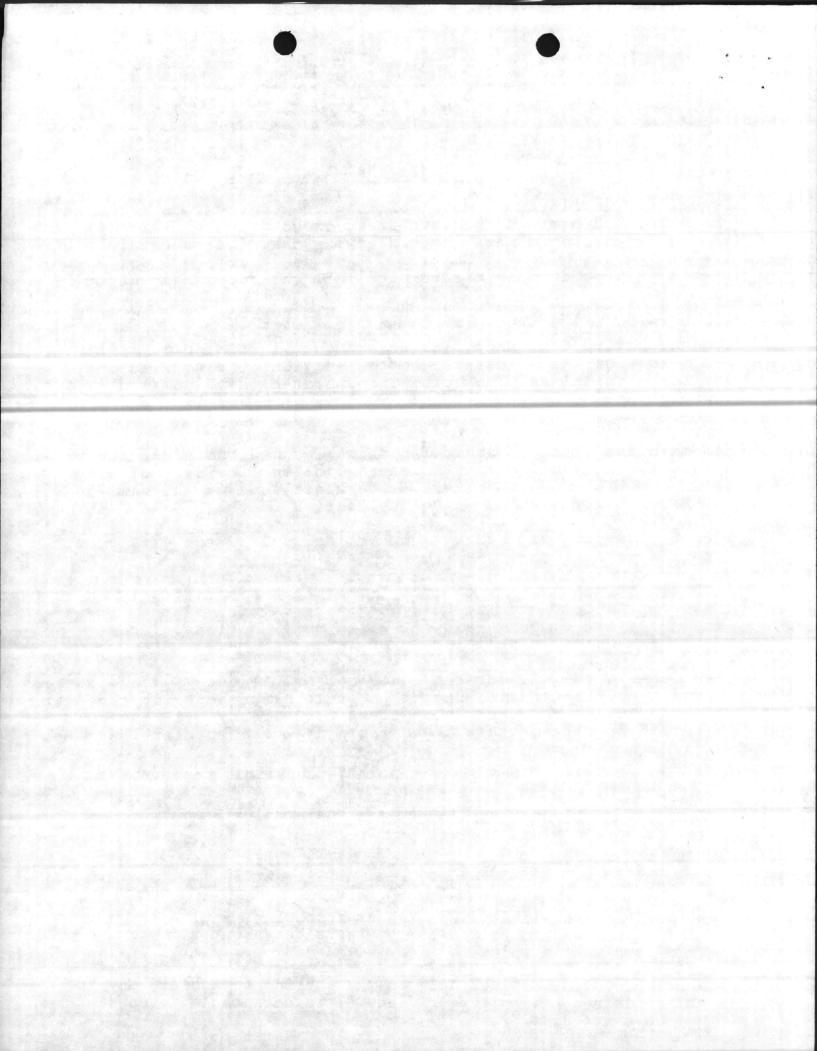
Further, dumping and sanitation are improved by the very smooth, "stick-free"surfaces. Offensive odor is reduced.

Although quite new (May of 1981), the Kit has satisfingly quick commercial acceptance including containers owned by the largest Refuse Service Company, a U. S. Based multi-national, whose containers number high in the thousands.

Technically, the Kit for the Container Maintenance System centers around a Polyisocyanate Monomer known to offer superior corrosion resistance. As polyurethane systems are already well known to the Armed Services, there is no learning curve to climb.

The Kit consists of four interrelated, compatible dependents:

- I-A specific solvent, applied to the "paintable" surface inside and outside.
- 2-A designed primer, silver in color, also applied inside and outside.
- 3-A flexible, resilient liner, shock absorbing, applied inside only on the bottom and up the sides about a foot. This is black in color.
- 4-A color system, applied onl on the outside to achieve any color desired. If silver (#2 above) is acceptable, step 4 may be omitted.



As to application, our directions are complete, detailed and simple. Any painter can handle the task. Steps 1, 2 and 4 , may be brushed, rolled or sprayed. Step 3 should be rolled.

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Polymetrics, Inc. the manufacturer who developed the System of Maintenance Kits for refuse containers, is long established in the polyurethane coating of the interior of rail cars where corrosion and dumping are problems.

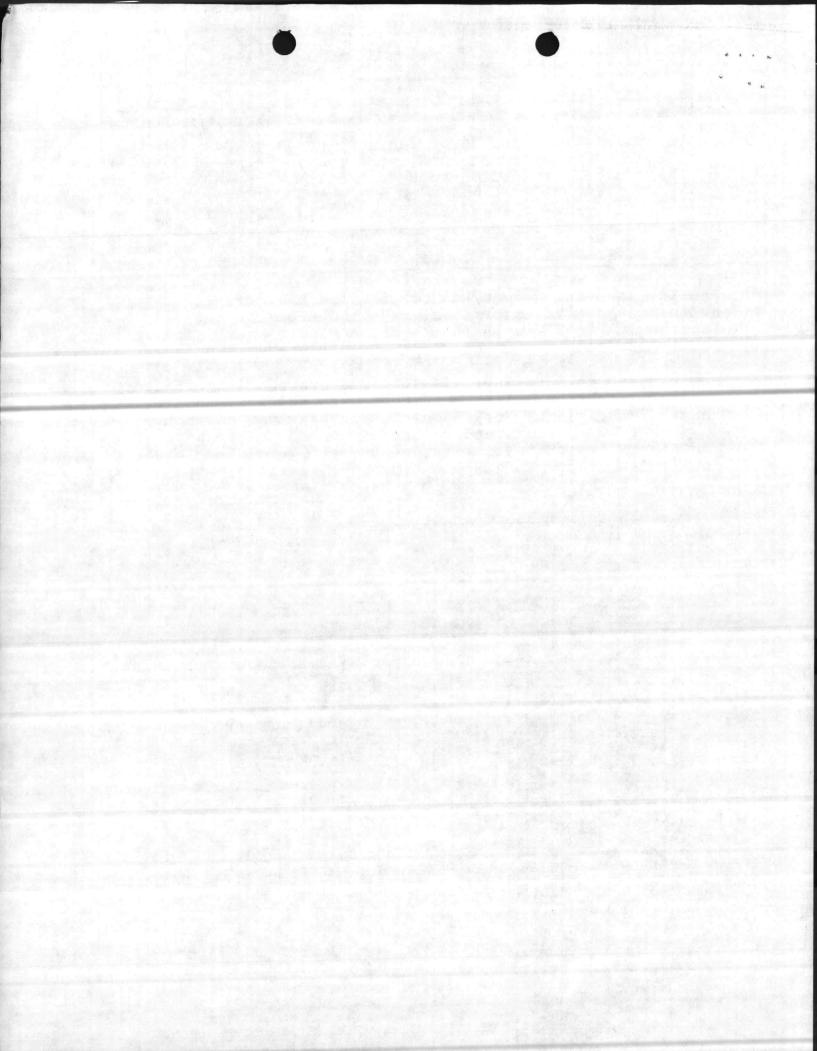
The Kit is being used by major firms in the Refuse Service business whose inventories of many thousands of containers are located in the U.S., Europe and the Middle East, also in South America. The endorsement of such users is unimpeachable.

An increase in container life 3 times provedes significant capital retention: less than a hundred dollars in material "buys" 2 additional "new" containers. With new containers costing \$700.00 delivered and in place, the savings on 100 containers approximates \$140,000.00--a figure of noteable magnitude. Improved on-line time and facilitated dumping from the smooth, slick liner are concomittants.

We anticipate further contact.

J. BANKS HUDSON, INC.

BANKS HUDSON (202) 244-7103 4714 SEDGWICK STREET, N. W. WASHINGTON, D. C. 20016



(For inclusion in Service Contractors agreements when they provide new, used or rehab'd Refuse Containers for the Base)

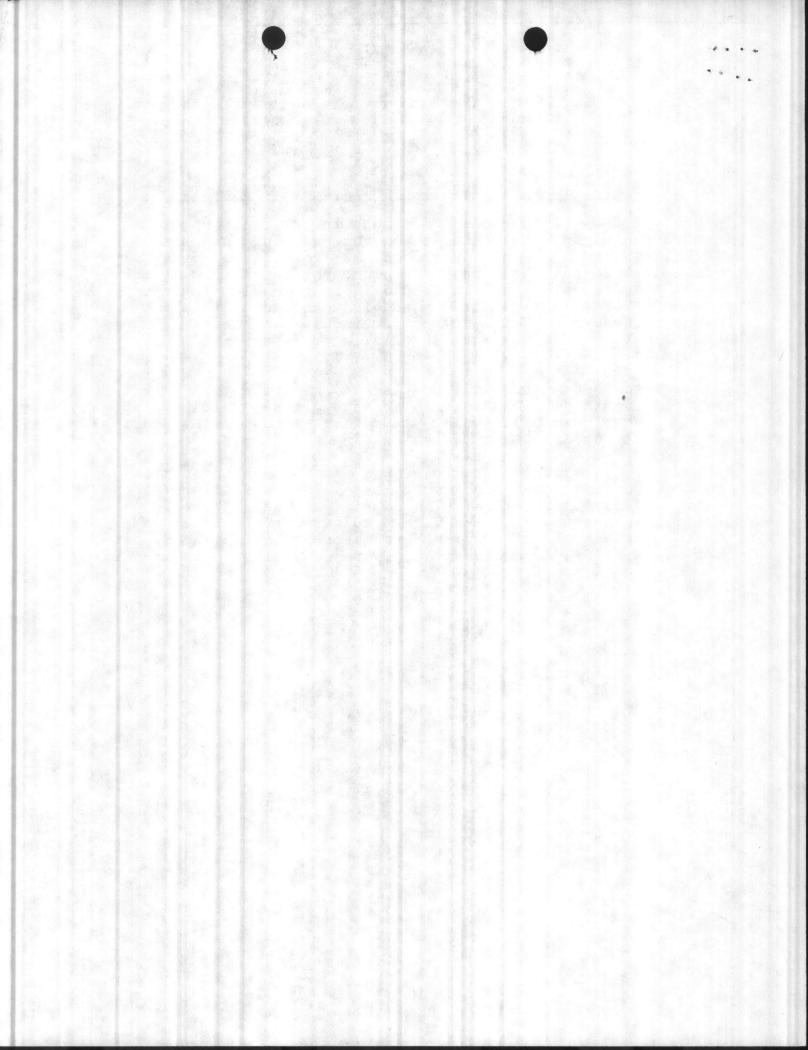
### CONTAINER TREATMENT, PAINTING AND PRESERVATION

To protect the Government's investment in its containers, to improve container appearance, to enhance dumping and thus cleanliness and to reduce odor problems, containers going thru rehabilitation and those new or replacement containers brought aboard the Base shall be, in lieu of conventional painting, cleaned, treated and painted in accord with a commercial Polyurethane System Kit designed for refuse containers (Polymetrics part # BH101 or equal) following the supplier's directions.

Surfaces to be painted shall be cleaned and dried to insure they are free from contaminants, such as oil, grease, welding slag and spatter, loose mill scale, water, dirt, loose paint, corrosion product, or any other contaminanting substances.

As soon as practicable after cleaning, and before any corrosion or other contamination can result, the surfaces shall be prepared or treated to insure adhesion, according to manufacturer's directions. Coating shall be with manufacturer's current materials according to supplier's current processes. The finished paint coat shall be free from runs, sags, orange peel or other defects

The color of the finish coat shall be as specified by the Base.



BASE MAINTENANCE DIVISION Marine Corps Base Camp Lejeune, North Carolina 28542

> MAIN/JIW/th 6240 19 Aug 1982

From: Base Maintenance Officer To: Distribution List

Subj: Hazardous and Toxic Material Information

Encl: (1) HQMC ltr Haz Mat Information Transfer of 11 Aug 1982

1. The enclosure is submitted for your information.

J. I. WOOTEN

By direction

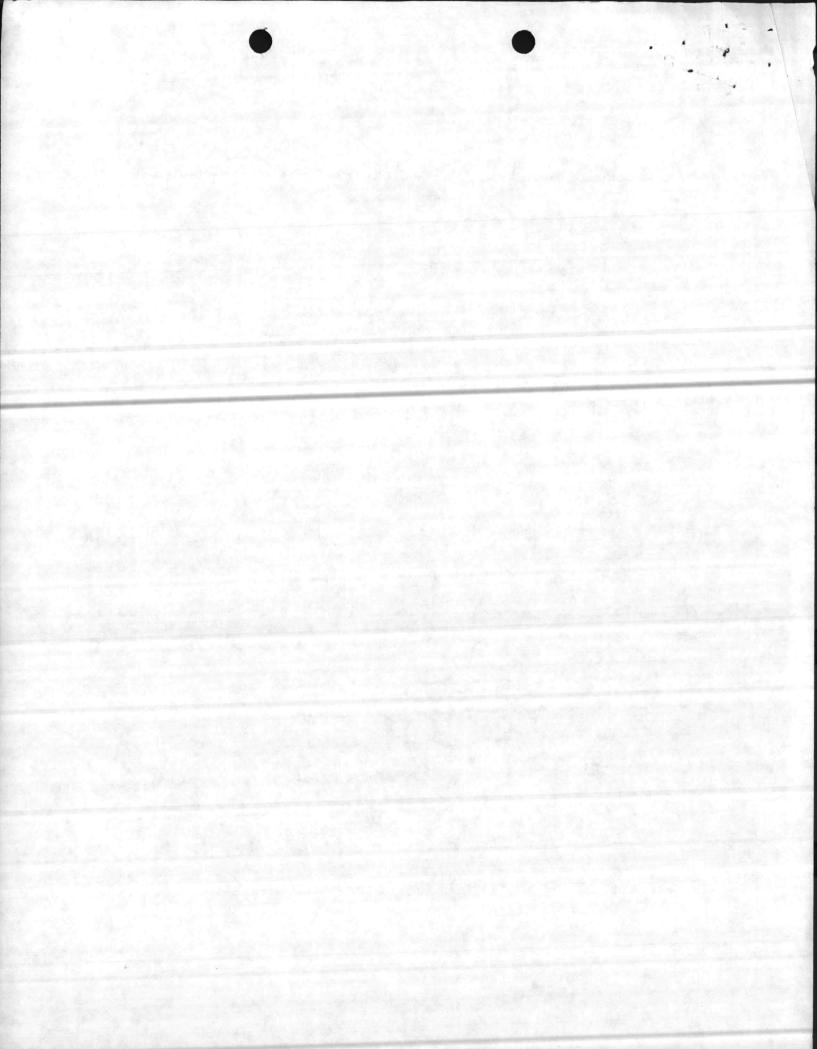
DISTRIBUTION: AC/S FAC AC/S LOG

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OFNAV 5216/144 (REV. 6.70) S/N 0107-L F-778-8099 DEPARTMENT OF THE NAV DATE 11 Aug 82 Memorandum FROM: Paul Hubbell TO: Mr. Julian Wooten, Director Natural Resources SUBJ: Information Transfer (1) DLA Commander's Guidance Statement #8 of 7Jun 82 Encl: (2) Scruba Dubster product literature Sent 10 Marma 1. Enclosure (1) indicates a definite commetment by DPDS to have its Regions and Defense Property Disposal Offices " step forward and fully accept [their] response bility in the disposal of hazardous and toxic materials". This document may be bareficial to you in dealing with reluctant DPDO'S. 2. As a point of interest, and possible future concern, I recently found out that the DoD philosophy of delaying the designation of an item as a higardous wrote vice a hayardous material (until all avenues for sale on reuse are explored - thus delaging the 90 day storage clock) is now being challenged by certain state (notably TX and CA) 3. you may wish to pass enclosure (2) to the maintenmee officer for his information/use.





DEFENSE LOGISTICS AGENCY DEFENSE PROPERTY DISPOSAL SERVICE FEDERAL CENTER BATTLE CREEK, MICHIGAN 49016

IN REPLY DPDS-D

7 June 1982

ACTION AGENCY

SUSPENSE

Encl

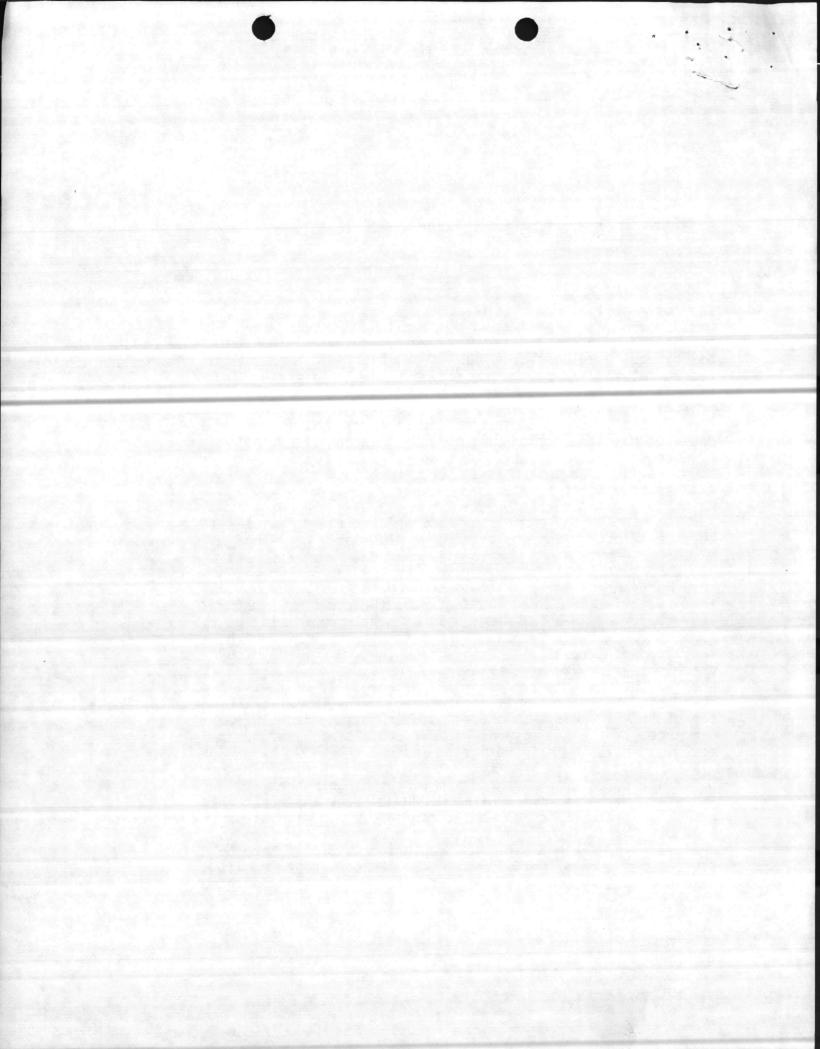
COMMANDER'S GUIDANCE STATEMENT (CGS) NO. 8

SUBJECT: Custody of Hazardous and Toxic Material

1. For some time now this Command has been charged with the mission of disposing of hazardous and toxic materials and waste. We have worked diligently to determine our responsibility and to help develop the DoD policy. As I am sure you are aware, the DoD policy concerning who will maintain custody of hazardous and toxic material and waste is clear. In a nutshell that policy is that if the DPDO has conforming storage the DPDO will accept accountability and custody. If the DPDO does not have conforming storage and the generator does; the DPDO accepts accountability and the generator maintains custody. If neither the generator nor the DPDO have conforming storage then whoever has the most nearly conforming storage maintains custody. If agreement cannot be reached as to who has the most nearly conforming storage then the decision will be raised through command channels to DoD for a decision.

2. Having said all of that my concern now is that we may not have made an honest effort to accept custody of hazardous and toxic material when we do in fact have the necessary conforming storage or when our storage is as nearly conforming as the generator. This is becoming a problem between DPDS and the services; as a result, we have agreed that we will develop a check sheet for use at the installation level to determine who has the most nearly conforming storage. It is invisioned that this check sheet will be executed by the installation commander. I support this process because the installation commander is the one responsible for storage of hazardous and toxic materials by all tenants to include the DPDO.

3. Prior to the formal execution of this check sheet which is a few months away, I want each DPDO to reevaluate with his host those items which can be stored safely and without danger of spill in the DPDO area. In those cases where an item is designated by Table 5-5 of DoD Regulation 4145.19-R-1 to be stored in a general purpose warehouse I expect that we will take physical custody unless we do not have a general purpose warehouse.



DPDS-D PAGE 2 SUBJECT: Custody of Hazardous and Toxic Material

4. Bottom line is that the time has come for us to step forward and fully accept our responsibility in the disposal of hazardous and toxic materials. Acceptance of physical custody when feasible and possible is critical to identification of the waste stream and help us to learn to properly store this material. One final thought, I am concerned that in some cases when we have accountability but not custody that we lapse into the feeling "out of sight, out of mind" and since the property is not within the DPDO we do not move as quickly as we should to dispose of the property. We need to be sure that is not the case.

5. Directed actions:

a. Development of check sheet.

b. DPDOs should make contact with their host to insure that the attitude of cooperation, not confrontation exists at the PDO level. Problems beyond resolution at the DPDO. DPDR level should be surfaced to DPDS-H.

c. DPDRs should assist DPDOs in making determinations concerning ability to store hazardous and toxic materials.

HENRY G. SKEEN Brigadier General, USA Commander

DISTRIBUTION: B1-B3 DD minus 33

Addendum:

In paragraphs 2 and 4 above whenever I mention hazardous and toxic material it should be understood that waste is also included, i.e., hazardous and toxic material and waste.

7 June 1982

ACTIC. AGENCY

SUSPENSE

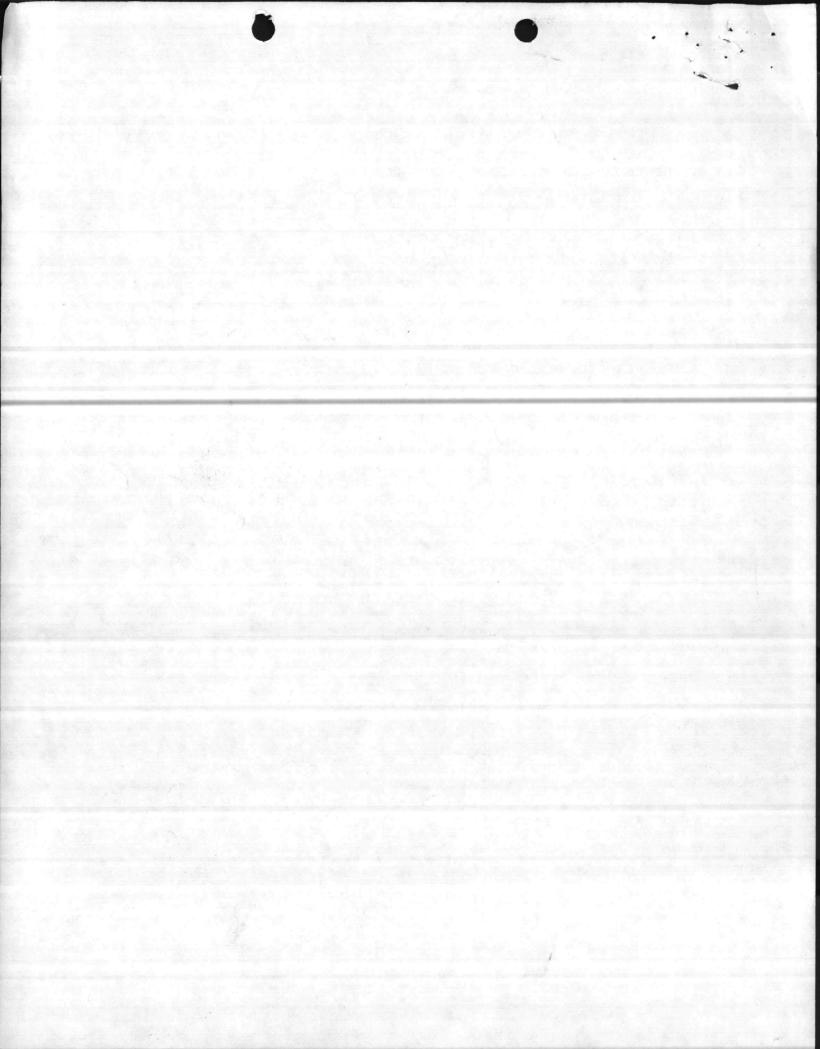
DPDS-H 1 Oct 82

DPDO DPDR

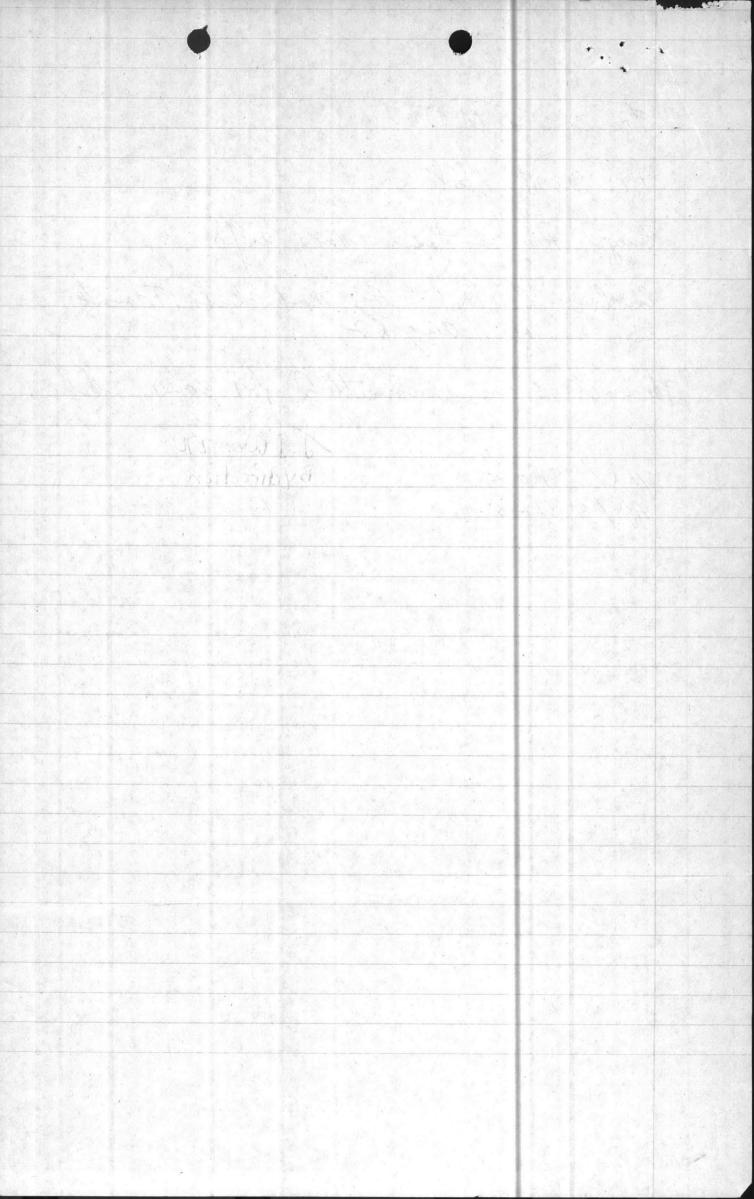
30 Jun 82 Continuous

As Required





· · · · From: BMD TO: Dest fist Suly : Hay & Tapie Mat. info Encl: () HGMC Hay Mat dufo. Transfer of 11 aug 67 The Encl & is submitted for your info. J. J. WOOTEN AC/S Far AC/S Fog Bydirection . . 





UNITED STATES MARINE CORPS 2D FORCE SERVICE SUPPORT GROUP (REIN) FLEET MARINE FORCE, ATLANTIC CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO 15/RHC/vao 6240 17 August 1982

From: Commanding Officer

To: Commanding General, Marine Corps Base, Camp Lejeune, NC (Attn: Natural Resources and Environmental Affairs Branch)

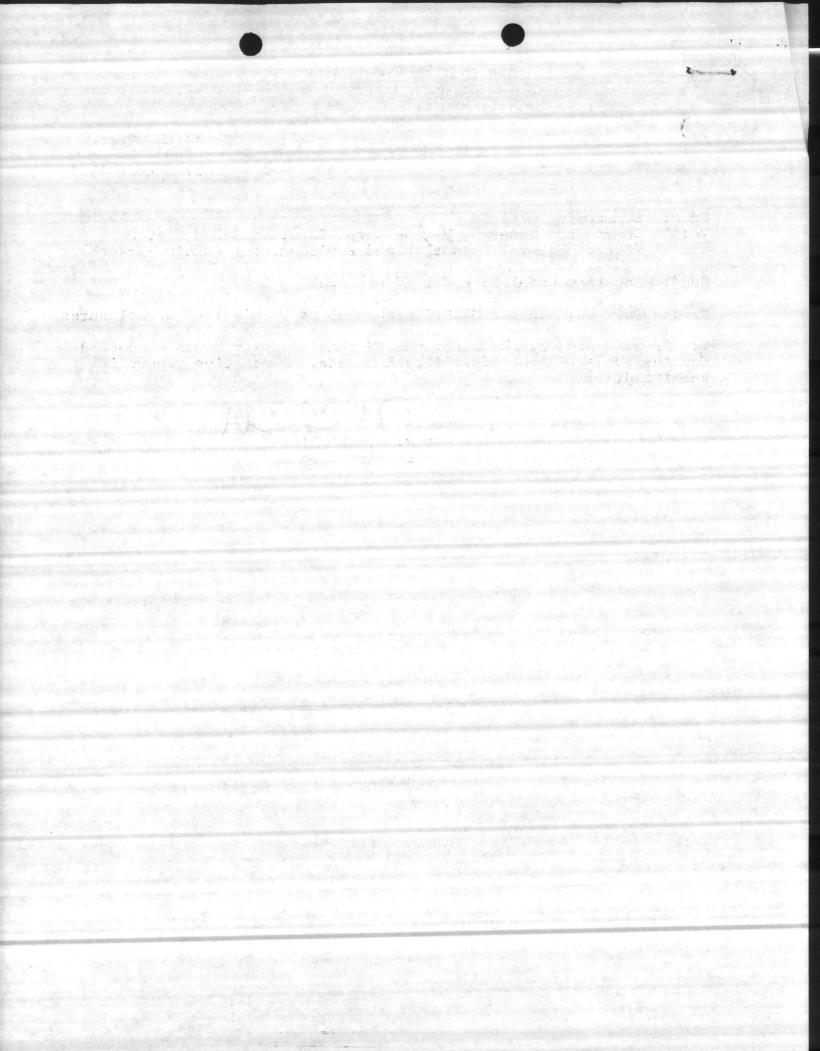
Subj: Locating Chemical Agent Identification Sets

Ref: (a) CG, MCB ltr MAIN/DDS/th 6240 of 2 July 1982 w/enclosures

1. As requested by the reference, a complete search was conducted for the subject agent identification sets. A negative report is submitted.

una R. H. CLAMPITT

R. H. CLAMPITT By direction



15/RHC/vao 6240 17 August 1982

Filom:

Commanding Officer Commanding General, Marine Corps Base, Camp Lejeune, NC (Attn: Natural Resources and Environmental Affairs Branch) To:

Subj: Locating Chemical Agent Identification Sets

(a) CG, MCB ltr MAIN/DDS/th 6240 of 2 July 1982 w/enclosures Ref:

1. As requested by the reference, a complete search was conducted for the subject agent identification sets. A negative report is submitted.

> R. H. CLAMPITT By direction



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UNITED STATES MARINE CORPS 2D FORCE SERVICE SUPPORT GROUP (REIN) FLEET MARINE FORCE, ATLANTIC CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO 15/RHC/vao 4400 13 July 1982

From: Commanding Officer To: Distribution List

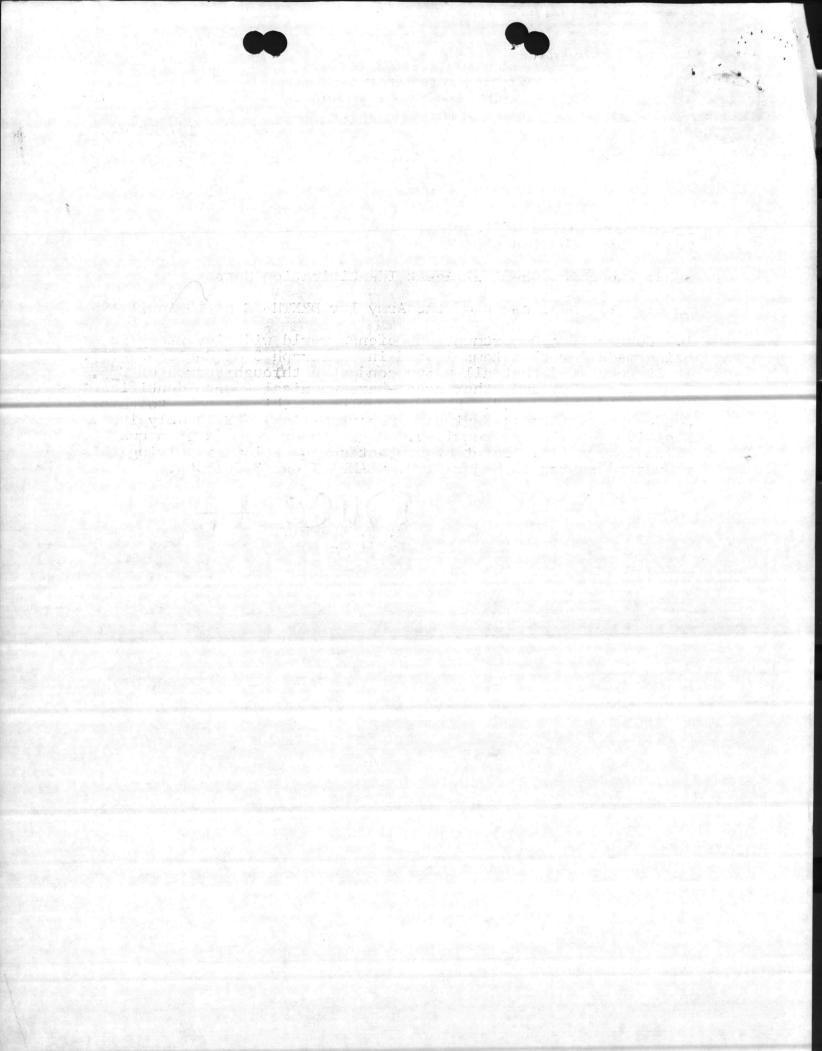
Subj: Location Chemical Agent Identification Sets

Encl: (1) Department of the Army 1tr DRXTH-SE of 15 April 1982

1. Currently a Department of Defense world wide inventory is being made for the items listed in paragraph 3 of Enclosure (1). It is requested that all units conduct a thorough search of NBC, armory, supply, and other areas where Chemical Agent Identification Sets could be located. Report results of this search, to this Headquarters (Attn: Engineer Support Office) NLT 23 July 1982. Negitive reports are required. Regret poor reproduction quality of Enclosure (1). Point of Contact for questions involving this requested search is Major R. H. CLAMPITT ext 3456/5506.

By direction

Distribution: All Battalions





UNITED STATES MARINE CORPS MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542

MAIN/DDS/th 6240

JUL 0 2 1982

From: Commanding General To: Distribution List

Subj: Locating Chemical Agent Identification Sets

Encl: (1) CO LANTNAVFACENGCOM 1tr 114:SGO:aed 6280 of 14 Jun 1982

1. The enclosure provides information regarding disposal of the subject items. It is recommended addressees conduct a search for other subject items and advise this Command of type and quantity found. Negative reply requested.

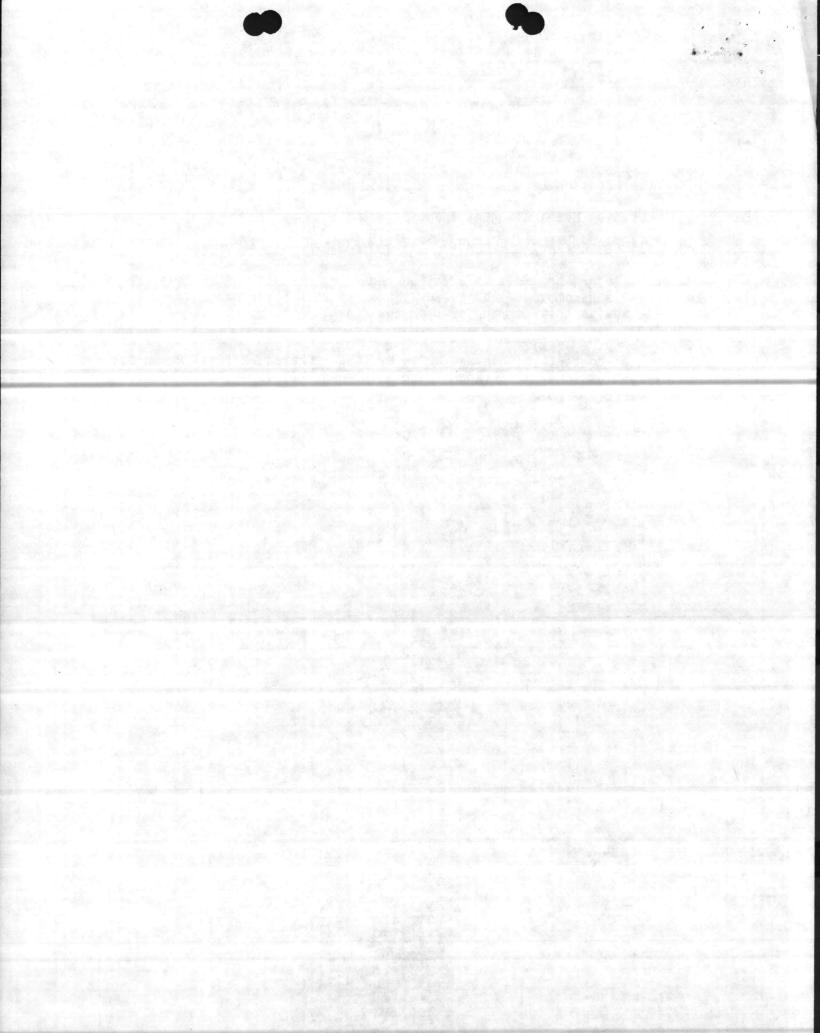
2. Point of contact in this matter is Mr. Danny Sharpe, Natural Resources and Environmental Affairs Branch, Base Maintenance Division, extensions 2083/1690.

Ata

R, F. CALTA By direction

DISTRIBUTION CG 2DMARDIV CG 2DFSSG CO MCAS(H), NR







ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA 23511

TELEPHONE NO. 444-9565 AUTOVON 690-9565 IN REPLY REFER TO: 114:SGO:aed 6280

1 4 JUN 1982.

From: Commander, Atlantic Division, Naval Facilities Engineering Command To: Distribution

Subj: Locating Chemical Agent Identification Sets (CAIS)

Encl: (1) Department of the Army 1tr DRXTH-SE of 15 April 1982

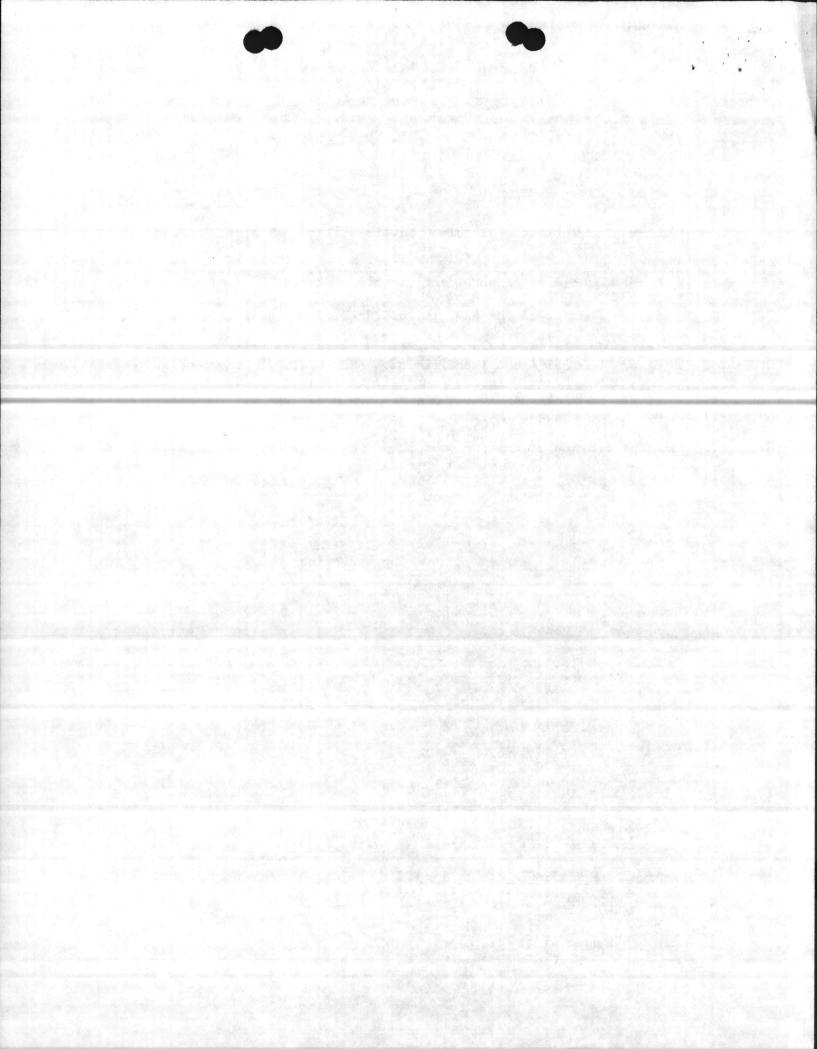
1. Enclosure (1) is forwarded to assist addressees in identifying and disposing of Chemical Agent Identification Sets (CAIS). Recommend addressees use information contained in enclosure (1) to conduct a final search for CAIS and if located advise the U.S. Army Toxic and Hazardous Materials Agency in accordance with enclosure (1).

2. Point of contact at this Command is Mr. Steve Olson, telephone (804) 444-9565, AUTOVON 690-9565 or FTS 954-9565.

By direction

Distribution: NAS OCEANA NAVPHIBASE LITTLE CREEK NAVFAC CAPE HATTERAS NAS NORFOLK PWC NORFOLK NAVSTA NORFOLK COMEODGRU TWO FLEASWTRACENLANT NORFOLK FLECOMBATRACENLANT VIRGINIA BEACH FITCLANT NORFOLK FLETRACEN NORFOLK AFXTRACTY CAMP PEARY NSC NORFOLK NSC CHEATHAM ANNEX NAVAIREWORKFAC CHERRY PT NAVAIREWORKFAC NORFOLK NAVSECGRUACT SABANA SECA NAVWPNSTA YORKTOWN NAVORDSTA LOUISVILLE

(Continued on next page)



NREA

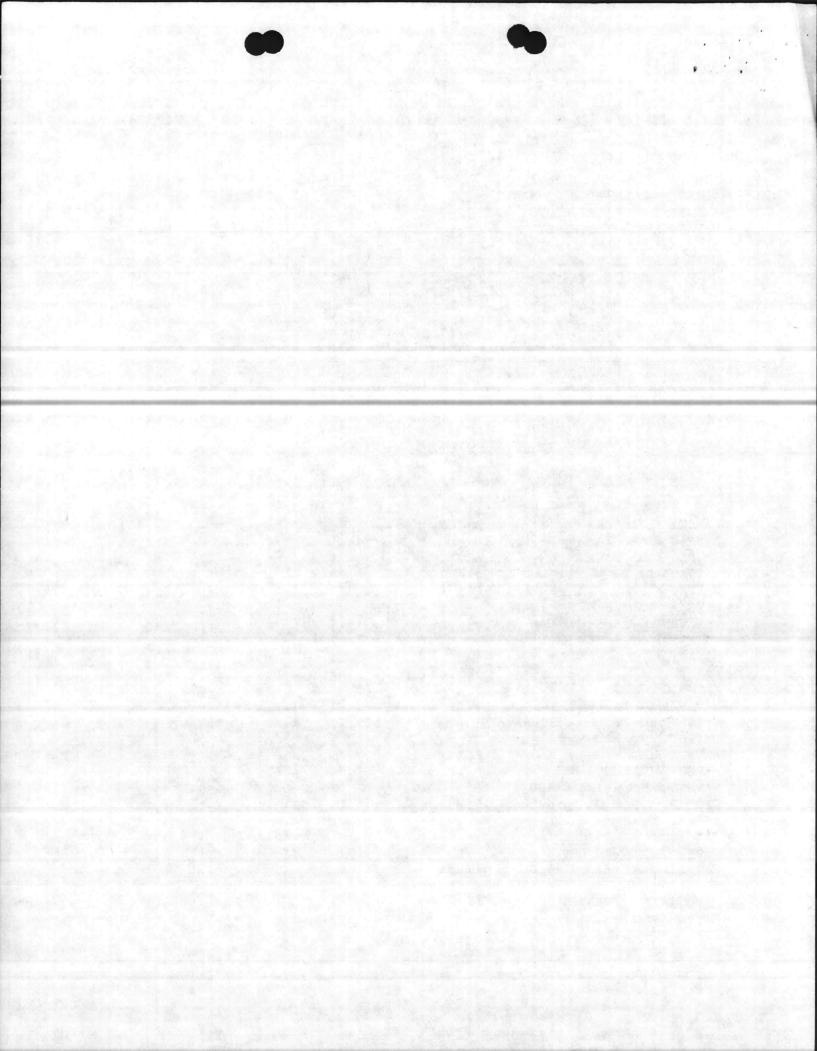
114:SGO:aed 6280

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2

Distribution (continue) NORFOLKNAVSHIPYD PORTSMOUTH NAVREGMEDCEN PORTSMOUTH NAVSECGRUACT NORTHWEST NAVCAMSLANT NORFOLK MCAS H NEW RIVER CG MCAS CHERRY PT CG MCB CAMP LEJEUNE CG FMFLANT LANTFLT HEDSUPPACT COMDT AFSC COMTACWINGSLANT COMOPTEVFOR NAVSTA ROOSEVELT ROADS NAVENVIRHLTHCEN NORFOLK NAVENPVNTMEDU COMNAVBASE NORFOLK COMCBLANT NAS BERMUDA NAF LAJES NAS GUANTANAMO NAVSTA KEFLAVIK NAVFAC ARGENTIA NAVFAC BERMUDA NAVFAC BRAWDY NAVFAC KEFLAVIK NAVSTA GUANTANAMO NAVAVNWPNSFAC ST MAWGAN NAVAVNWPNSFAC DET MACHRIHANISH NAVACTDET HOLY LOCH NAF MILDENHALL NAS SIGONELLA NAVSUPPACT NAPLES NAVSUPPACT NAPLES DET GAETA NAVSUPPO LA MADDALENA NAVSTA ROTA NAVSUPPACT SOUDA BAY NAVMEDRSCHU THREE CAIRO NAVENPVNTMEDU SEVEN NAPLES NAVSECGRUACT AUGSBURG NAVSECGRUACT EDZELL NAVSECGRUACT KEFLAVIK NAVSECGRUACT SAN VITO DET NORMANNI NAVSECGRUACT TERCEIRA ISLAND NAVCOMMSTA KEFLAVIK NAVCOMMSTA NEA MAKRI NAVCOMMSTA THURSO

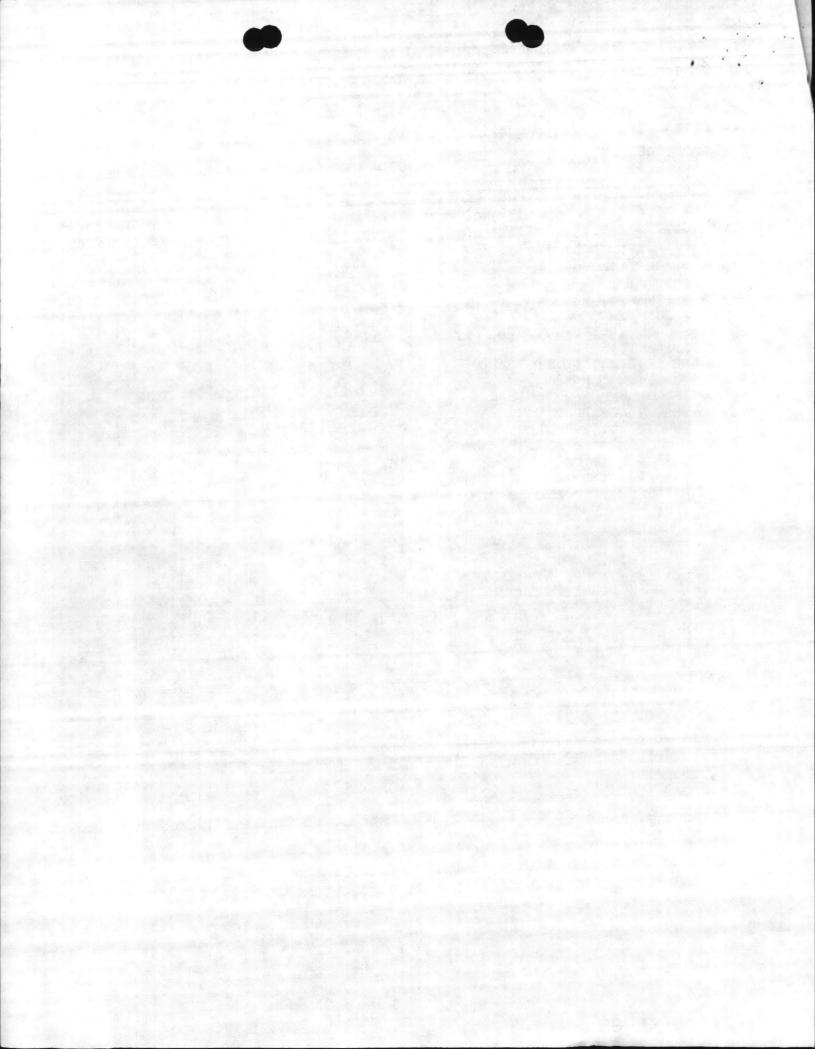
(Continued on next page)



114:SG0:aed 6280

Distribution: (continue) NAVCOMMDET SOUDA BAY ADMINSUPU BAHRAIN INACTSHIPFAC PORTSMOUTH NAVSTA PANAMA CANAL LANTFLTWPNTRAFAC ROOSEVELT ROADS NAVSECGRUACT GALETA NAVCOMMSTA BALBOA NAVMMACLANT NORFOLK NARU NORFOLK NAVMARCORESCEN WHEELING NAVRESCEN BALTIMORE NAVRESCEN SOUTH CHARLESTON NAVRESCEN CUMBERLAND NAVRESCEN HUNTINGTON NAVMARCORESCEN NORFOLK NAVMARCORESCEN NEWPORT NEWS NAVRESCEN PARKERBURG NAVMARCORESCEN RICHMOND NAVMARCORESCEN ROANOKE NAVRESCEN STAUNTON NAVRESCEN LEXINGTON NAVMARCORESCEN LOUISVILLE MARCORESTRACEN BALTIMORE MARCORESTRACEN LYNCHBURG MARCORESTRACEN RICHMOND MARCORESTRACEN ROANOKE MARCORESTRACEN SOUTH CHARLESTON

Copy to: CINCLANTFLT CINCUSNAVEUR COMNAVFACENGCOM COMNAVAIRLANT COMSUBLANT COMTRALANT COMTRALANT COMOCEANSYSLANT NAVRADSTA R SUGAR GROVE COMNAVFORCARIB COMFAIRCARBID CMC NAVENENVSA PORT HUENEME CNARES NEW ORLEANS





US ARMY TOXIC AND HAZARDOUS MATERIALS AGENCY

PEPLY TO ATTENTION OF

DRXTH-SE

15 APR 1982

ENCLOSURE [ ] ]

SUBJECT: Final Effort for Locating Chemical Agent Identification Sets (CAIS)

## SEE DISTRIBUTION

1. The US Army Toxic and Hazardous Materials Agency (USATHAMA) is currently involved in destruction of obsolete CAIS in the Department of Defense inventory. This operation is to be completed by December 1982 at the Rocky Mountain Arsenal (RMA), Commerce City, CO.

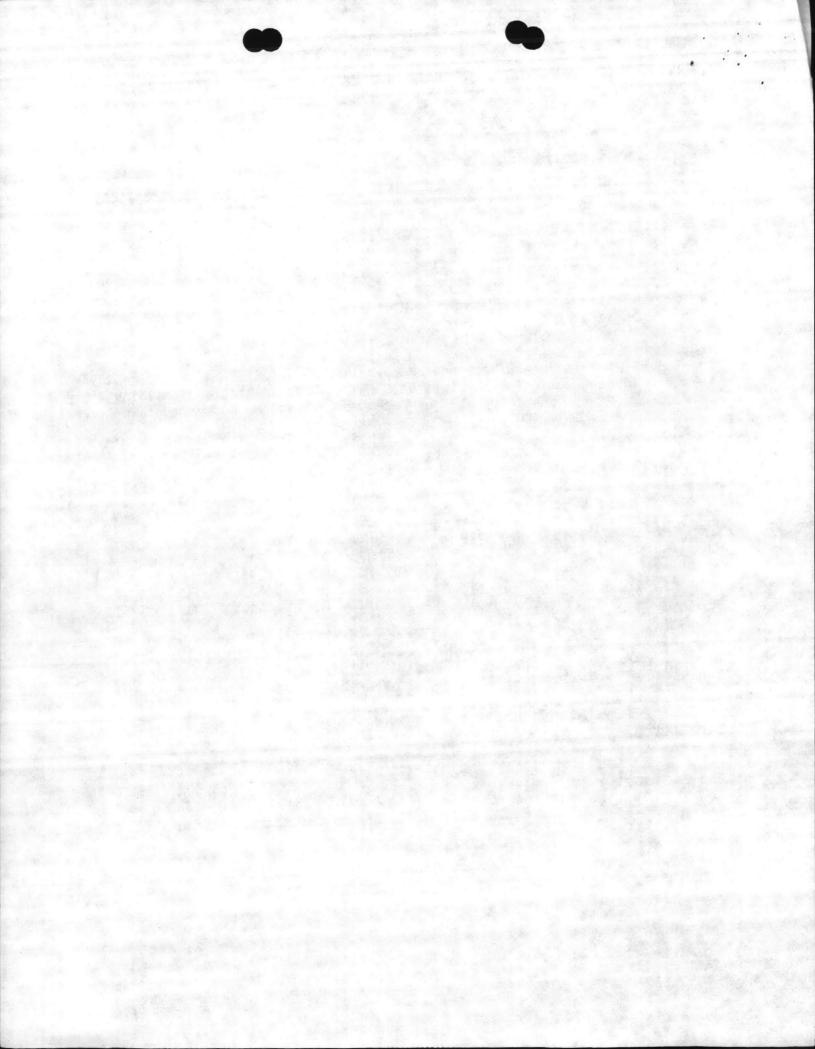
2. Although all known stocks of these sets were shipped from world-wide locations in June 1980, small numbers of sets continue to be discovered in locations such as National Guard Armory storage areas and moth-balled naval vessels. The most cost effective way to dispose of these sets in accordance with Public Laws 91-121 and 91-441 is in the RMA demilitarization facility. Since that facility is intended to be decommissioned early in 1983, at the conclusion of current operations, it is requested that one final search of your inventories be made to identify any remaining sets. If sets are found, it is requested that you advise this Agency not later than 1 August 1982 so arrangement can be made to transport them to RMA for disposal.

3. To assist your search, nomenclatures of these sets are provided as follows:

a. Training Set, Chemical Agent Identification, M72 (CAITS), FSN 1365-051-1807, DODAC Code K945 (Box 12" X 5 1/2" X 4").

b. War Gas Identification Set, Instructional, M1, FSN 1365-368-6154, DODAC Code K955 (Large Box 30 3/8" X 15 1/2" X 11 3/4").

c. Set Gas Identification, Instructional (NAVY): HN and Set Sample Replacement, FSN 1365-038-5183 and FSN 1365-608-5322 thru 1365-608-5329, DODAC Code X302 and X545 through X552 (Box 7 1/2" X 16" X 11 3/4").





## DRXTH-SE

SUBJECT: Final Effort for Locating Chemical Agent Identification Sets

d. Toxic Gas Set, HD, M1, FSN 1365-219-3574, DODAC Code K941 (Pig).

e. Toxic Gas set, HD, M1, FSN 1355-563-4146, DODAC Code K942 (Pig or 10gallon pail).

f. War Gas Identification Set, Instructional, M1, FSN 1354-025-3273 and FSN 1365-025-3283, DODAC Code K951 and K952 (Pigs).

g. War Gas Identification Set; Instructional, AN-MIA1, FSN 1365-323-7728 and FSN 1365-338-0735, DODAC Code K953 and K954 (Pigs).

4. These sets can be found packaged in wooden boxes or in cylindrical steel shipping containers referred to as pigs. The sets are shown in the inclosed photographs. Both boxes and pigs are usually painted gray, blue, Army olive drab or black. Print on them is typically in black, green or yellow and usually refers to manufacture at Edgewood Arsenal, MD.

5. Points of contact for questions involving reporting, transporting and identification of these sets are Mr. William Brankowitz, USATHAMA, AV 584-2424/2556 or LT Lucas Polakowski, Technical Escort Unit, Edgewood Area of Aberdeen Proving Ground, AV 584-4331/3516.

2

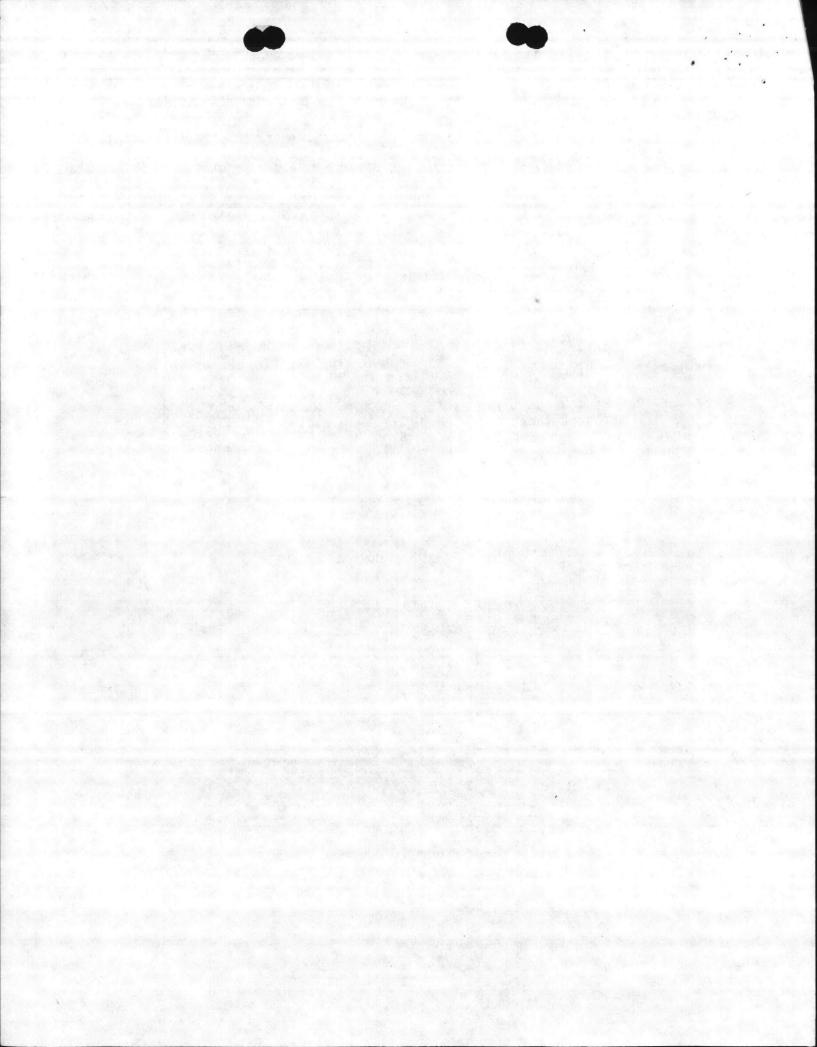
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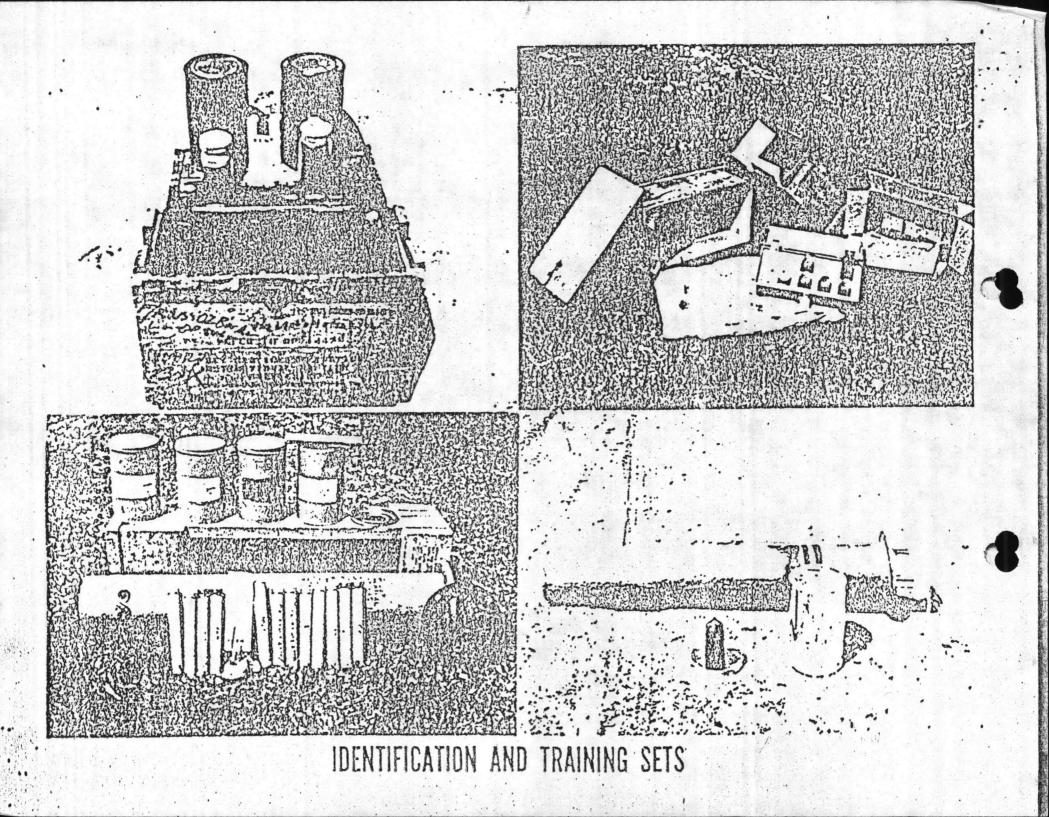
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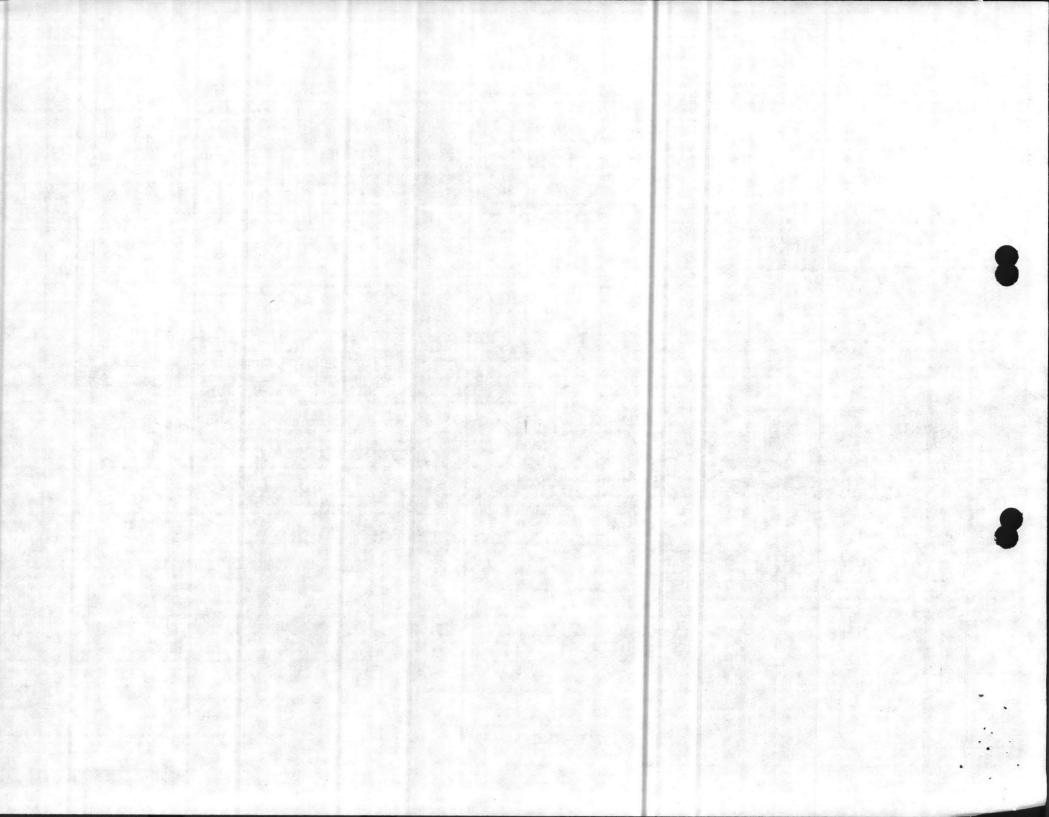
JOHN D. SPENCE Colonel, CmlC Commanding

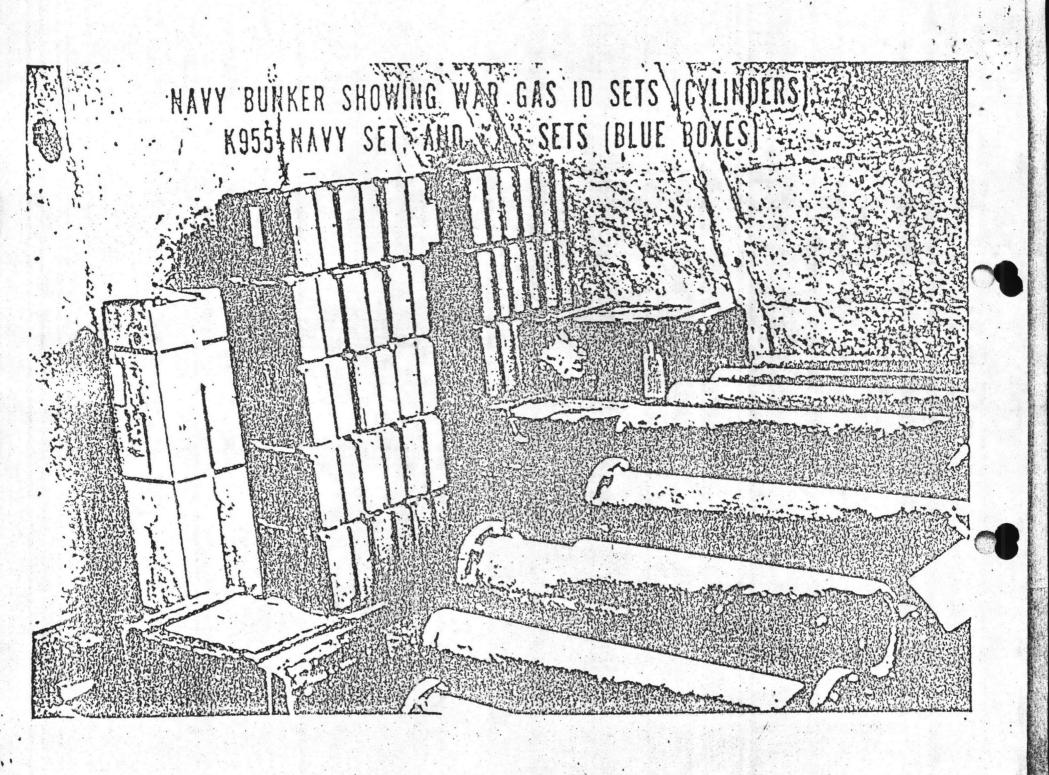
2 Inclosures

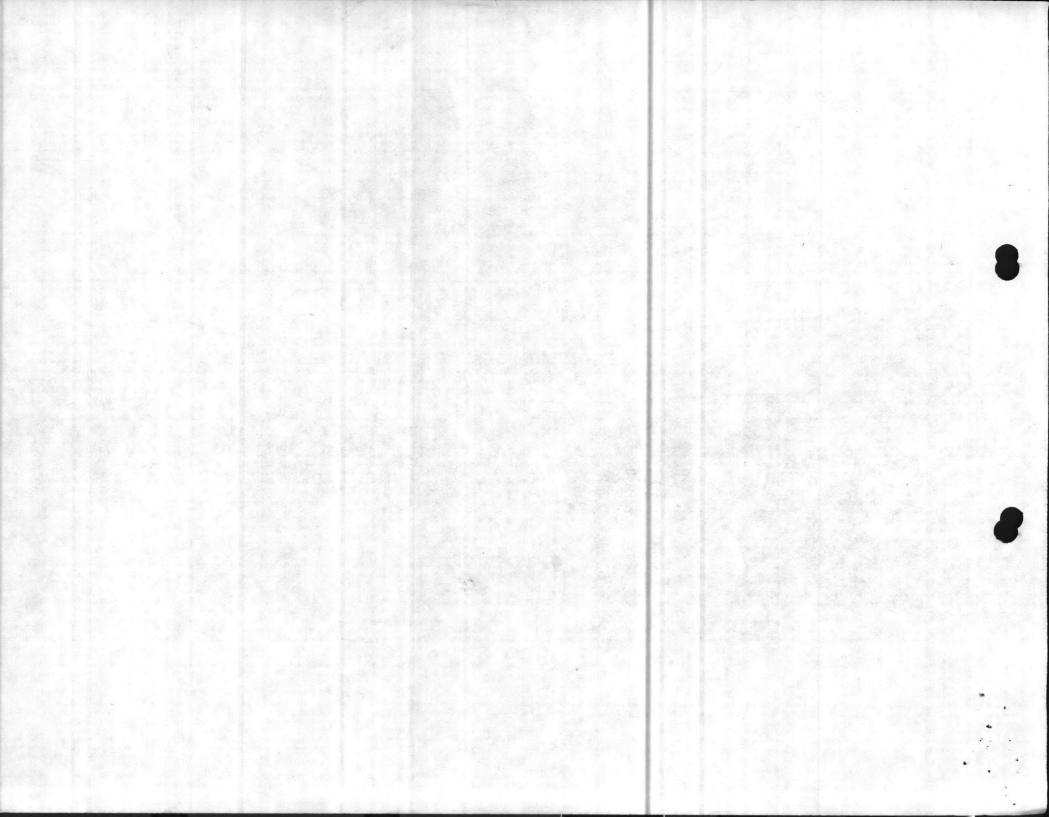
- Photo, Identification and Training Sets
   Photo, Navy Bunker
- w/Cylinders & Boxes











UNITED STATES MARINE CORPS HEADQUARTERS AND SERVICE BATTALION 2D FORCE SERVICE SUPPORT GROUP (REIN) FLEET MARINE FORCE, ATLANTIC CAMP LEJEUNE, NORTH CAROLINA 28542

3/ARD/ard 3400 5 Aug 1982

FROM: COMMANDING OFFICER

TO: COMMANDING OFFICER, 2D FORCE SERVICE SUPPORT GROUP (REIN) (ENGRSUPO)

SUBJ: LOCATION CHEMICAL AGENT IDENTIFICATION SETS

REF: (A) CO, 2DFSSG LTR 15/RHC/VAC 4400 DTD 13 JULY 1982

1. IN RESPONSE TO THE REFERENCE, A NEGATIVE RESPONSE IS HEREBY SUBMITTED.

GR

G. R. THORPE By direction

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LOW: Стыблі ING SEEIGER Gr. Domannistic Filder, So оноє Зекутоє заррокт плоце (Lern) р Стіралісь)

CODE LOOATION CLEHICAL REENTIFICATION GETS FEET (A) - C - LTR 1/AND/AAC - C - PTR 1/2 CUL: 1/2 1. IN REPORT TO THE HERE A FERTIVE CERONE IS HERE Y UNITTED.

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UNITED STATES MARINE CORPS

8th Communication Battalion 2D Force Service Support Group (REIN) Fleet Marine Force, Atlantic Camp Lejeune, North Carolina 28542

KJK/dee 4400 23 Jul 1982

From: Commanding Officer

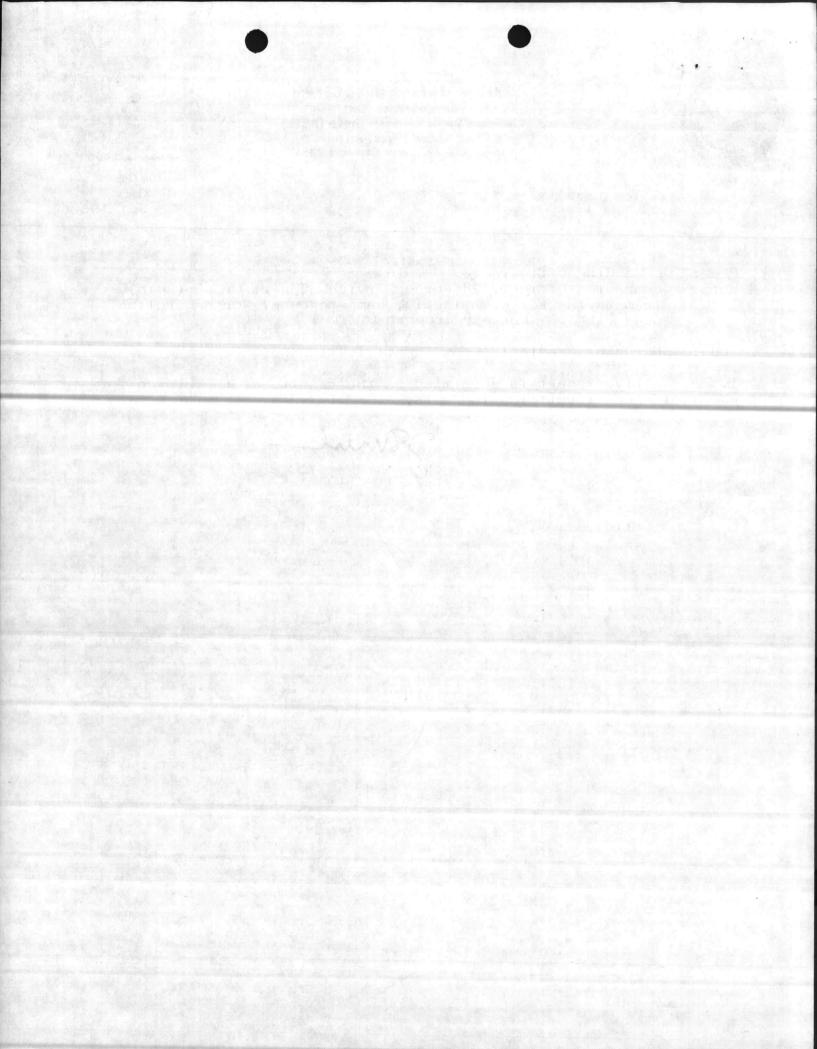
To: Commanding Officer, 2d Force Service Support Group (Rein), Fleet Marine Force, Atlantic, Camp Lejeune, North Carolina 28542 (Attn: Engineer Support Office)

Subj: Search of Chemical Agent Identification Sets

1. A negative report is submitted as the results of the search for chemical agent identification sets.

direction

Copy to: S-1 File S-3





UNITED STATES MARINE CORPS 2d SUPPLY BATTALION 2d FORCE SERVICE SUPPORT GROUP (REIN) FLEET MARINE FORCE, ATLANTIC CAMP LEJEUNE, NORTH CAROLINA 28542

4/LS/rth 4400 27 July 1982

From: Commanding Officer To: Commanding Officer, 2d Force Service Support Group {REIN} {Attn: Engr Spt Officer, MAJ R. H. CLAMPITT}

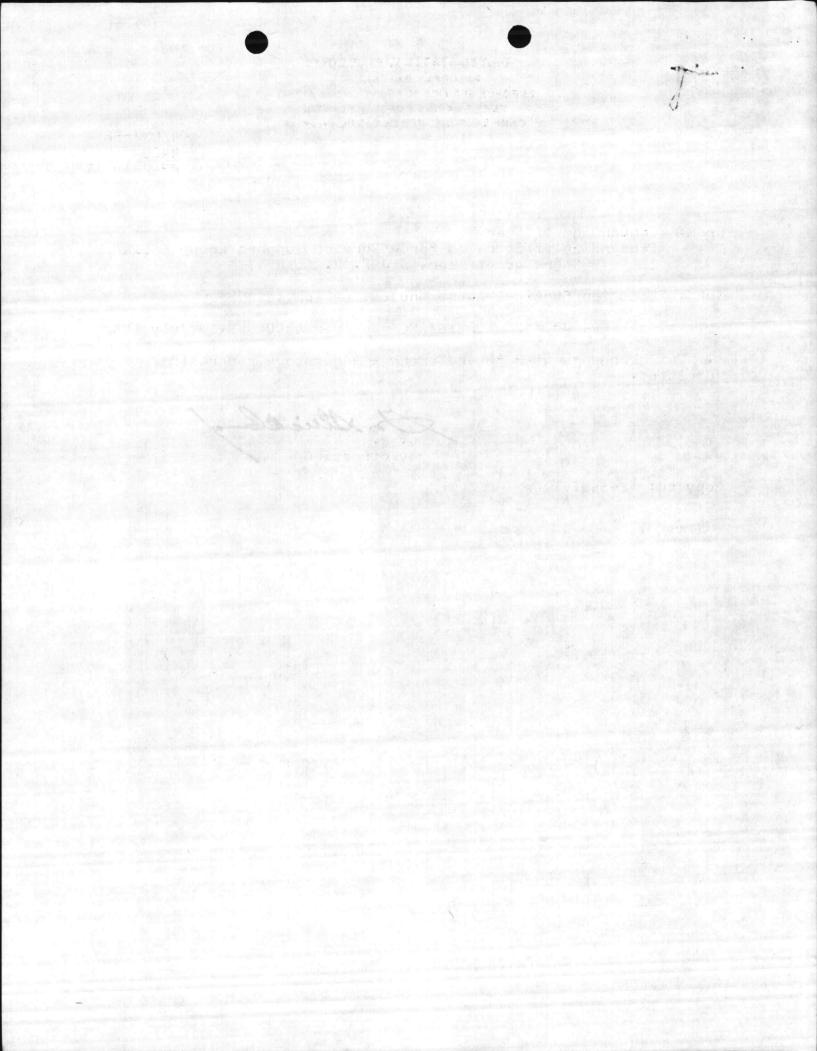
Subj: Location Chemical Agent Identification sets

Ref: {a} COn 2d FSSG 1tr 15/RHC/vao over 4400 dtd 13 July 1982

l. In accordance with the reference, a negative report is submitted.

G. N. STRICKLAND By direction

Copy to: S-3 Officer



UNITED STATES MARINE CORPS 2d Force Reconnaissance Company 2d Force Service Support Group (Rein) Fleet Marine Force, Atlantic Camp Lejeune, North Carolina 28542

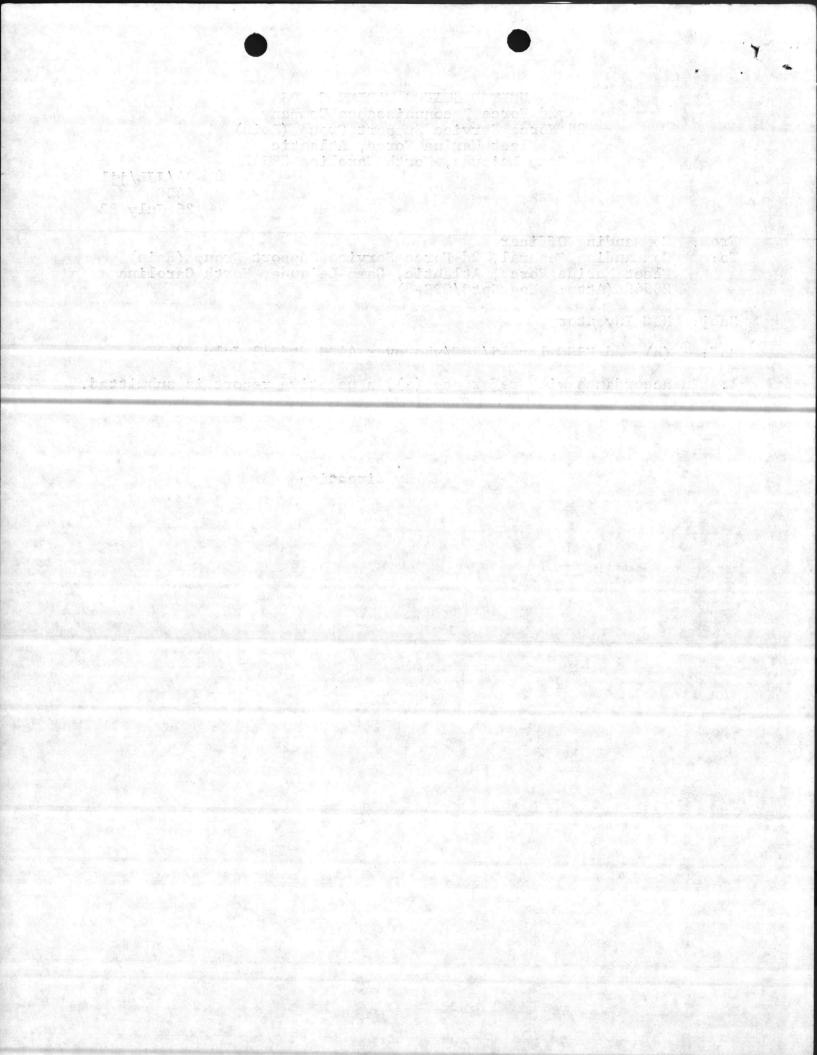
04/JJL/jj1 4400 26 July 82

From: Commanding Officer To: Commanding General, 2d Force Service Support Group (Rein) Fleet Marine Force, Atlantic, Camp Lejeune, North Carolina 28542 (Attn: EngrSpt0/OPS-8)

- Subj: NBC Inventory
- Ref: (a) 2d FSSG 1tr 15/RHC/vho over 4400 dtd 13 July 82
- 1. In accordance with reference (a), a negative report is submitted.

Carlan

C. GRABOWSKY By direction



UNITED STATES MARINE COSPS 2d Radio Battalion Fleet Marine Force, Atlantic Camp Lejeune, North Carolina 28542

4/FBH/flh 4400 23 July 1982

From: Commanding Officer To: Commanding Officer, 2d Force Service Support Group (OPS-8)

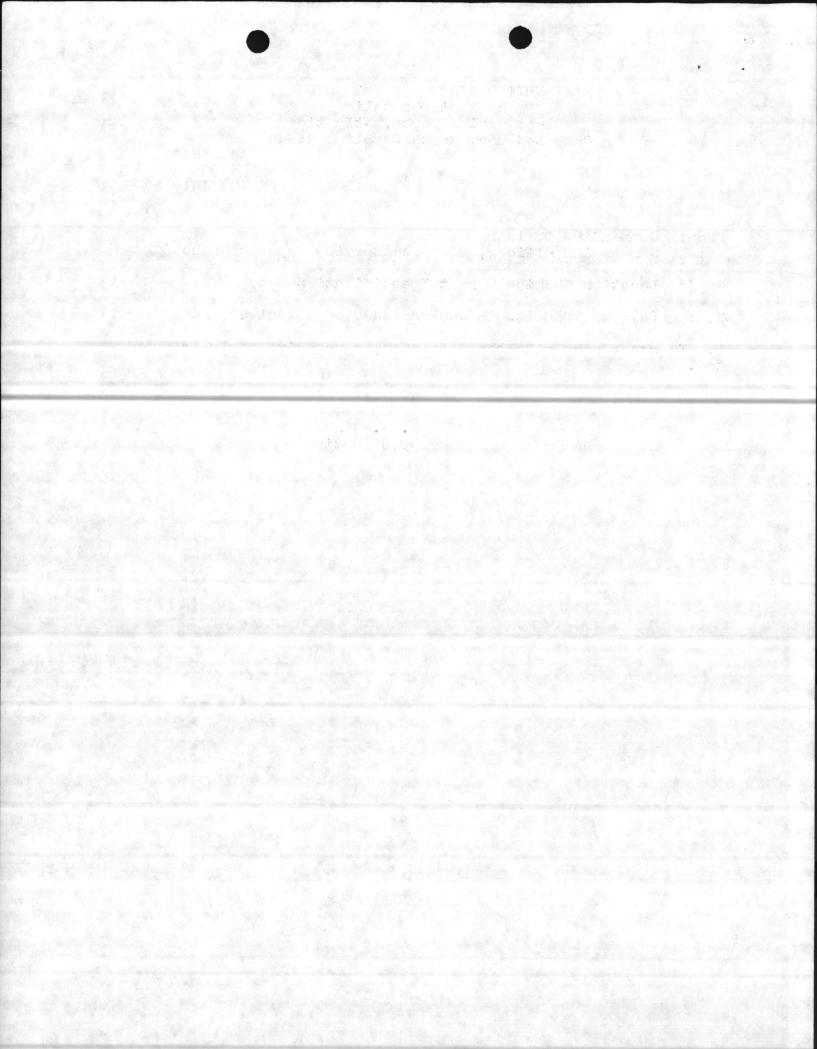
Subj: Location Chemical Agent Identification Sets

Ref: (a) 2d FSSG ltr 15/RHC/vao 4400 of 13 Jul 82

1. In accordnace with the reference, a negative reply is submitted.

F. B. HARRIS

By direction



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UNITED STATES MARINE CORPS 8th Engineer Support Battalion 2d Force Service Support Group (Rein) Fleet Marine Force, Atlantic Camp Lejeune, North Carolina 28542

03/RTW/res 4400 20 Jul 1982

From: Commanding Officer

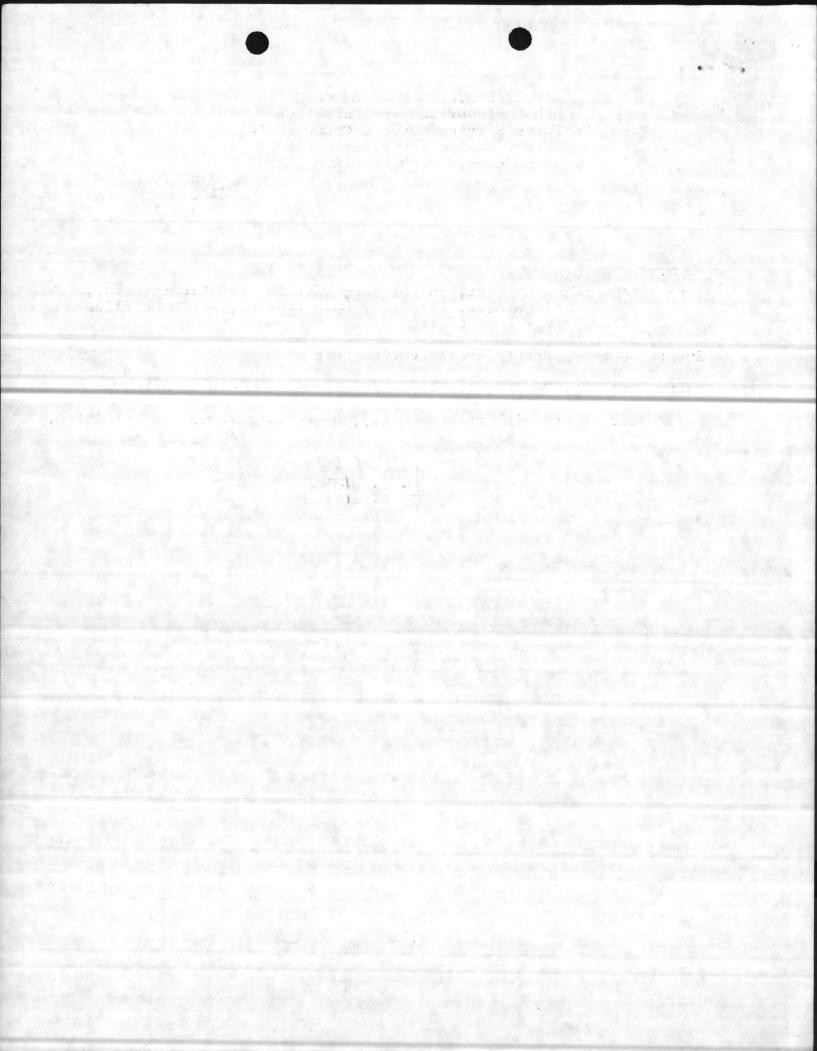
To: Commanding Officer, 2d Force Service Support Group (Rein), Fleet Marine Force, Atlantic, Camp Lejeune, North Carolina 28542 (Engr Supt Office)

Subj: Chemical Agent Identification Sets

Ref: (a) CG, 2d FSSG 1tr 15/RHC/vao over 4400 dtd 13 Jul 1982

1. In accordance with reference (a), a negative report is submitted.

DE Morman D. E. NORMAN By direction





UNITED STATES MARINE CORPS 2d Landing Support Battalion 2d Force Service Support Group (REIN) Fleet Marine Force, Atlantic Camp Lejeune, North Carolina 28542

3/TJG/crw 4400 22 July 1982

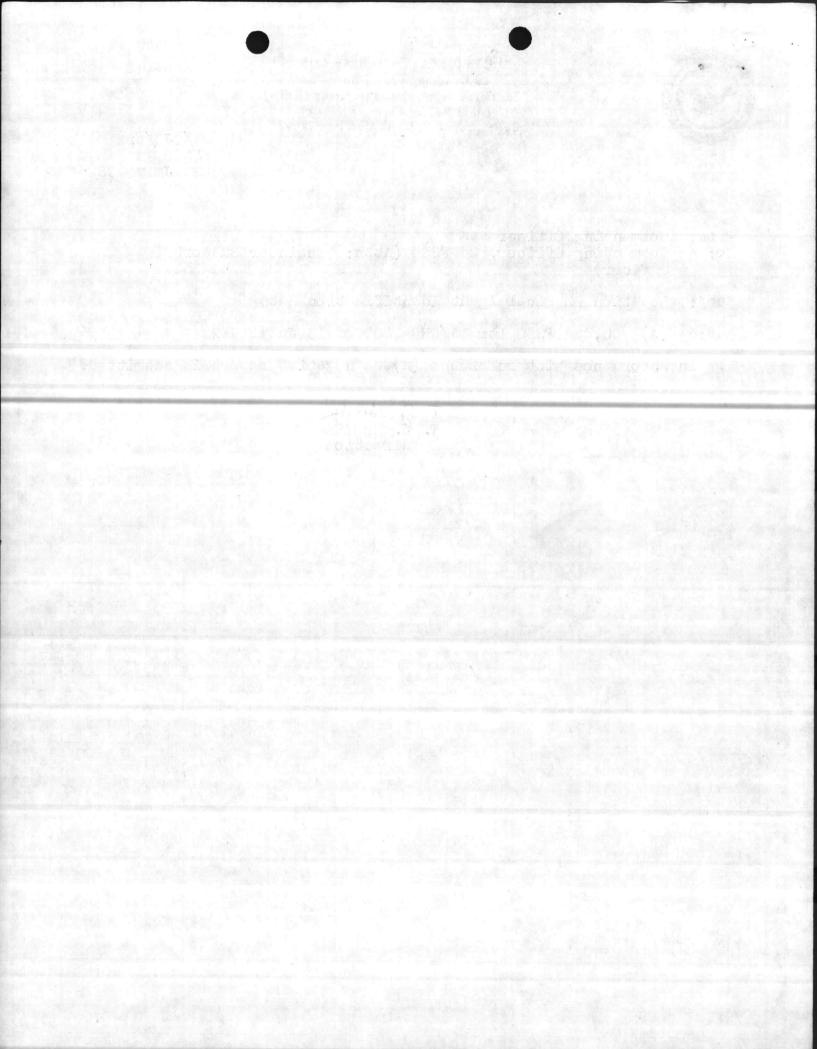
From: Commanding Officer To: Commanding Officer, 2d FSSG (Attn: Engineer Support Officer)

Subj: Location Chemical Agent Identification Sets

Ref: (a) CO, 2d FSSG ltr 15/RHC 4400 of 13 July 1982

1. In accordance with reference (a), a negative report is submitted.

T. J. GRESKA By direction





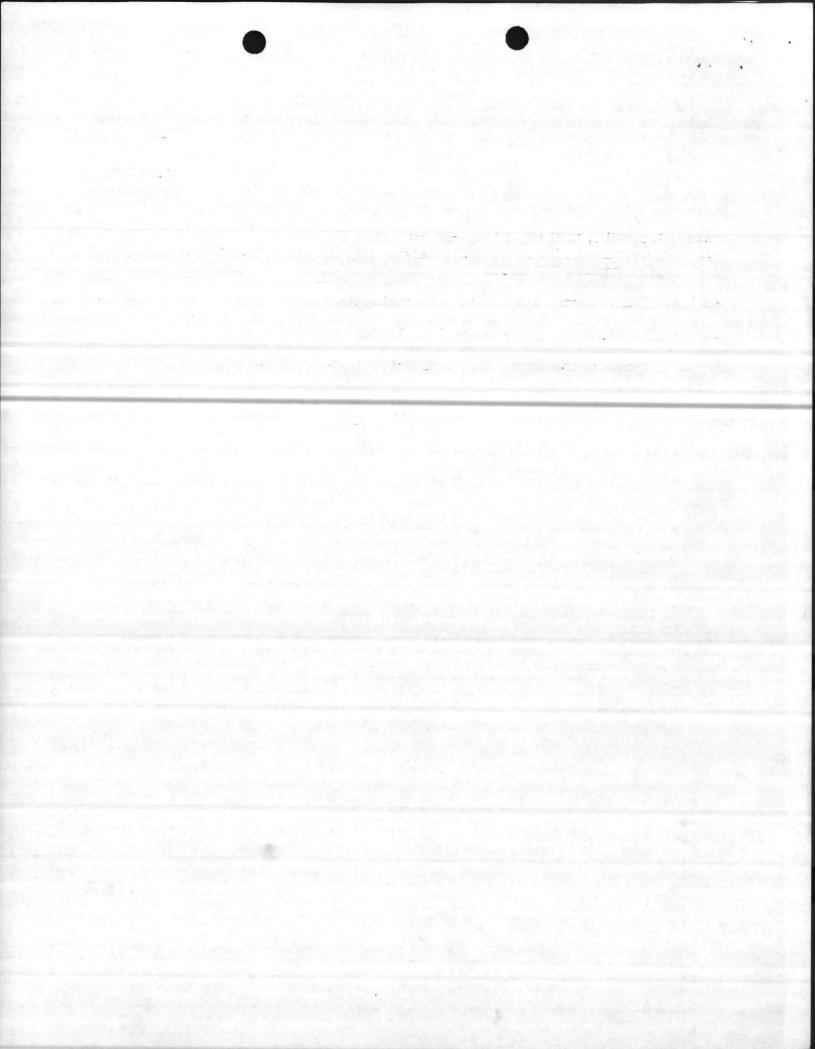
UNITED STATES MARINE CORPS 2d DENTAL BATTALION 2d FORCE SERVICE SUPPORT GROUP (REIN) FLEET MARINE FORCE, ATLANTIC CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO 40:MIG:srp 4400 16 July 1982

- From: Commanding Officer, 2d Dental Battalion To: Commanding Officer, 2d Force Service Support Group (REIN), FMFLant, Camp Lejeune, NC 28542
- Subj: Location Chemical Agent Identification Sets
- Ref: (a) Your ltr 15/RHC/vao 4400 of 13 July 1982
- 1. In response to reference (a), a negative report is submitted.

MT Grabbe

M. T. GRABBE By direction



UNITED STATES MARINE CORPS 2d Air and Naval Gunfire Liaison Company Fleet Marine Force, Atlantic Camp Lejeune, North Carolina 28542

3/PJG/kbp 4400 11 Aug 1982

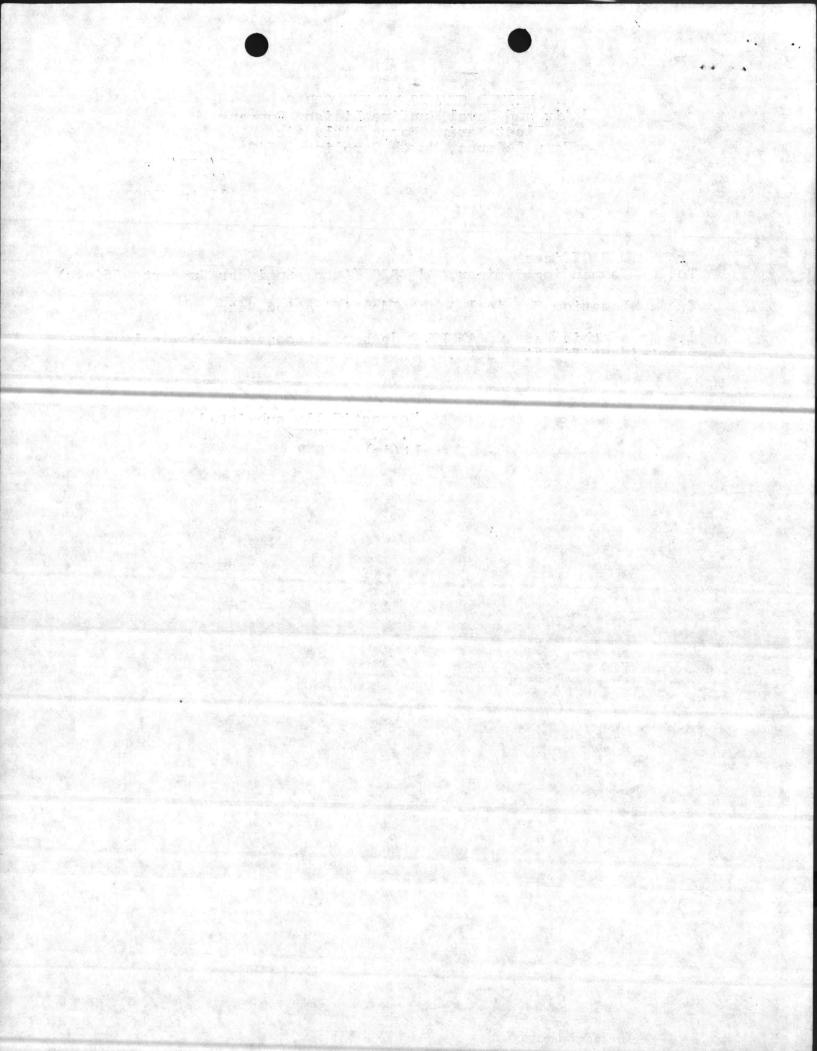
From: NBC Officer

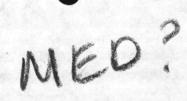
To: Commanding Officer, 2d FSSG (Attn: Engineer Support Officer)

Subj: Location Chemical Agent Identification Sets

1. As of this date 2d ANGLICO does not posess any chemical agent identification sets.

J. GRIFFIN P. Lt(jg) USNR

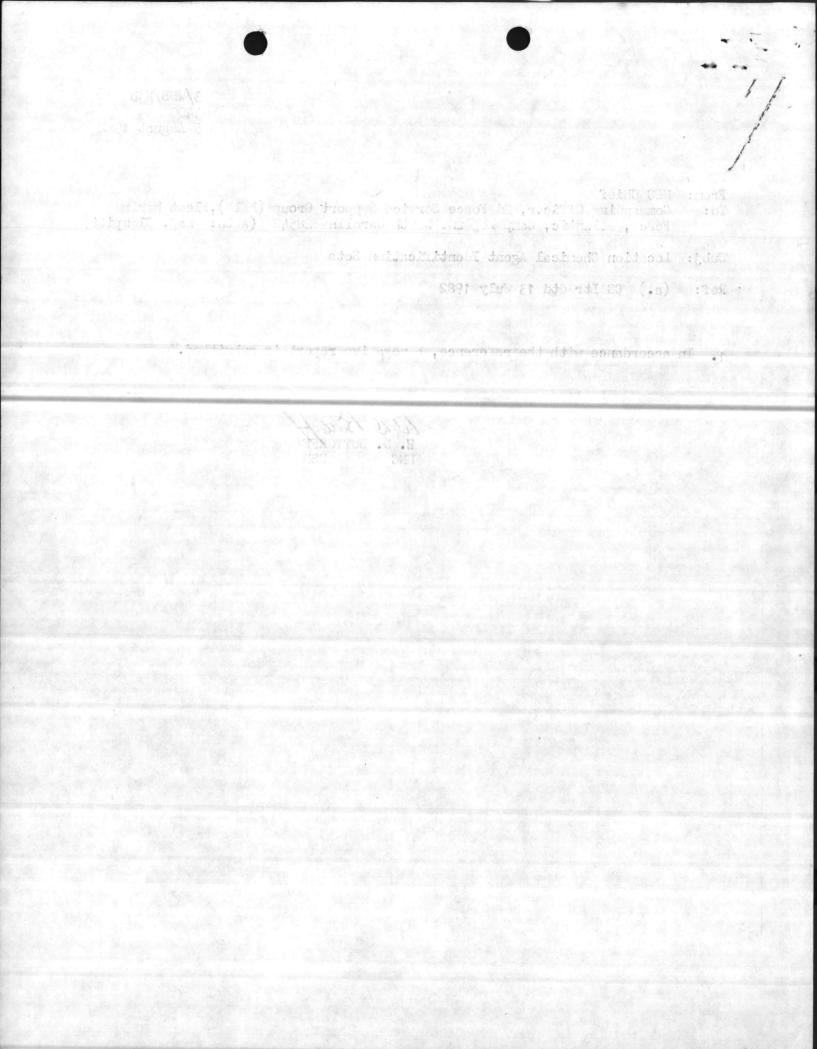




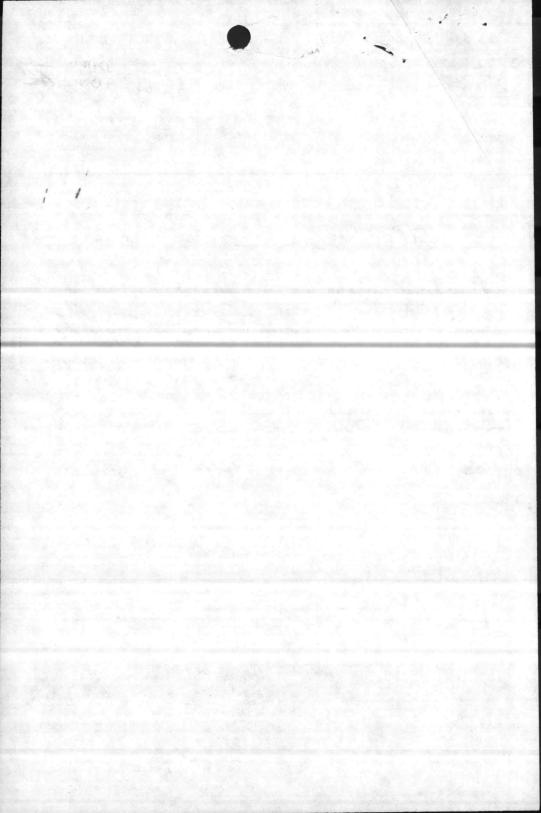
3/WDB/kjb 4400 5 August 1982

- From: NBC Chief To: Commanding Officer, 2d Force Service Support Group (REIN), Fleet Marine Force, Atlantic, Camp Lejeune North Carolina 28542 (Attn: Maj. Clampitt)
- Subj: Location Chemical Agent Identification Sets
- Ref: (a.) CG Ltr dtd 13 July 1982
- 1. In accordance with the reference, a negative report is submitted.

W.12. 1. N. D. BUTTORF HMC USN



NATURAL RESOURCES AND ENVIREMENTAL AFFAIRS BRANCH BASE MAINTENANCE DIVISION Bmo -MARINE CORPS BASE ABMO BK CAMP LEJEUNE, NORTH CAROLINA 28542 8-16-82 Date From: Director To: BMO Subj: 1. attached was received from Paul Hubbell this date. I recommend we send a copy to AC/SFac and AC/S Logistics) Greneral Skeen says what WREA has been saying for sometime. Julion When when C Jone th





UNITED STATES MARINE CORPS MARINE CORPS AIR STATION (HELICOPTER) NEW RIVER, JACKSONVILLE NORTH CAROLINA 28545

> 222/MW/mc 6280 12 Aug 1982

BNO

From: Commanding Officer To: Commanding General (AC/S, Facilities), Marine Corps Base, Camp Lejeune, North Carolina 28542

Subj: Reporting of Hazardous Material Spills

Ref: (a) BO 11090,1B

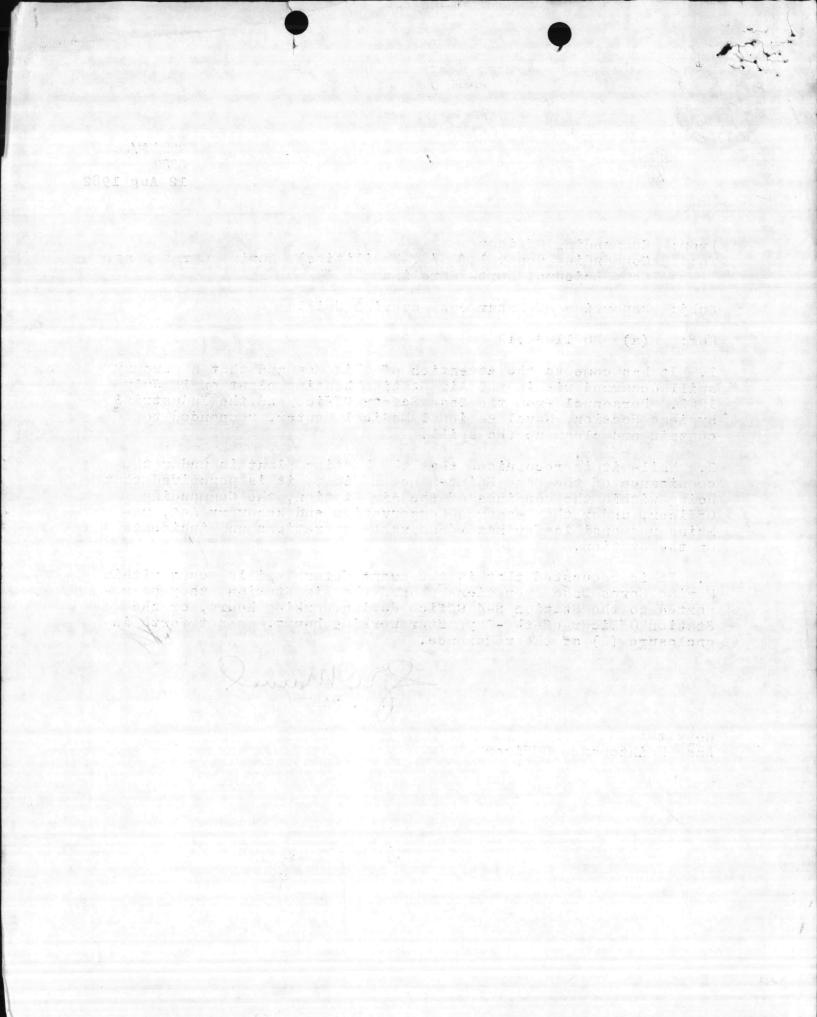
1. It has come to the attention of this Command that a mercury spill occurred within the Air Station heating plant on 19 July 1982. Personnel from the Base Safety Office and the Industrial Hygiene Section, Naval Regional Medical Center, responded to contain and clean up the spill.

2. While it is recognized that the heating plant is under the cognizance of the Base Maintenance Officer, it is perceived that being within the confines of the Air Station, the Commanding Officer, under the Resource Conservation and Recovery Act, remains responsible for hazardous waste operations and incidents on the Station.

3. It is requested that in the event future spills occur within Marine Corps Base operations aboard the Air Station, they be reported to the Station S-4 Office during working hours, or the Station Officer-of-the-Day after working hours, as set forth in enclosure (2) of the reference.

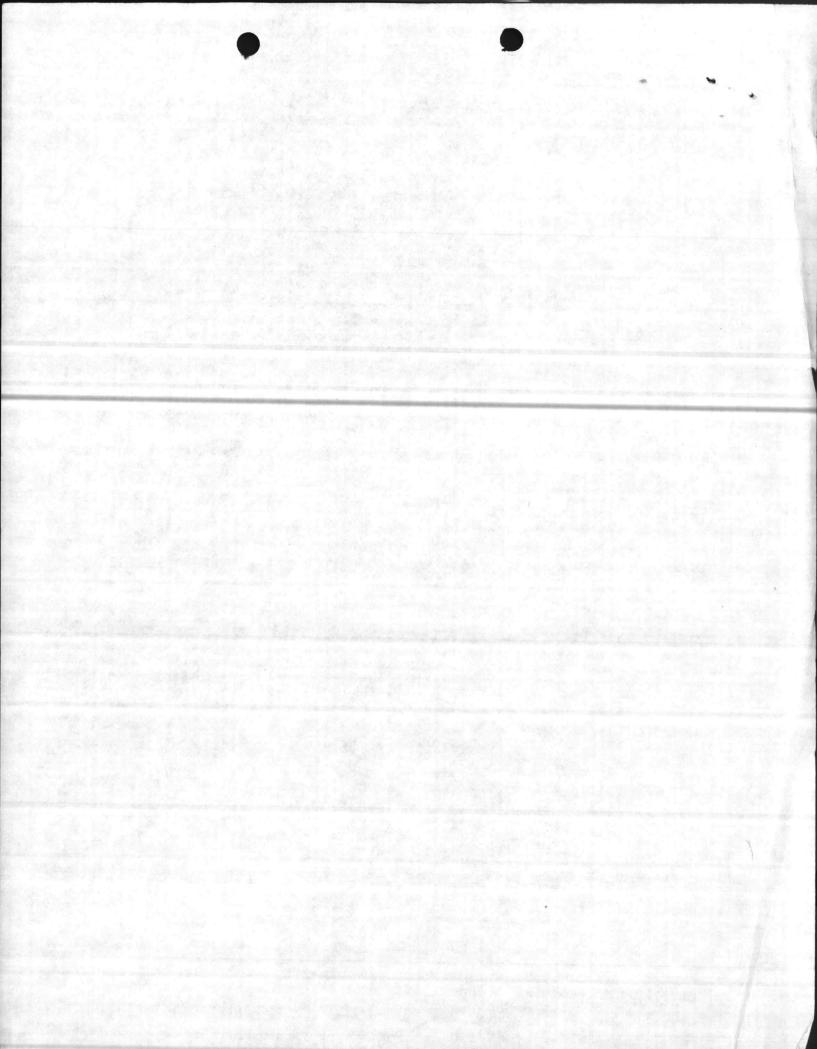
Internal break down - util didn't notify Fire Dypt

Copy to: Base Maintenance Officer



Hay Wasth Wornay 3218/144 (REV. 6.70) S/N 0107-L F-778-8099 DEPARTMENT OF THE NAVY Memorandum 3 DATE: 11 Aug 82 FROM: Paul Hubbell TO: Mr. Julian Wooten, Director Natural Resources SUBJ: Information Transfer (1) DLA Commander's Guidance Statement # 8 of 7Jun 82 Encl: (2) Scrube Dubster product literature 1. Enclosure (1) indicates a definite commetment by DPDS to have its Regions and Defense Property Disposal Offices " step forward and fully accept [their] sespons, b, 1, ty in the disposal of hayandows and toxic materials". This document may be bareficial to you in dealing with reluctant DPDO'S. 2. As a point of interest, and possible future concern, I recently found out that the DoD philosophy of delaying the designation of an item as a higardons wrote vice a hayardous material (until all avenues for sale or reuse are explored - thus delaging the 90 day storage clock) is now being challenged by certain state (notably TX and CA) 3. you may wish to pass enclosure (2) to the maintenance officer for his information/use.

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DEFENSE LOGISTICS AGENCY DEFENSE PROPERTY DISPOSAL SERVICE FEDERAL CENTER BATTLE CREEK, MICHIGAN 49016

REFER TO DPDS-D

7 June 1982

ACTION

Fncl

SUSPENSE

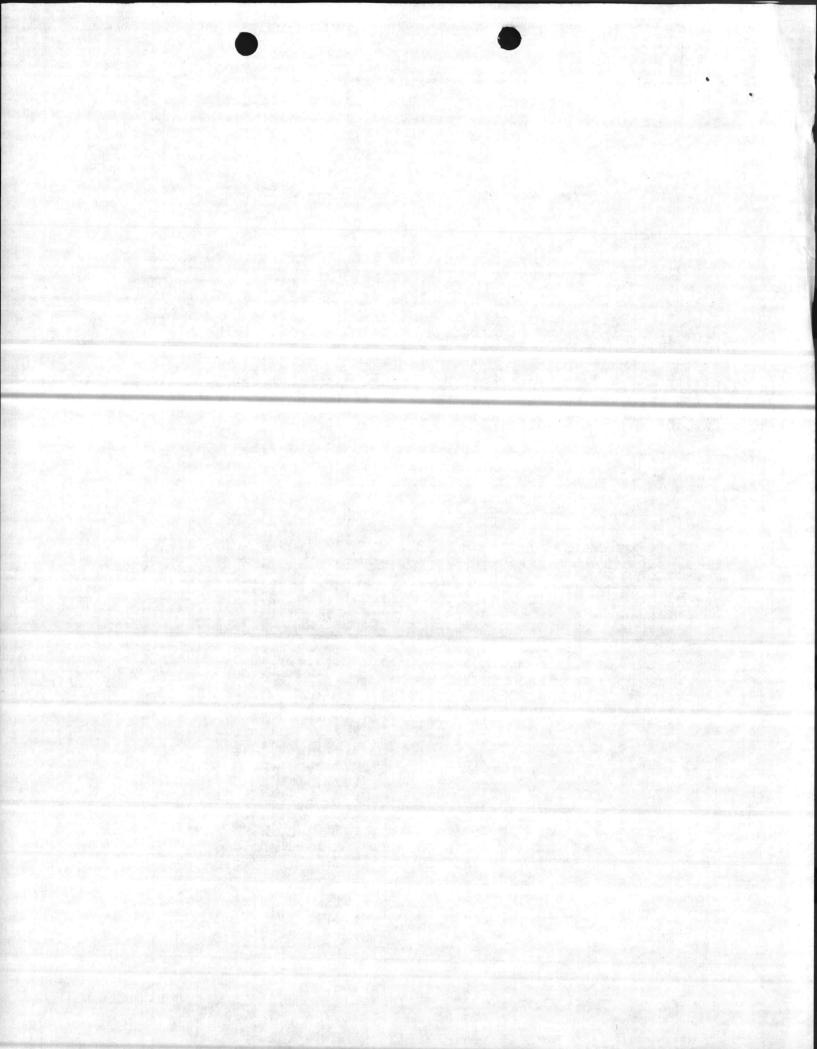
### COMMANDER'S GUIDANCE STATEMENT (CGS) NO. 8

SUBJECT: Custody of Hazardous and Toxic Material

1. For some time now this Command has been charged with the mission of disposing of hazardous and toxic materials and waste. We have worked diligently to determine our responsibility and to help develop the DoD policy. As I am sure you are aware, the DoD policy concerning who will maintain custody of hazardous and toxic material and waste is clear. In a nutshell that policy is that if the DPDO has conforming storage the DPDO will accept accountability and custody. If the DPDO does not have conforming storage and the generator does; the DPDO accepts accountability and the generator maintains custody. If neither the generator nor the DPDO have conforming storage then whoever has the most nearly conforming storage maintains custody. If agreement cannot be reached as to who has the most nearly conforming storage then the decision will be raised through command channels to DoD for a decision.

2. Having said all of that my concern now is that we may not have made an honest effort to accept custody of hazardous and toxic material when we do in fact have the necessary conforming storage or when our storage is as nearly conforming as the generator. This is becoming a problem between DPDS and the services; as a result, we have agreed that we will develop a check sheet for use at the installation level to determine who has the most nearly conforming storage. It is invisioned that this check sheet will be executed by the installation commander. I support this process because the installation commander is the one responsible for storage of hazardous and toxic materials by all tenants to include the DPDO.

5. Prior to the formal execution of this check sheet which is a few months away, I want each DPDO to reevaluate with his host those items which can be stored safely and without danger of spill in the DPDO area. In those cases where an item is designated by Table 5-5 of DoD Regulation 4145.19-R-1 to be stored in a general purpose warehouse I expect that we will take physical custody unless we do not have a general purpose warehouse.



## DPDS-D PAGE 2 SUBJECT: Custody of Hazardous and Toxic Material

4. Bottom line is that the time has come for us to step forward and fully accept our responsibility in the disposal of hazardous and toxic materials. Acceptance of physical custody when feasible and possible is critical to identification of the waste stream and help us to learn to properly store this material. One final thought, I am concerned that in some cases when we have accountability but not custody that we lapse into the feeling "out of sight, out of mind" and since the property is not within the DPDO we do not move as quickly as we should to dispose of the property. We need to be sure that is not the case.

5. Directed actions:

1:

a. Development of check sheet.

b. DPDOs should make contact with their host to insure that the attitude of cooperation, not confrontation exists at the PDO level. Problems beyond resolution at the DPDO, DPDR level should be surfaced to DPDS-H.

c. DPDRs should assist DPDOs in making determinations concerning ability to store hazardous and toxic materials.

T G. SKEEN

Brigadier General, USA Commander 7 June 1982

ACTIC.

AGENCY

DPDS-H

DPDD

DPDR

DPDR

SUSPENSE

1 Oct 82

30 Jun 82

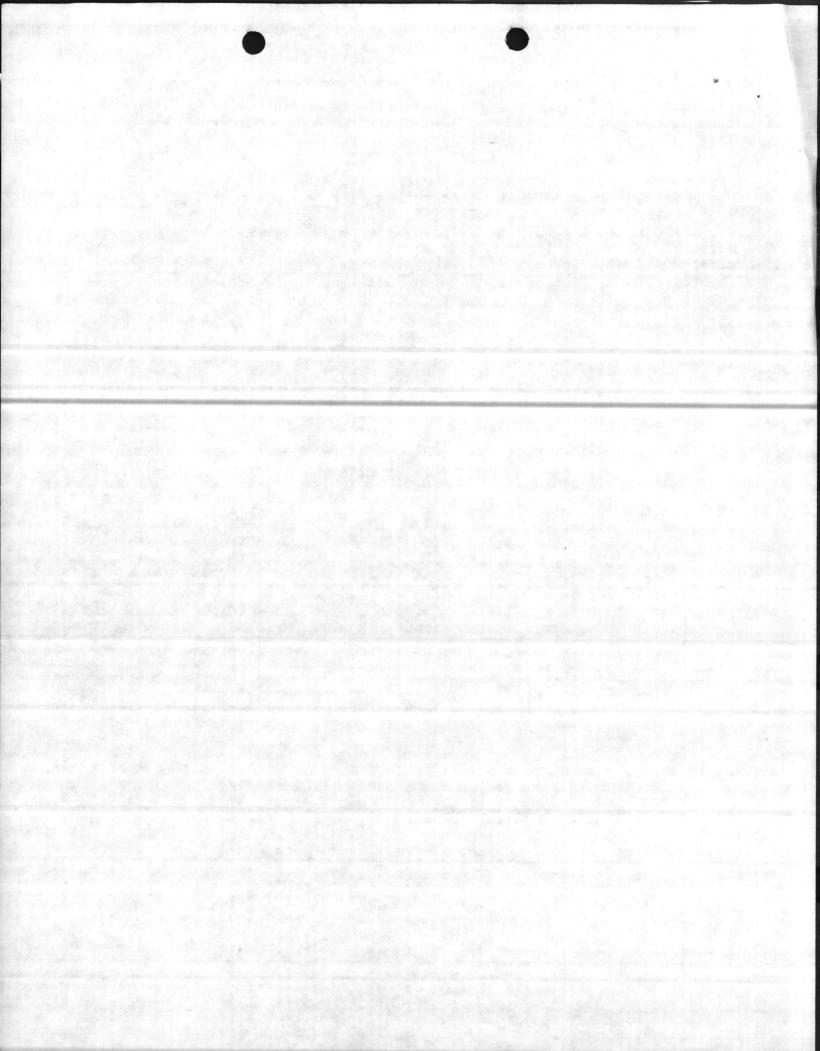
Continuous

As Required

DISTRIBUTION: B1-B3 DD minus 33

Addendum:

In paragraphs 2 and 4 above whenever I mention hazardous and toxic material it should be understood that waste is also included, i.e., hazardous and toxic material and waste.



J., BANKS HUDSON, INC. "B H I"

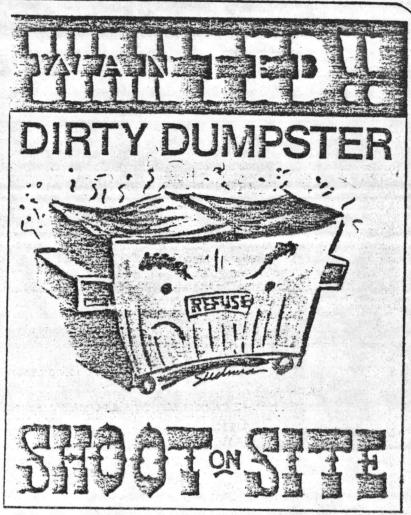
#### BANKS HUDSON (202) 244-7103

4714 SEDGWICK STREET, N. W. WASHINGTON, D. C. 20016

Specifically engineered by the "old pros"...

# Shoots on site for clean dumpster containers

Obviate Container Nuisance Prolong Container Life Enhance Container Cleanliness



ScrubaDubster





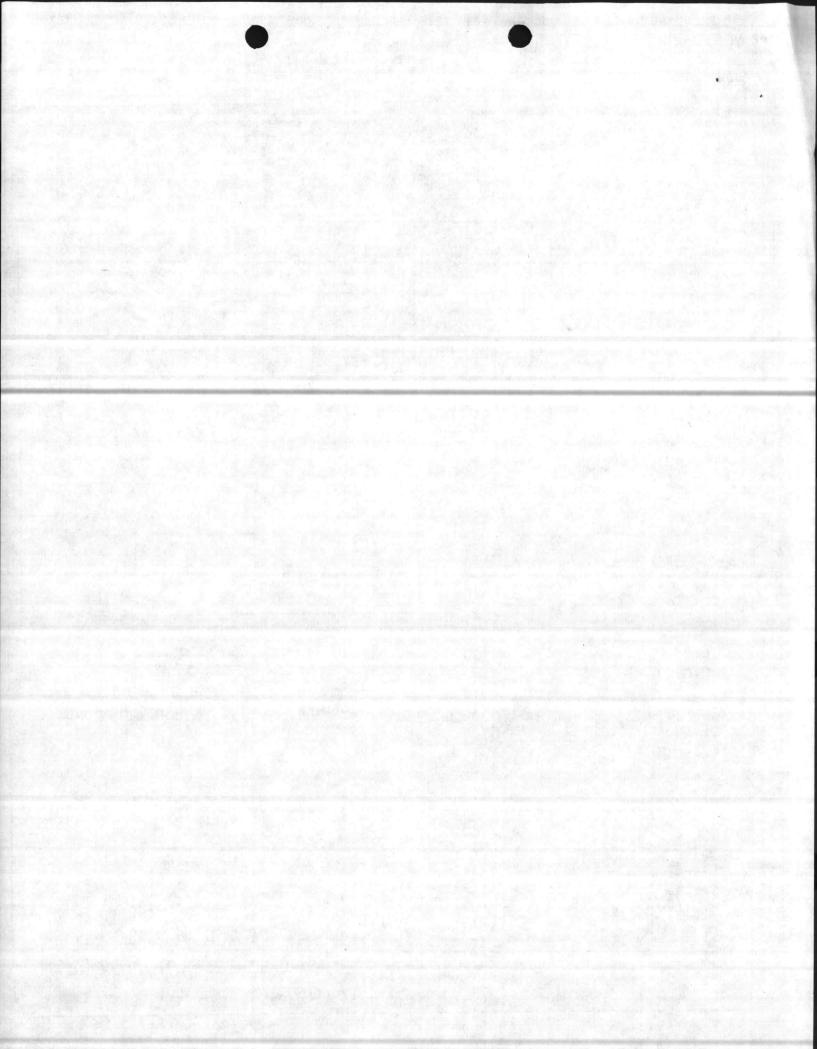


Rear Load (RLP) Containers Front Load (FEL) Containers Hoist Haul (Arm-Chain) Containers Truck Mounted Hauling Equipment Container Sites

USN "FPB" Fast Pay Back

USA "QRIP" Quick Return on Investment Program

USAF "FASCAP" Fast Capital Amortization Program



# ScrubaDubster - Model 1500

# SPECIFICATIONS

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## and the second HOT HIGH PRESSURE WASHER:

Discharge - 5 GPM 300 GPH

21 State 14

**CHARG** 

Pressure-1500 PSI, adjustable Hose-80' High Pressure Hose standard

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-

Pump-Triplex design with lubricated crosshead-withstands extended periods of

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no-water useage.

Trigger Gun-"Deadman" type, cool grip Discharge Temperature - Adjustable to 210°F

Burner-460,000 BTU Input

Ignition - Aircraft magneto, constant

Fuel Type-Kerosene, No. 1 or No. 2 Diesel

Fuel Tank-8 hour capacity

Fuel Consumption - Burner - 3.0 GPH

Chemical Feed-High pressure and low pressure standard, both systems calibrated.

#### ENGINE:

N. ANG

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-

24 H.P.-2 cylinder standard, air-cooled gasoline, electric start. (See Options)

the state of the state of

#### VACUUM SYSTEM:

Air Flow-150 CFM Maximum Vacuum - 27" Mercury Hose Length-50' x 3" I.D. Standard Wand-5' with Three Heads Faith Lat Instan

#### WATER TANKS:

Type-Dual Tank Design Capacity-500 galions each Interior - Baffled

#### SPECIAL FEATURES:

· Electric clutches permit independent or simultaneous operation of vacuum system and pressure washer.

- · All tanks have liquid indicators.
- Pressure hose mounted or hose reel.
- Skid mounted.

#### **OPTIONS:**

Engines - 30 HP 4 Cylinder Gasoline, air-cooled

Trees T

Diesel engines per customers specifications

Electric motor drives, including availability of all standard voltages, 50 or 60 Hz and explosion proof.

- Mounting-Hoist eye for skid mounted units.
  - Dual axle trailer.

Truck mounted per customer specification.

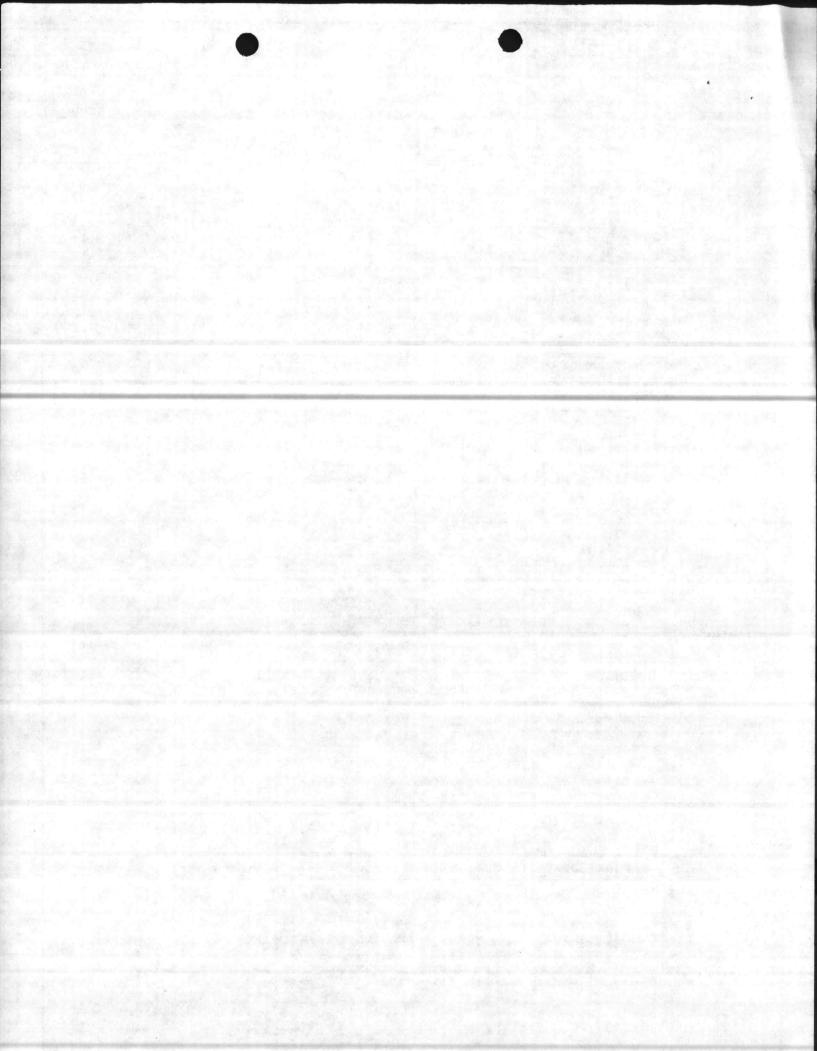
Tanks - Fiberglass or stainless steel per customers corrosion requirements.

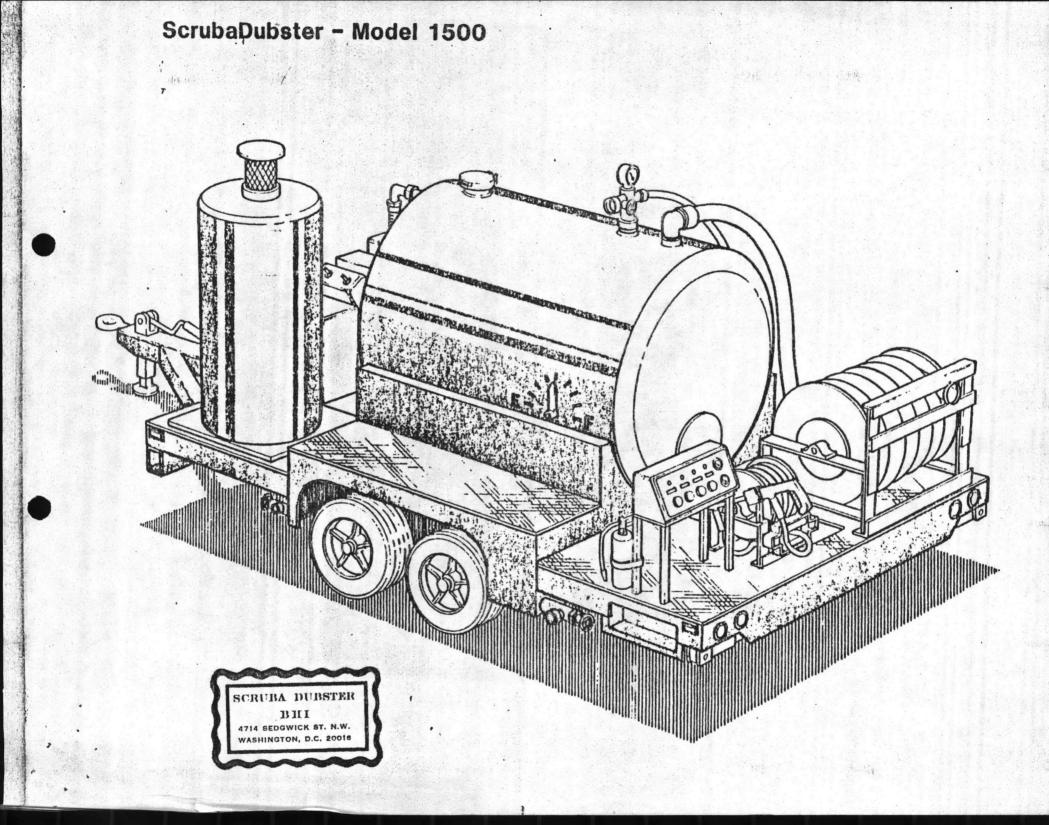
Capacities to customer's specifications, including 8 hour continuous operation capability.

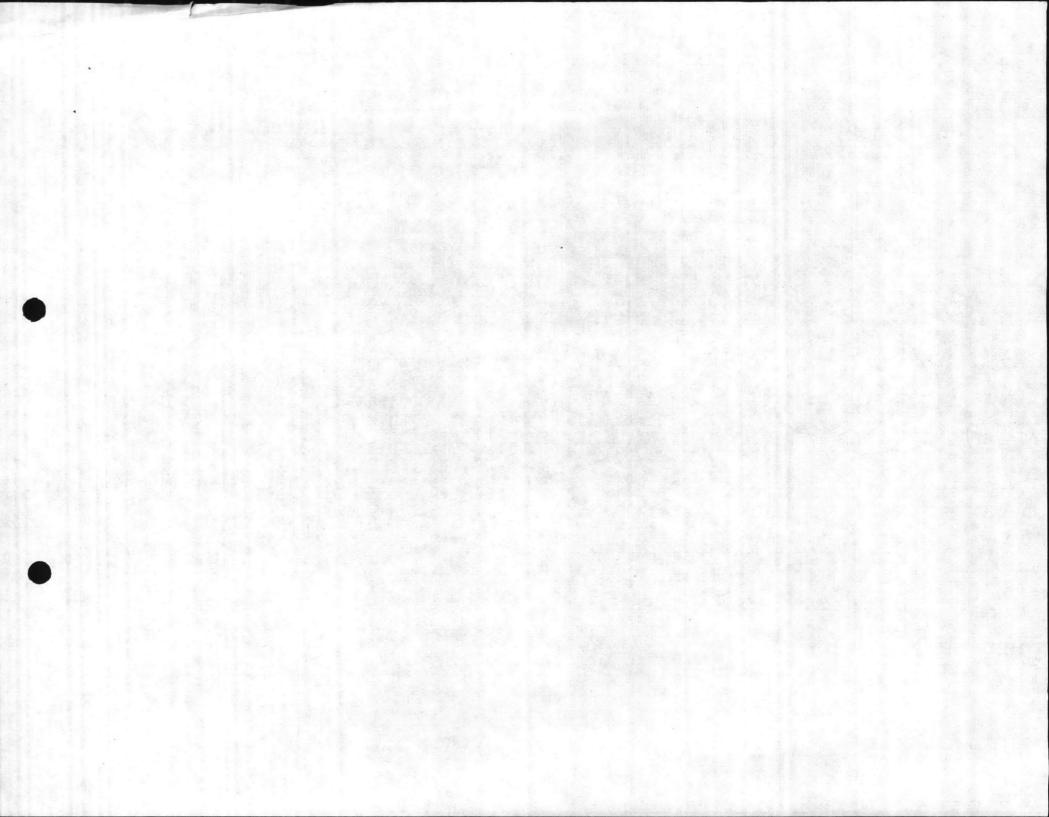
Hose Reel-Suction hose reel-hand crank or electric.

Sand Blast-Liquid sand blasting attachment with sand hopper-100#, 300#, and 800# capacities standard.

Pressure - To 5,000 PSI available per customer specification. Volume-To 12 GPM per customer specifications.







## (PROCUREMENT DESCRIPTION FOR ON-SITE CONTAINER CLEANING EQUIPMENT)

The intended primary use of the equipment is to perform the specialized task of cleansing, at their assigned sites, more efficiently, conviently and economically Solid Waste Collection Equipment: dumpster and roll-off containers inside and out, stationary packers and indicated prepared sites. The transporting vehicles and other similar compatible cleansing tasks are also to be accomplished.

It is required that technologies associated with high pressure hot water, vacuum, chemicals and abrasives will be knowledgeably combined and exploited to provide a device able to apply processed cleansing to the Collection Equipment so its operation may continue to the satisfaction of the "customers" dependent on that Collection System.

#### HOT HIGH PRESSURE WASHER

Discharge: 5 gpm-300 gph Pressure: 1500 psi adjustable

Hose: 30' high pressure hose on spring rewind reel Pump: Triplex design with lubricated cross head

to withstand extended periods of no water usage Trigger gun: Thermo-plastic dead man type. Wands with grips 24" and 48": extension 36". Three nozzles of O degree, 15 degree and 25 degree spray patters, all quick

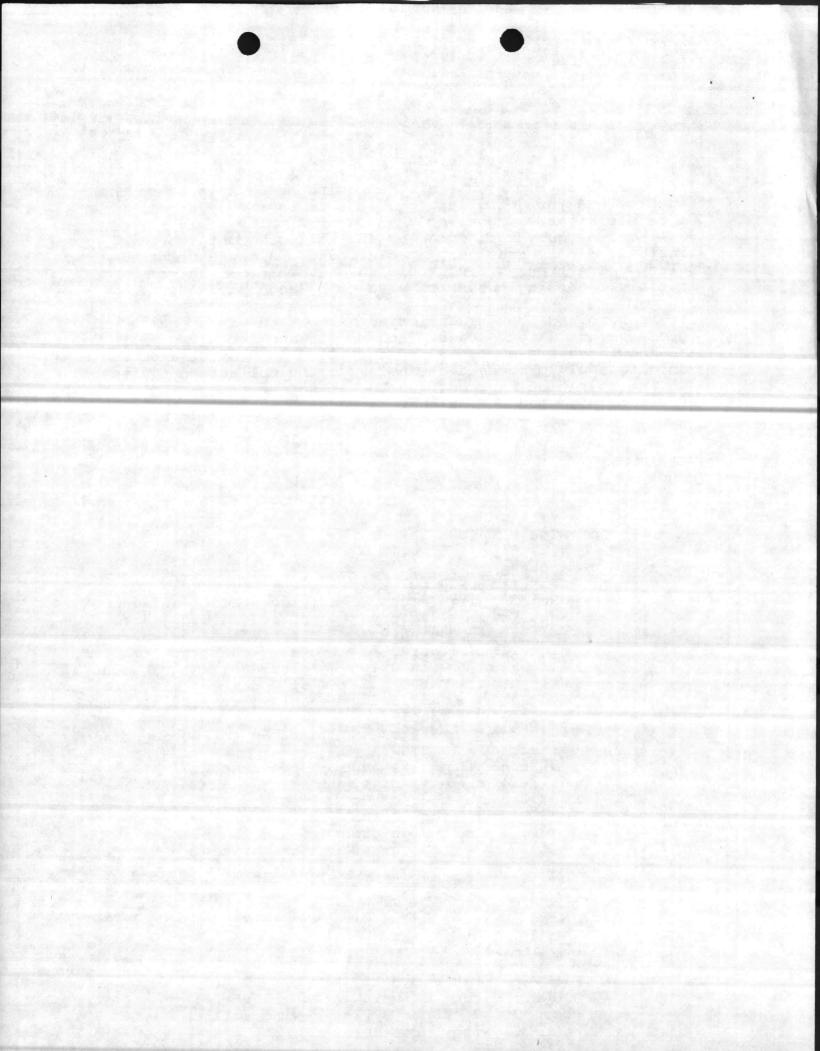
couple. Discharge temperature: adjustable to 200 degrees. Burner: 46,000 BTU input Ignition: Aircraft Magneto, constant Fuel: Kerosene #1 or #2 diesel Fuel Tank: 9 hour capacity Fuel Consumption: Burner 3.0 gph Chemical Feed: High pressure and low pressure, both systems calibrated.

ENGINE

Diesel: Deutz: power minimum equivalent 24 hp gasoline

VACUUM SYSTEM

Air Flow: 270 cfm @ 15" Hg Blower: direct drive-twin impeller Mose: 30' 3" ID on spring rewind roll Wand: 5' with three heads



### WATER TANKS

1000 gallon total capacity divided by baffle for 500 gallons fresh and 500 gallons waste; equipped with cleanout gate and rapid discharge valve. The former to provide easy manual cleanout and the latter to provide a discharge diameter at least 25% greater than the waste inlet diameter.

#### TRAILER

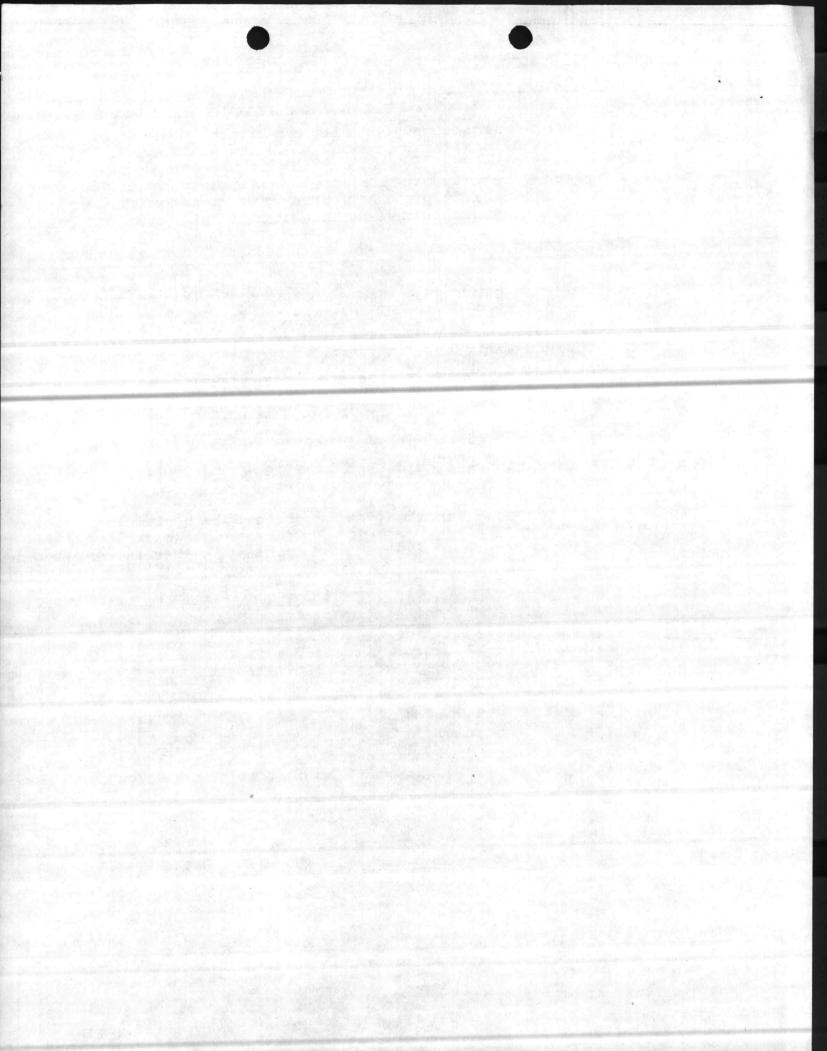
To be mounted on dual axel trailer to withstand rugged service to operate with GAWR of 11000 lbs. minimum: ICC lighting-compatible hitch.

#### REQUIRED FEATURES

Electric clutches: to permit independent or simultaneous operation of vacuum and water systems. All tanks to have liquid indicators.

Sand blast: liquid sand blasting with 300 lb. capacity sand hopper.

Water concentration device: to enable operator to assemble occassional pools of water in dumpster so vacuum will leave interior moist-dry.



# CONTAINER CLEANSING\*.

In order to incorporate acceptably into the necessary process of waste handling, the specialized task of cleansing refuse containers, stationary packers and hardened sites, must offer the capabilities listed hereinafter.

A System using high-pressure hot water, detergent-deodorant, grit and vacuum must be brought to the containers for use on-site at the regularly assigned locations of the containers.

Each unit of the System shall be able to process-cleanse containers per the subsequent schedule, in the required increments, at a minimum rate of 15 Eight Cubic Yard Containers in eight contiguous hours.

Water temperature must be adjustable to a maximum of 200 degrees Farenheit, pressure adjustable to a maximum of 1500 psi, flow rate at 5 gpm minimum.

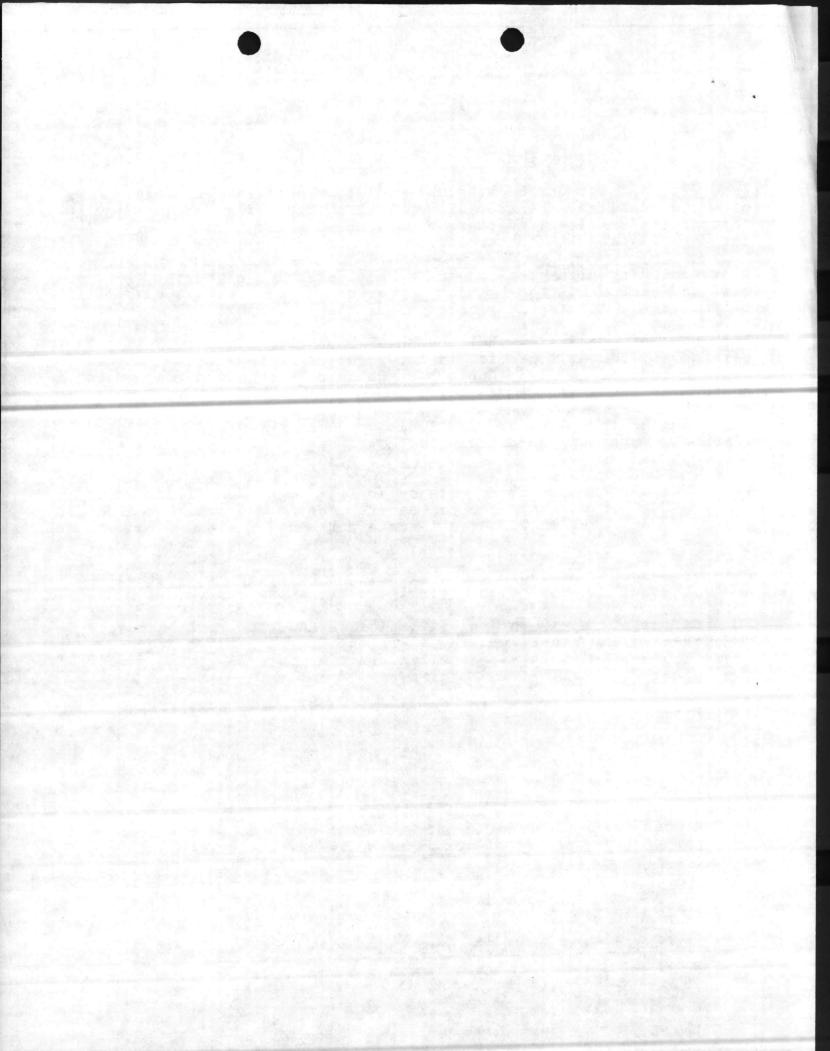
Vacuum at 270 cfm at 15" Hg with capability to vacuum cleanse and leave moist-dry not only the containers, inside and out, but also the hardened sites where certain containers and stationary packers regularly repose.

Detergent-deodorant capability, as well as grit capability, must be a compatible, intergal component of the cleansing system.

For reasons of safety to inhibit explosion and electrical hazards to operators and others who may be in the many sensitive areas where the operation takes place, aircraft magneto is required in the burner chamber.

The System shall neither disrupt the waste handling process nor disturb community life-style.

\*For use to obtain adequate contract service by incorporation in the Invitations to Bid for Refuse Service or as an in-house directive to Government employees when work is performed by the Base's own forces.



# KIT, CONTAINER MAINTENANCE

Especially developed to case maintenance requirements, prolong the life, and protect the investment in both new and already in-use Refuse Containers, the following describes a developmentby Polymetrics, Inc. of Maitland, Florida, a company long established in problems associated with rail car body maintenance.

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DOLL OF STORE

Designed particularly for the unique damage control need in Refuse Containers, the Kit provides a System of Polyurethane for the entire Container, inside and out, including especial provision for the vulnerable bottom section, the top lid and end door assemblies. The color incorporated in the System is the customer's choice.

For material costs of about 1/6 that of a new container the use of the Kit anticipates extending the on-line life of a new or in-use FEL, RLP or RO Refuse Container some 3x. Thus, "2 free containers" for each to which application of the Kit is made.

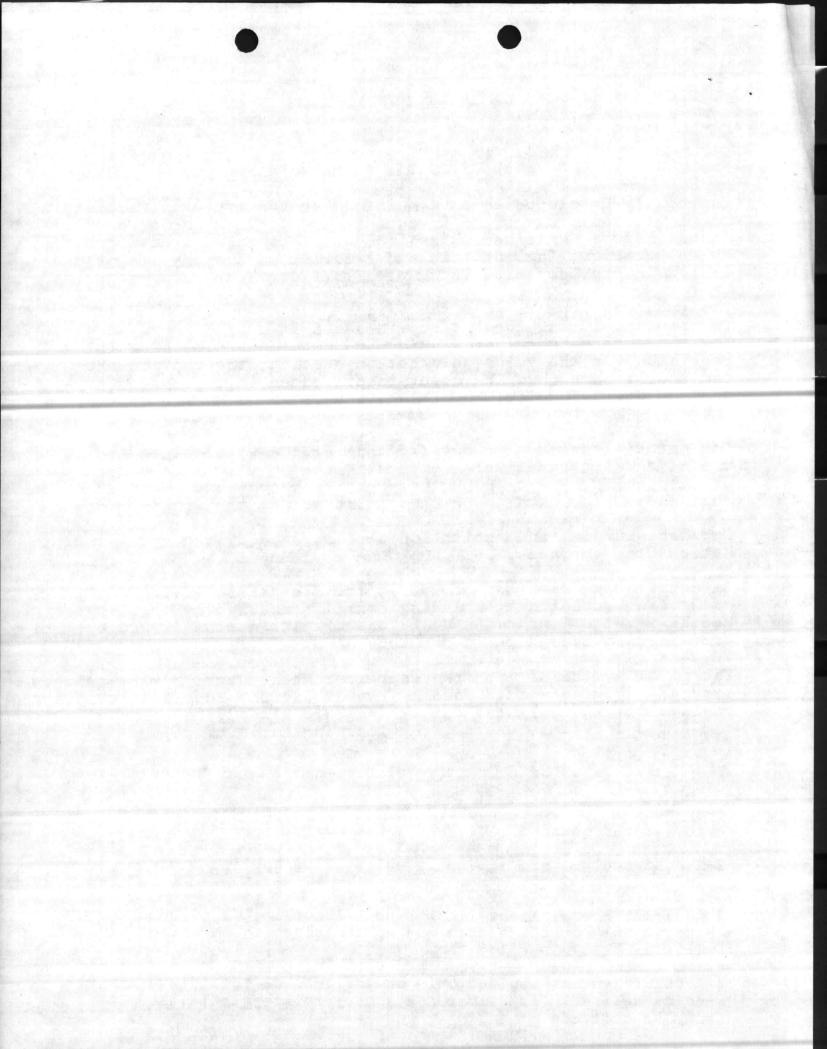
Further, dumping and sanitation are improved by the very smooth, "stick-free"surfaces. Offensive odor is reduced.

Although quite new (May of 1981), the Kit has satisfingly quick commercial acceptance including containers owned by the largest Refuse Service Company, a U. S. Based multi-national, whose containers number high in the thousands.

Technically, the Kit for the Container Maintenance System centers around a Polyisocyanate Monomer known to offer superior corrosion resistance. As polyurethane systems are already well known to the Armed Services, there is no learning curve to climb.

The Kit consists of four interrelated, compatible dependents:

- I-A specific solvent, applied to the "paintable" surface inside and outside.
- 2-A designed primer, silver in color, also applied inside and outside.
- 3-A flexible, resilient liner, shock absorbing, applied inside only on the bottom and up the sides about a foot. This is black in color.
- 4-A color system, applied onl on the outside to achieve any color desired. If silver (#2 above) is acceptable, step 4 may be omitted.



As to application, our directions are complete, detailed and simple. Any painter can handle the task. Steps 1, 2 and 4 may be brushed, rolled or sprayed. Step 3 should be rolled.

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Polymetrics, Inc. the manufacturer who developed the System of Maintenance Kits for refuse containers, is long established in the polyurethane coating of the interior of rail cars where corrosion and dumping are problems.

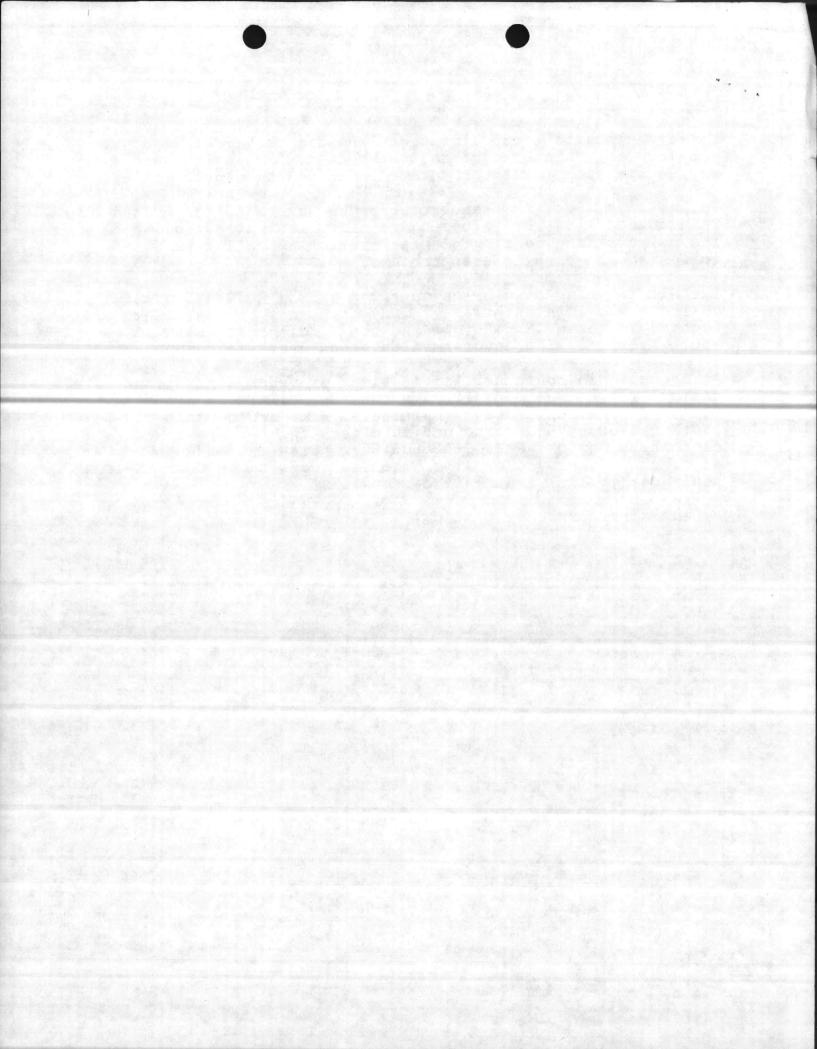
The Kit is being used by major firms in the Refuse Service business whose inventories of many thousands of containers are located in the U. S., Europe and the Middle East, also in South America. The endorsement of such users is unimpeachable.

An increase in container life 3 times provedes significant capital retention: less than a hundred dollars in material "buys" 2 additional "new" containers. With new containers costing \$700.00 delivered and in place, the savings on 100 containers approximates \$140,000.00--a figure of noteable magnitude. Improved on-line time and facilitated dumping from the smooth, slick liner are concomittants.

We anticipate further contact.

J. BANKS HUDSON, INC. "B H I"

BANKS HUDSON (202) 244-7103 4714 SEDGWICK STREET, N. W. WASHINGTON, D. C. 20016



(For inclusion in Service Contractors agreements when they provide new, used or rehab'd Refuse Containers for the Base)

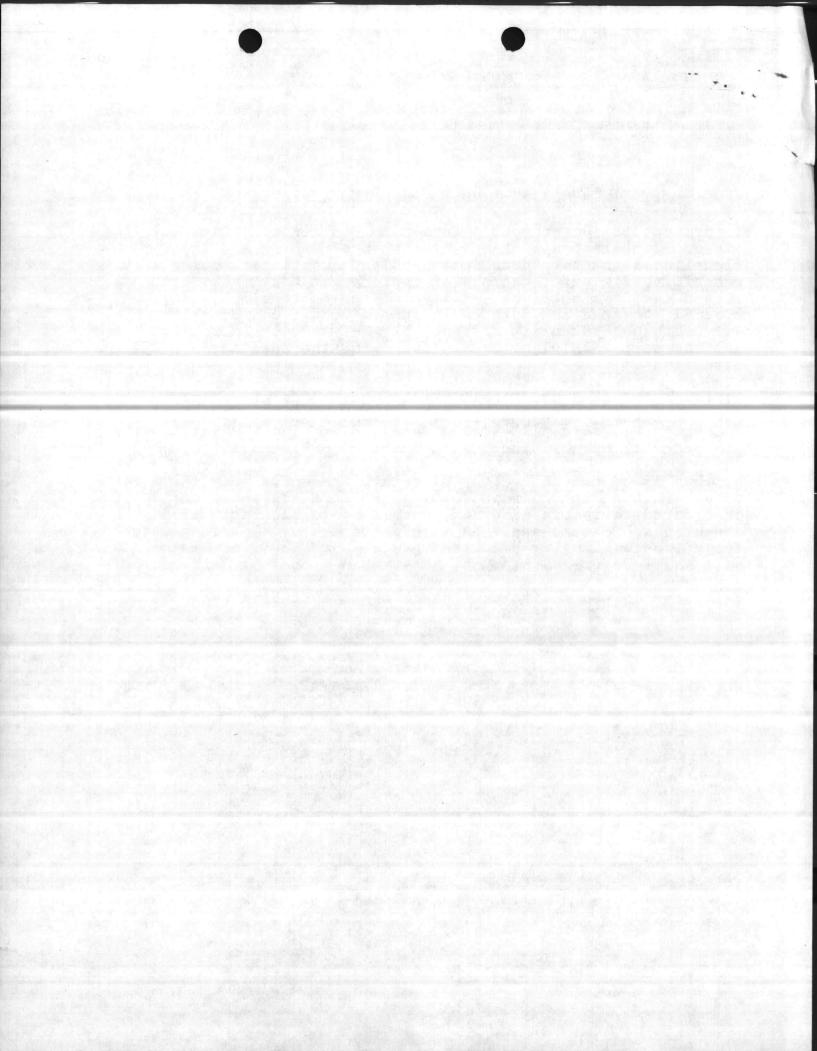
### CONTAINER TREATMENT, PAINTING AND PRESERVATION

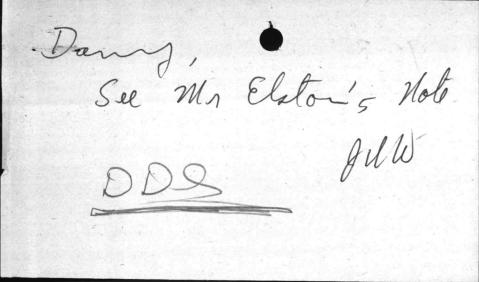
To protect the Government's investment in its containers, to improve container appearance, to enhance dumping and thus cleanliness and to reduce odor problems, containers going thru rehabilitation and those new or replacement containers brought aboard the Base shall be, in lieu of conventional painting, cleaned, treated and painted in accord with a commercial Polyurethane System Kit designed for refuse containers (Polymetrics part # BH101 or equal) following the supplier's directions.

Surfaces to be painted shall be cleaned and dried to insure they are free from contaminants, such as oil, grease, welding slag and spatter, loose mill scale, water, dirt, loose paint, corrosion product, or any other contaminanting substances.

As soon as practicable after cleaning, and before any corrosion or other contamination can result, the surfaces shall be prepared or treated to insure adhesion, according to manufacturer's directions. Coating shall be with manufacturer's current materials according to supplier's current processes. The finished paint coat shall be free from runs, sags, orange peel or other defects

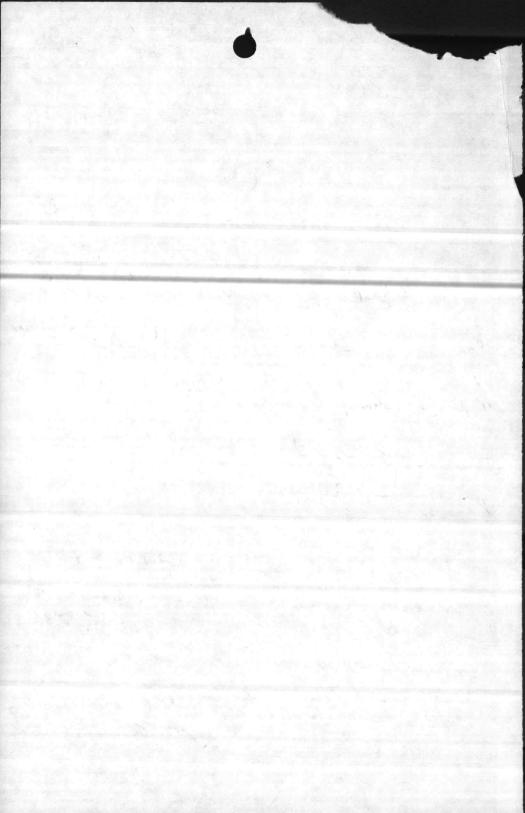
The color of the finish coat shall be as specified by the Base.



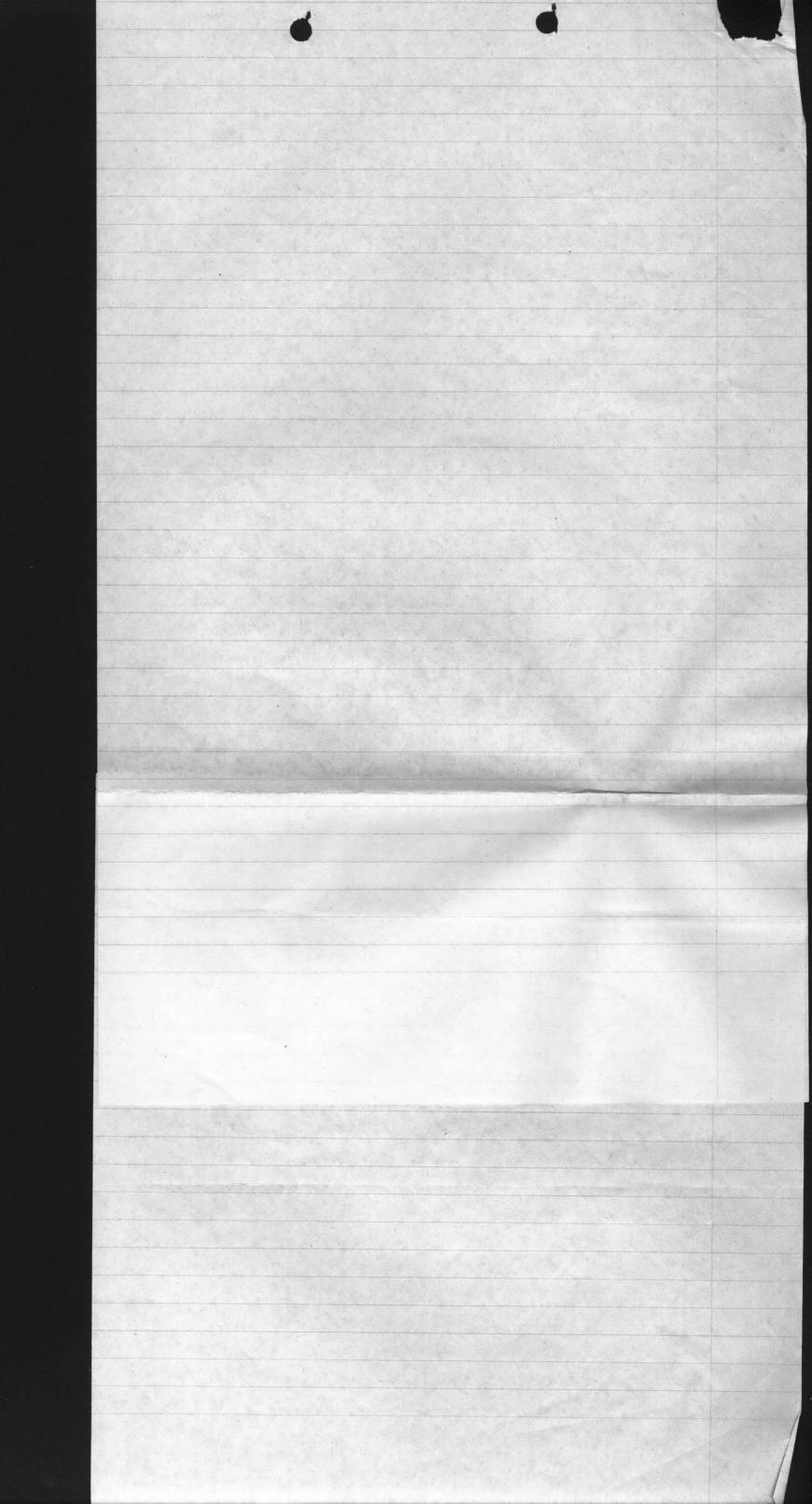


92 B

RESOURCES AND EN RONMENTAL AFFAIRS BRANCH BASE MAINTENANCE DIVISION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542 8-12-82 Date From: Director To: BMD subj: asbiston at DPD Lot attached provides additional enfor Defense Property Desposed Kontrator problem which was discussed during Staff meeting this AM. Have talked w/ DPDO & PWO concerning askata pipe. DADO Z states they will get with fevo and the seak contractor to not same. Dwo says they will have contractor to more upon so so identify which contractor. Bar



subject: Disposal of asbestis Jusulated Pipe Rep (a) Forecan between Mr. R. J. andrews, Base Safety manger and Mr. Julin Wooley BMan Dof 1/Aug 11 Aug 8-11 Aug 8~ Rel(6) ON site visit of Lot 203 by Mr. Re JAndrews and mr. Tex Ritter, Bile Sofels, and Mr. Daning Stays, Brain Dog 11 ang 87 1. This is to advise that a large quantity of the subject pape issulated with prable orbestas is currently stored in a file at dot 203 by the Defense Property Desposed office (DPDO), During ref (a), My andrews requested NREAB assistance with determining a safe inverementally sound mithed of desposed of the gage. During reference (6), it was leaved that the give had been dunged 2 at the DPDO lot by a contractor. 2. During ref (a). Ma andrews advised that OPDO wanted to drapese of the material at the pase Sandfill. Much of the material Cereses Do 3-416 Alan line Coaled in asbestas with an orter compatick pipe 1 & porge 8 - 12" to deameter. Current BARD policy does not permit disposal of this size pipe at the Cardfill, However, No environmented Constraint clists which worked prevent the BMO from making an exception. 3, Daspoord of the publicat material will be relaterely opening in that the present Condition of the subject pipe well require pardling under severe safety constraints. I should be noted that the contractor man be liable for cleaning up and proper disposed of the material. accordingly, it is recommended that the DPDO be requested to formally advise the AC/S Saculities and the ROYCC of the subject problem and to request appropriale assistance. The naterial standed be handled following recommendations and guidence of Base Safets My. & Industrul Nygrest (NRMC).





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

AUG 9 1982

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

file. He waster 1982

To Whom It May Concern:

Thank you for your cooperation in our recent telephone effort to create an accurate list of treatment, storage, and disposal facilities which handled hazardous waste in 1981. Facilities randomly selected from this list will receive a questionnaire in the next week or two. The Office of Solid Waste needs the information from these efforts to better plan, manage, and evaluate the hazardous waste regulatory program under RCRA.

The questionnaire to be sent is extensive because it will enable the Agency to carry out regulatory impact analysis. This analysis combines cost/benefit analysis with human health and environmental risk assessment so that our approach for regulating hazardous waste management practices can be made more effective and more efficient.

If your facility is selected, you will receive a questionnaire package in the next few weeks. Your continued cooperation will assist the Agency in its efforts to develop and refine effective and reasonable regulations governing the management of hazardous wastes.

Sincerely,

George A. Garland Chief, Analysis Branch Office of Solid Waste (WH-562)

United States Environmental Protection Agency Official Business Penalty for Private Use \$300

Washington DC 20460

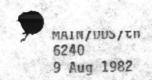


First-Class Mail Postage and Fees Paid EPA Permit No. G-35

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NC6170022580 SHARPE DANNY ECOLOGIST MARINE CORPS BASE CAMP LEJEUNE NC HWY 24 & US HWY 17 CAMP LEJEUNE NC 28542



Director, Natural Resources and Environmental Affairs Branch

Director, Maintenance & Repear Branch

Used Transformers Awaiting Disposal

Encl: (1) LANTDIV ltr 114: JGW:mbe 6280 of 15 Jul 1982

1. The enclosure furnishes data required to turn subject items into the local Defense Property Disposal Office. Samples marked "921 - 923" do not apply to transformers aboard Camp Lejeune. These were check samples inserted by Atlantic Division, Naval Facilities Engineering Command, to check quality of contract laboratory.

J. I. WOOTEN

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DEPARTMENT OF THE NAVY ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA 23511

444-9566 AUTOVON 690-9566 IN REPLY REFER TO: 114:JGW:mbe 6280

1 5 JUL 1982

From: Commander, Atlantic Division, Naval Facilities Engineering Command To: Commanding General, Marine Corps Base, Camp Lejeune

Subj: Transformer Oil Analyses; results of

Encl: (1) Certificate of Analysis, Jennings Laboratories, Inc.

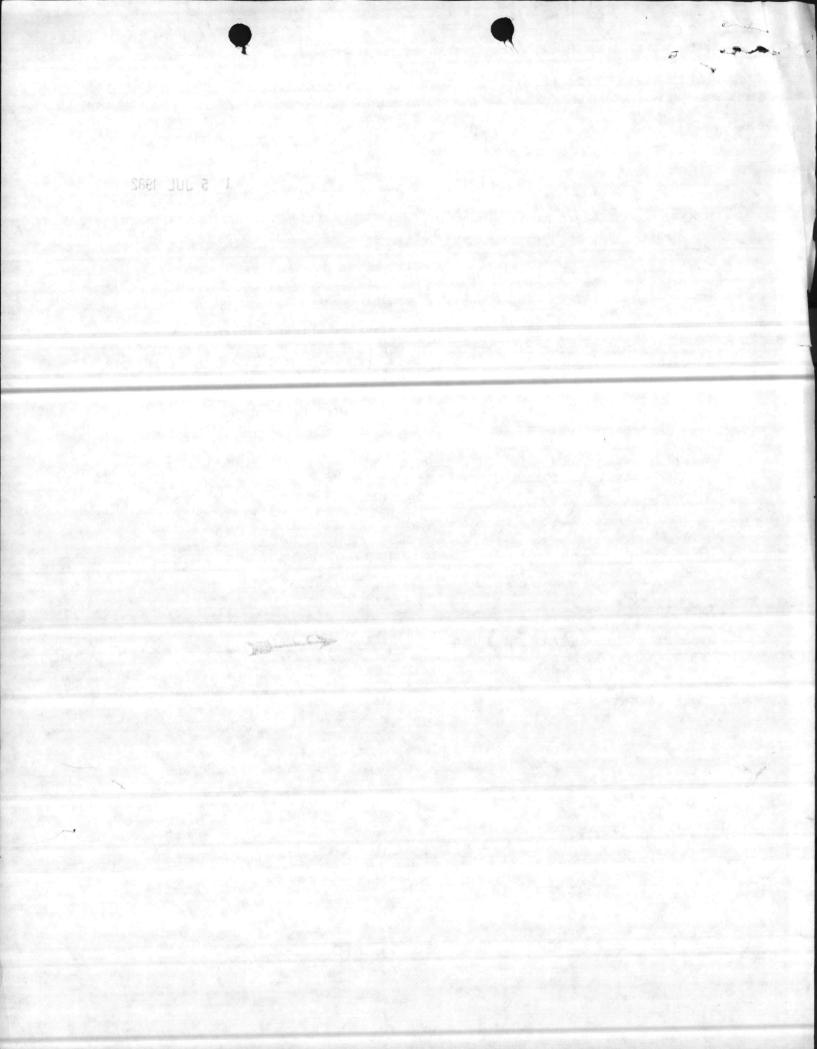
1. In response to submittal by Marine Corps Base (MCB), Camp Lejeune, of water and transformer oil samples for PCB analysis, enclosure (1) is forwarded as a record of oil analysis results. Only sample numbers 911-918 apply to MCB CAMP LEJEUNE.

2. The results of analysis of water samples will be forwarded upon receipt from the contractor.

3. LANTNAVFACENGCOM point of contact is Mr. Jerry Wallmeyer, telephone (804) 444-5566 or A/V 690-9566.

J. R. BAILEY, P.E. By direction

Copy to: CG MCB CAMP LEJEUNE (NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS) (ATTN: Mr. D. Sharpe)



# JENNINGS LABORATORIES, INC.

ANAL CAL AND CONSULTING CHEMISTS

- 1113 CYPRESS AVENUE • P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION Laboratory Approved by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

**ASBESTOS ANALYSIS – NIOSH 582** 

#### **CERTIFICATE OF ANALYSIS**

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

DATE: May 20, 1982

SAMPLE OF TRANSFORMER OIL SAMPLE (11)

#### MARKED

Samples delivered to laboratory 5/06/82

OFFICIAL SAMPLE BY:

SAMPLE AS MARKED	LABORATORY ANALYSIS NUMBER	PCB
#911	#1405	None Detected (<0.01 ppm
#912	#1406	None Detected (<0.01 ppm
#913	#1407	None Detected (<0.01 ppm
#914	#1408	None Detected (<0.01 ppr
<b>#915</b>	#1409	None Detected (<0.01 ppr
#916	#1410	None Detected (<0.01 ppr
#917	#1411	None Detected (<0.01 ppr
#918	#1412	None Detected (<0.01 ppr
#921	#1413	250.86 ppm
#922	#1414	762.88 ppm
<b>#923</b>	#1415	4.13 ppm

Per fore Con with WAllmeyer, Codelly. Check SAmples Inserted By LANT Div. DDS 32

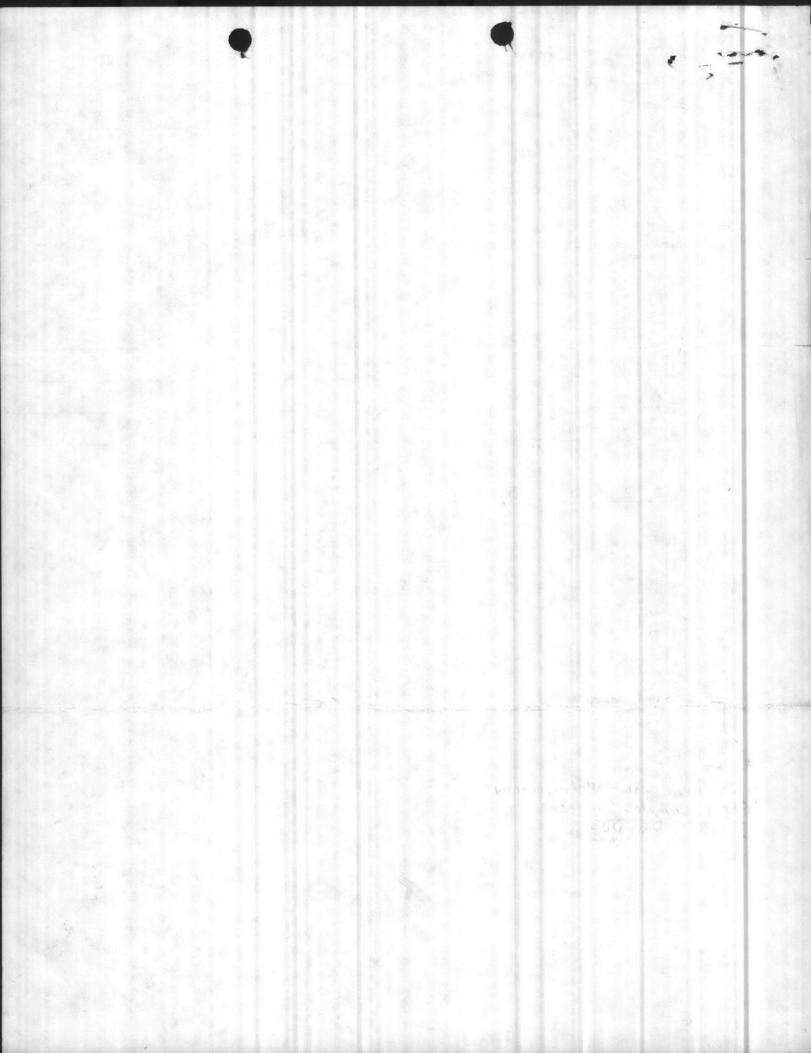
> Respectfully submitted, JENNINGS LABORATORIES, INC.

G0.00 ca CHEMIST

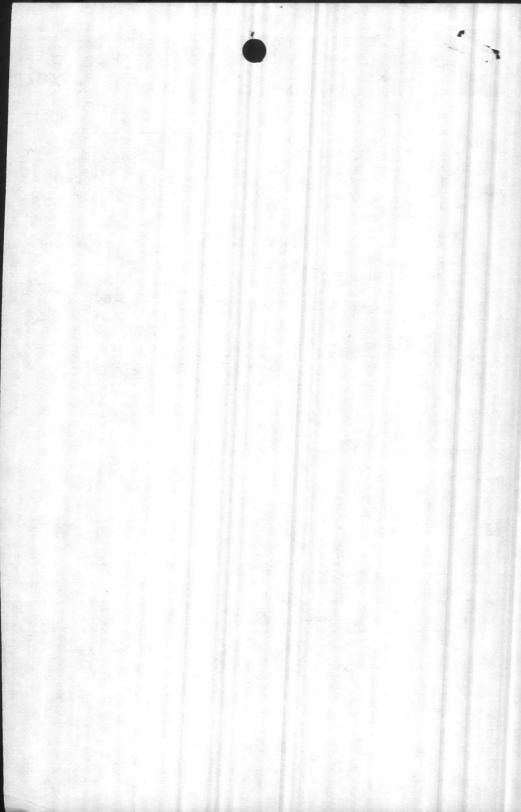
Analysis No. listed above

Laboratory

OFFICIAL METHODS OF A.O.A.C., A.O.C.S., A.S.T.M., A.P.H.A., E.P.A. AND N.S.P.A. USED IN ALL ANALYSIS UNLESS OTHERWISE STATED



NATURAL RESOURCES AND ENVIONMENTAL AFFAIRS BRANCH Base Mainter Ce Division Bro C Marine Corps Base Camp Lejeune, North Carolina 28542 Date 7-21-82 From: Director, NREAB To: BMD Subj: Hogardour Waste duspiction attached which was received by Damy Sharps this date is submitted for your info. I recommend à copy be sent to AC/S Fac) for info. Allen Send cogn for info. Bar beth.





Ronald H. Levine, M.D., M.P.H. STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

July 19, 1982

Commanding Officer ATTN: Lt. Col. D. W. Nelson, S4 Officer Marine Corps Air Station (H) New River US Hwy 17 South Jacksonville, NC 28546

Dear Sir:

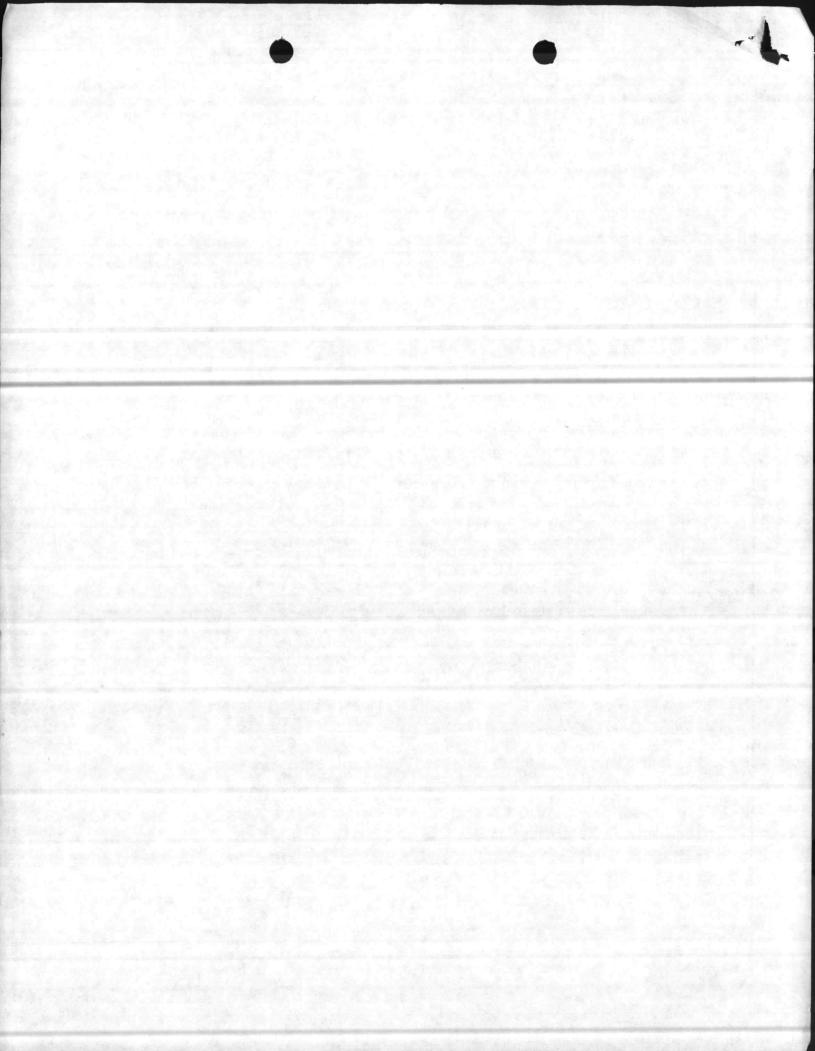
On June 22, 1982 Messrs. Jerry Rhodes and Ray Church of the Solid and Hazardous Waste Management Branch conducted a RCRA inspection of your facility. The following violations were noted:

- 1. Contingency Plan: Emergency coordinator is named by a position (265.52(d) & 265.55).
- 2. Manifest: Errors on initial manifests (262.21).
- 3. Labeling: All containers were not labeled (265.31).
- 4. Accumulation Time: All containers were not dated and containers were being stored for more than 90 days (262.34).
- 5. Management of Containers: All were not closed (265.173).

The following compliance schedule has been established:

- 1. This practice can be allowed if position is always filled with qualified, knowledgeable officials. These officials must qualify under 40 CFR Section 265.55 and be familiar with all of Section 265.56.
- 2. New manifests are to be correct.
- 3. To be corrected immediately.
- 4. Containers are to be dated immediately. Containers stored more than 90 days must be removed from MCAS New River immediately or complete all requirements for a container storage facility.
- 5. Containers are to be closed.

Please advise this office of corrective actions.



Lt. Col. D. W. Nelson Page 2 July 19, 1982

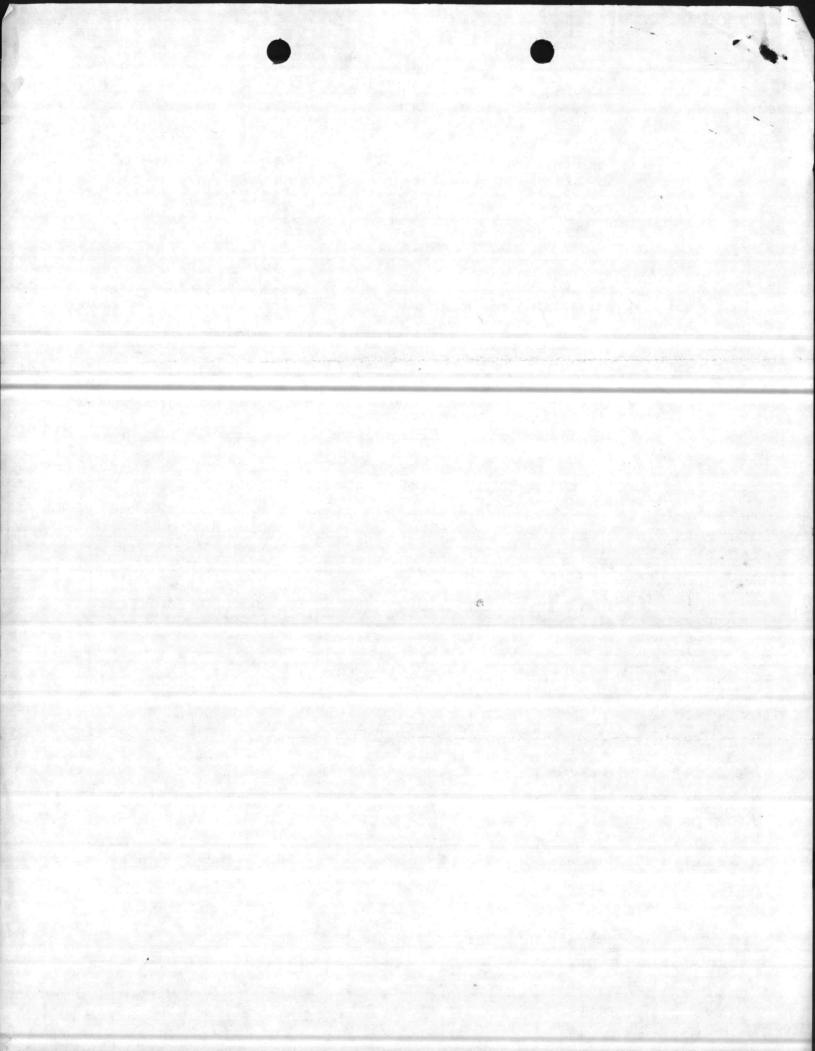
If you have any questions concerning this matter, please contact Mr. William Paige, Environmental Chemist at (919) 733-2178.

Sincerely,

9. W. Strickland, Head Solid & Hazardous Waste Management Branch Environmental Health Section

OWS:nlc/

cc: Mr. Danny Sharp Mr. Ray Church





DEPARTMENT OF THE NAVY ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA 23511

TELEPHONE NO. 444-9566 AUTOVON 690-9566 IN REPLY REFER TO: 114:JGW:mbe 6280

1 5 JUL 1982.

From: Commander, Atlantic Division, Naval Facilities Engineering Command To: Commanding General, Marine Corps Base, Camp Lejeune

Subj: Transformer Oil Analyses; results of

Encl: (1) Certificate of Analysis, Jennings Laboratories, Inc.

1. In response to submittal by Marine Corps Base (MCB), Camp Lejeune, of water and transformer oil samples for PCB analysis, enclosure (1) is forwarded as a record of oil analysis results. Only sample numbers 911-918 apply to MCB CAMP LEJEUNE.

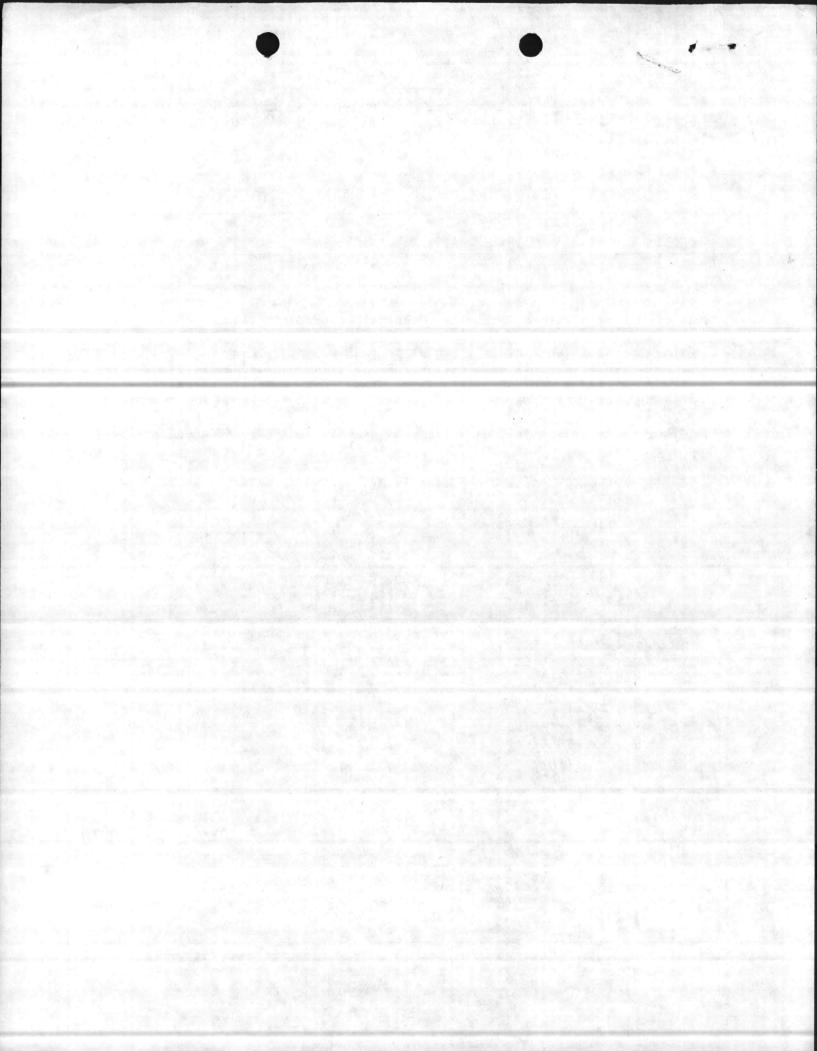
2. The results of analysis of water samples will be forwarded upon receipt from the contractor.

3. LANTNAVFACENGCOM point of contact is Mr. Jerry Wallmeyer, telephone (804) 444-5566 or A/V 690-9566.

David Bordlow .

for J. R. BAILEY, P.E. By direction

Copy to: CG MCB CAMP LEJEUNE (NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS) (ATTN: Mr. D. Sharpe)



# SENNINGS LABORATORIES, INC.

ANALYTICAL AND CONSULTING CHEMISTS

1118 CYPRESS AVENUE • P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

**ASBESTOS ANALYSIS - NIOSH 582** 

NATIONAL SOYBEAN PROCESSORS ASSOCIATION

Laboratory Approved by VA. STATE WATER. **CONTROL BOARD** for Analysis of **Effluents for NPDES PERMITS** CERTIFIED OFFICIAL U.S.D.A. LABORATORY

FOR MEAT ANALYSIS

### **CERTIFICATE OF ANALYSIS**

Mr. Dave Goodwin TO: Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

DATE: May 20, 1982

TRANSFORMER OIL SAMPLE (11) SAMPLE OF

MARKED

Samples delivered to laboratory 5/06/82

**OFFICIAL SAMPLE BY:** 

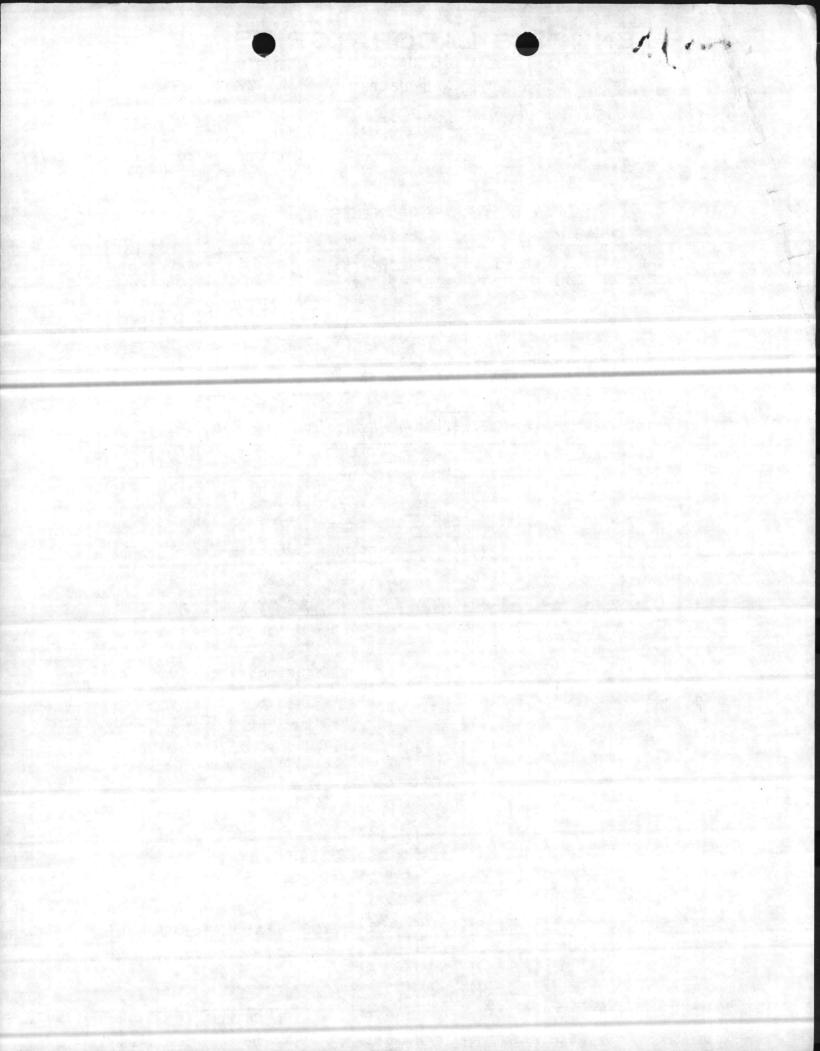
SAMPLE AS MARKED	LABORATORY ANALYSIS NUMBER	PCB
#911	#1405	None Detected (<0.01 ppm)
#912	#1406	None Detected (<0.01 ppm)
#913	#1407	None Detected (<0.01 ppm)
#914 CLNC	#1408	None Detected (<0.01 ppm)
#915	#1409	None Detected (<0.01 ppm)
#916	#1410	None Detected (<0.01 ppm)
#917	#1411	None Detected (<0.01 ppm)
#918	#1412	None Detected (<0.01 ppm)
#921	#1413	250.86 ppm
#922	#1414	762.88 ppm
#923	#1415	4.13 ppm

Respectfully submitted. JENNINGS LABORATORIES, INC.

90.00 ca CHEMIST

Laboratory Analysis No. listed above

OFFICIAL METHODS OF A.O.A.C., A.O.C.S., A.S.T.M., A.P.H.A., E.P.A. AND N.S.P.A. USED IN ALL ANALYSIS UNLESS OTHER TED



ROUTING SLIP HUL & 3 1982 ACTION INFO INITIAL BMO ABMO Aur ADMIN ENVIOR AFF F&A SEC MAINT NCO M&R Twylal Make us a Copy of worthy and sundy to M+R **OPNS** PROP UMACS UTIL SECRETARY COMMENTS: MREA/MSR: Take artion to dispon of subject transforming BER Julia



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ASSISTANT CHIEF OF STAFF, FACILITIES HEADQUARTERS, MARINE CORPS BASE

DATE 15 July 82

TO:

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ATTN:

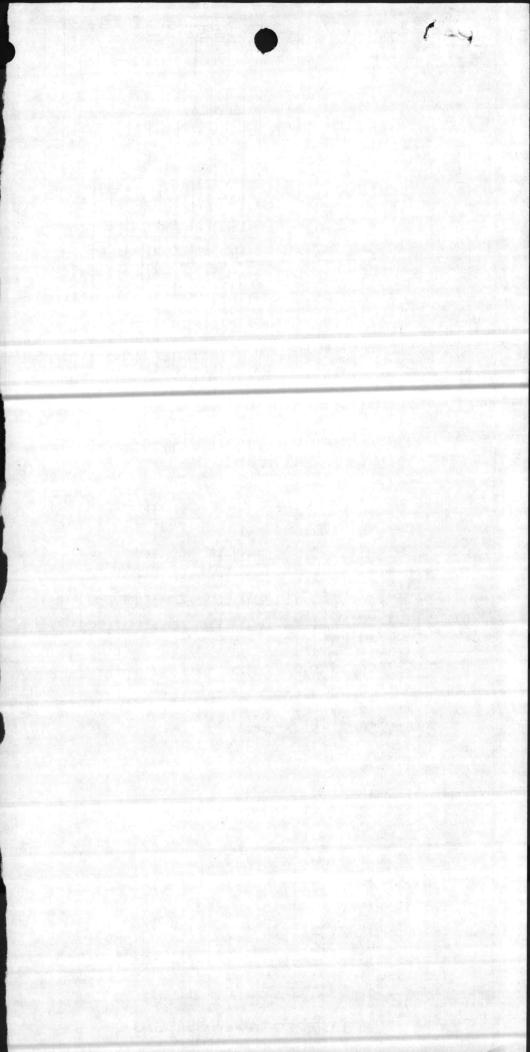
1. Attached is forwarded or info/action.

2. Please initial, or comment, and return all papers to this office.

3. Your file copy

K. P. MILLICE, Jr.

"LET'S THINK OF A FEW REASONS WHY IT CAN BE DONE"



Ronald H. Levine, M.D., M.P.H. STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

July 13, 1982

Commanding General ATTN: Assistance Chief of Staff, Facilities Marine Corps Base Camp Lejeune, NC 28542

Dear Sir:

0 ------

On June 21, 1982 Mr. Jerry Rhodes of the Solid and Hazardous Waste Management Branch conducted a RCRA re-inspection of your facility. You were found to be in compliance with the standards.

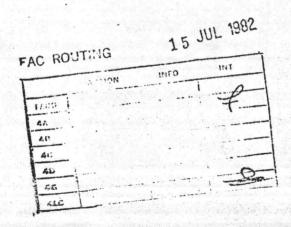
This office wishes to thank you for your cooperation and please do not hesitate to contact us if we may be of future assistance.

Sincerely; W. Strickland, Head

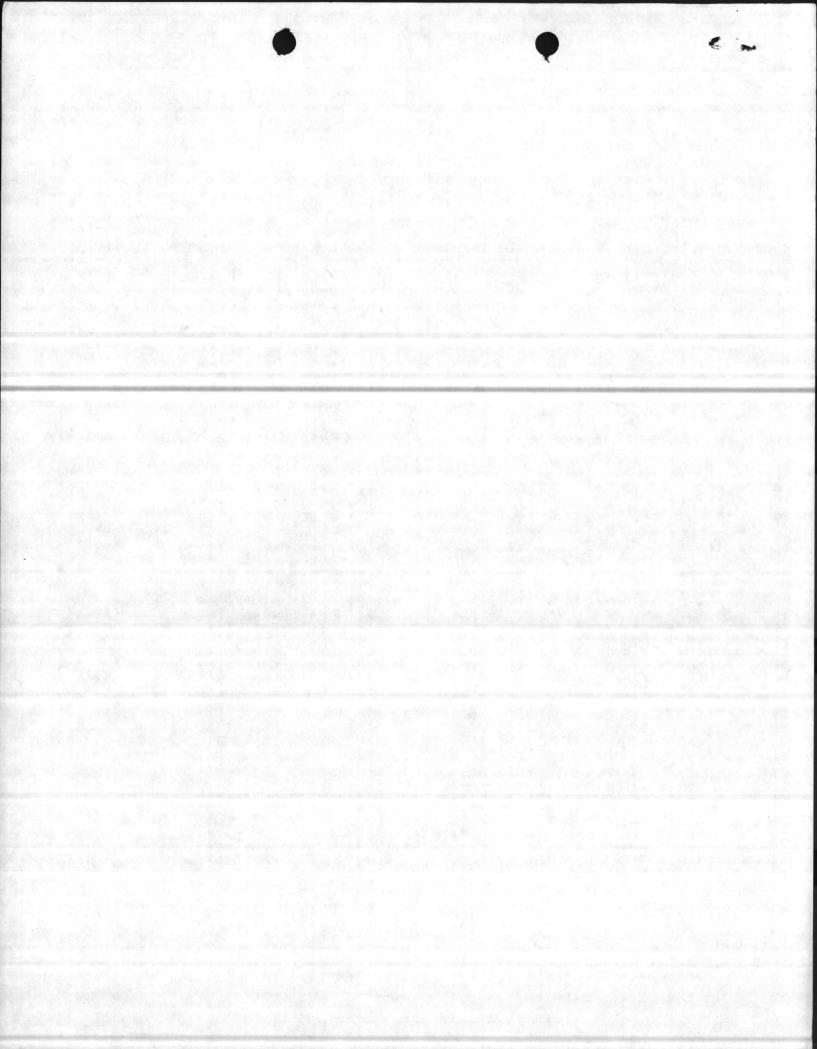
Solid & Hazardous Waste Management Branch Environmental Health Section

OWS:nlc

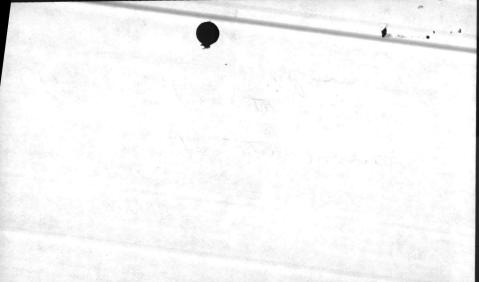
cc: Mr. Ray Church



Sarah I Morrow MD MPH



and Recomment Damy, See attached - Should soneone attend. XID Anha DDS



Ronald H. Levine, M.D., M.P.H. STATE HEALTH DIRECTOR

2-20-82

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

July 7, 1982

TO: Owners and Operators Hazardous Waste Treatment, Storage or Disposal Facilities in North Carolina

On November 19, 1980, the State of North Carolina adopted its Hazardous Waste Management Rules. These rules adopt by reference the Federal regulations dealing with financial requirements for all hazardous waste treatment, storage, and disposal facilities. More specifically, 10 NCAC 10F .0032(g) adopts the final financial requirements for facilities set forth in 40 CFR, Part 264, Subpart H, and 10 NCAC 10F .0033(h) adopts the interim financial requirements set forth in 40 CFR, Part 265, Subpart H. North Carolina's rules require that hazardous waste facilities have financial assurance for closure (and post-closure if a disposal facility). Four mechanisms are available to facility owners for accomplishing this task. These are: (1) Trust Fund; (2) Surety Bond guaranteeing payment into a trust fund; and (3) Letter of Credit; and (4) other methods that provided an equivalent degree of protection concerning human health and the environment as mechanisms 1, 2, and 3.

The Federal regulations adopted by North Carolina also require that all hazardous waste treatment, storage and disposal facilities operating in the State be covered by liability insurance for sudden (accidental) occurrences, and that all hazardous waste surface impoundments, landfills, or land treatment facilities have liability insurance covering non-sudden occurrences.

The Federal financial responsibility regulations, Subpart H, have been revised since they were originally adopted in North Carolina. These revisions, published in the Federal Registers on April 7 and April 16, 1982, accomplished two things. They expanded the financial assurance and liability insurance mechanisms available to facility owners and set new Federal compliance dates.

It is anticipated that the above revisions in the Federal rules, except for compliance dates, will be adopted in North Carolina in August. Until that time, the existing North Carolina Rules for Hazardous Waste Management continue in effect. These existing rules have been strictly enforced concerning required cost estimates for closure and post-closure. When the Federal revisions have been adopted in North Carolina, the Solid and Hazardous Waste Management Branch intends to enforce compliance with the Subpart H, Financial Requirement Rules, beginning on the following dates:

	Permitted Status & <u>New Facilities</u>	Interim Status & Existing Facilities
Financial assurance for closure and post-closure care plans	At least 60 days before the first receipt of hazardous waste	October 1, 1982
Liability coverage for sudden accidental occurrences	At least 60 days before the first receipt of hazardous waste	October 1, 1982
Liability coverage for non-sudden accidental occurrences	At least 60 days before the first receipt of hazardous waste	Annual Sales or Revenues over \$10 mil. \$5-\$10 mil. others

The new additional Federal mechanisms for achieving financial assurance as published in the Federal Register on April 7 and April 16, 1982 are likely to be adopted as written in North Carolina, and should therefore provide accurate guidance in your preparations for providing financial assurance by the above dates. Please contact this office at (919) 733-2178 if you have any questions regarding your responsibilities in complying with these requirements.

Sincerely, Strickland, Head W.

Solid & Hazardous Wa Management Branch Environmental Health Se ion

OWS:nlc

Attachment

-2-

## R.C.R.A. One Day Conference

FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE CARE AND LIABILITY INSURANCE REQUIREMENTS

August 25, 1982, McKimmon Center, Raleigh, North Carolina August 26, 1982, Mulls Conference Center, Hickory, North Carolina

Registration: 8:00 A.M. - 9:00 A.M.

Program: 9:00 A.M. - 4:30 P.M.

- Objectives: Acquaint representatives of North Carolina industries and institutions who must meet the new RCRA Financial Assurance requirements with the requirements and with the available means of meeting them. Provide a setting in which the representatives meet with EPA and North Carolina Hazardous Waste staff and with bankers and insurance company officials to discuss costs and instruments for meeting the RCRA requirements.
  - For: Representatives of industries and institutions who are treators, storers, or disposers of hazardous waste, as defined under RCRA, and who must meet the North Carolina October 1 deadline requirement for financial assurance for closure and post-closure care. And for representatives of financial institutions and insurance companies who will be providing the trust funds, surety bonds and insurance policies called for in the RCRA provisions.
  - Program: The program will include: a presentation by Michael J. Hartnett, the EPA Region 4 Residual Management Branch Specialist on implementation of the financial assurance regulations; presentations by the legal and technical staff of the Solid and Hazardous Waste Management Branch of the State of North Carolina on the North Carolina regulations, the implementation schedule and enforcement plan; and presentations by representatives of the North Carolina insurance and financial community covering their means of helping TSDs meet the RCRA requirements. Time has been scheduled for questions and discussions.
  - Handout: Each participant will receive a copy of the May 1982 EPA publication: FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE CARE: Requirements for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities - A Guidance Manual
  - Costs: The registration fee for this conference is <u>\$45.00</u> which includes luncheons, coffee breaks, and a copy of the EPA Guidance Manual.

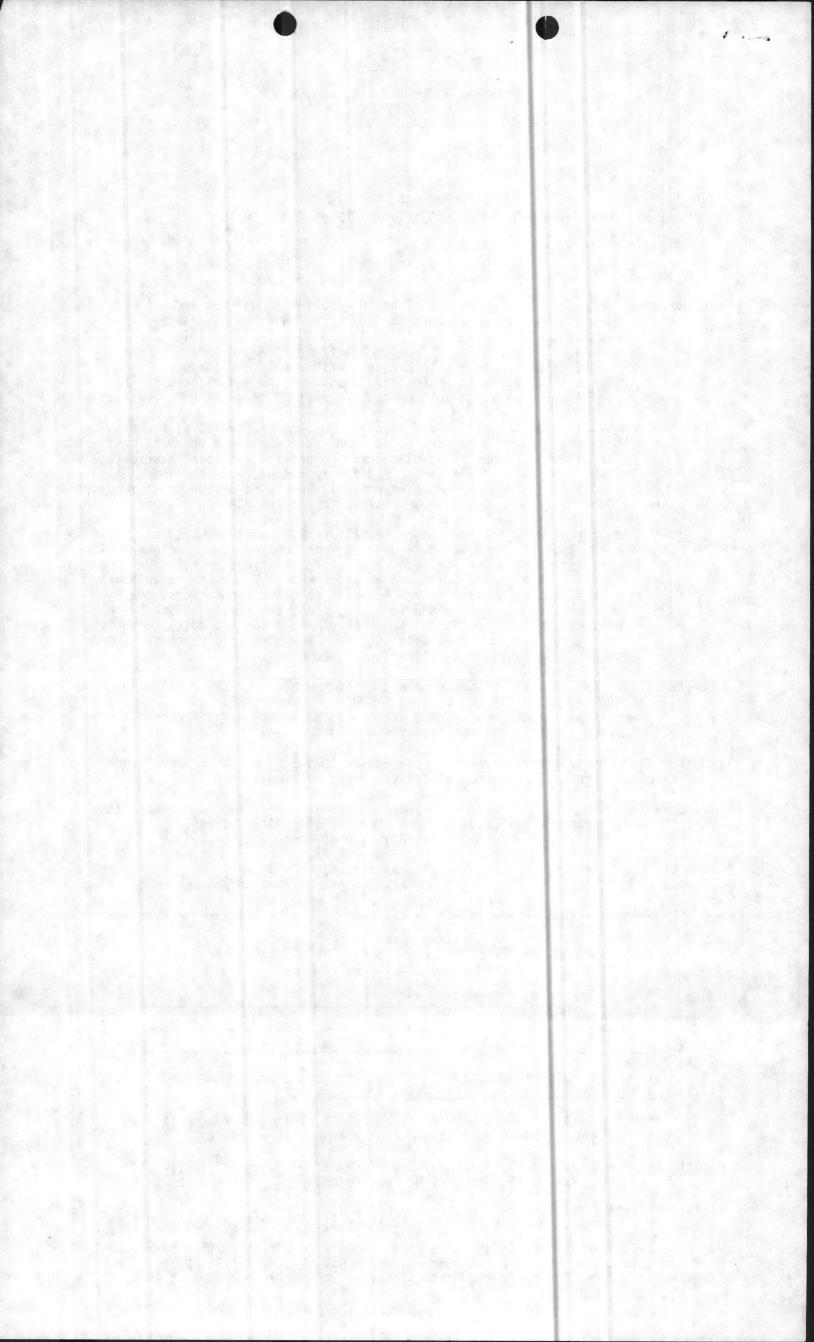
Registration: To register for this conference, please complete the registration form and mail to: NORTH CAROLINA STATE UNIVERSITY Division of Continuing Education P. 0. Box 5125 Raleigh, NC 27650 ATTN: Woody Fairbrother/Michelle Howell

### Advance Registration Form FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE CARE AND LIABILITY INSURANCE

NAME:			
FIRM:			
TITLE:		Sector Property in	
ADDRESS:			
CITY:		STATE:	ZIP
FEE: \$45.	00 - Check must accompany would like NCSU to in	registration or ple voice for your reg	ease check here if you istration fce
CHECK HERE	FOR: August 25, Raleigh FOR: August 26, Hickory		<u> </u>

PLEASE DUPLICATE THIS FORM FOR MULTIPLE REGISTRATIONS. PLEASE MAKE CHECKS PAYABLE TO: NORTH CAROLINA STATE UNIVERSITY.

If you would like further information on this conference registration procedure, etc., please contact Woody Fairbrother/Michelle Howell at (919/737-2261), or for conference information or course content, please contact Jerome Kohl at (919/737-2303).





Ronald H. Levine, M.D., M.P.H. STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

July 7, 1982

#### MEMORANDUM:

TO:

Owners and Operators Hazardous Waste Treatment, Storage or Disposal Facilities in North Carolina O.W. Strickland, Head Solid & Hazardous Waste Management Branch

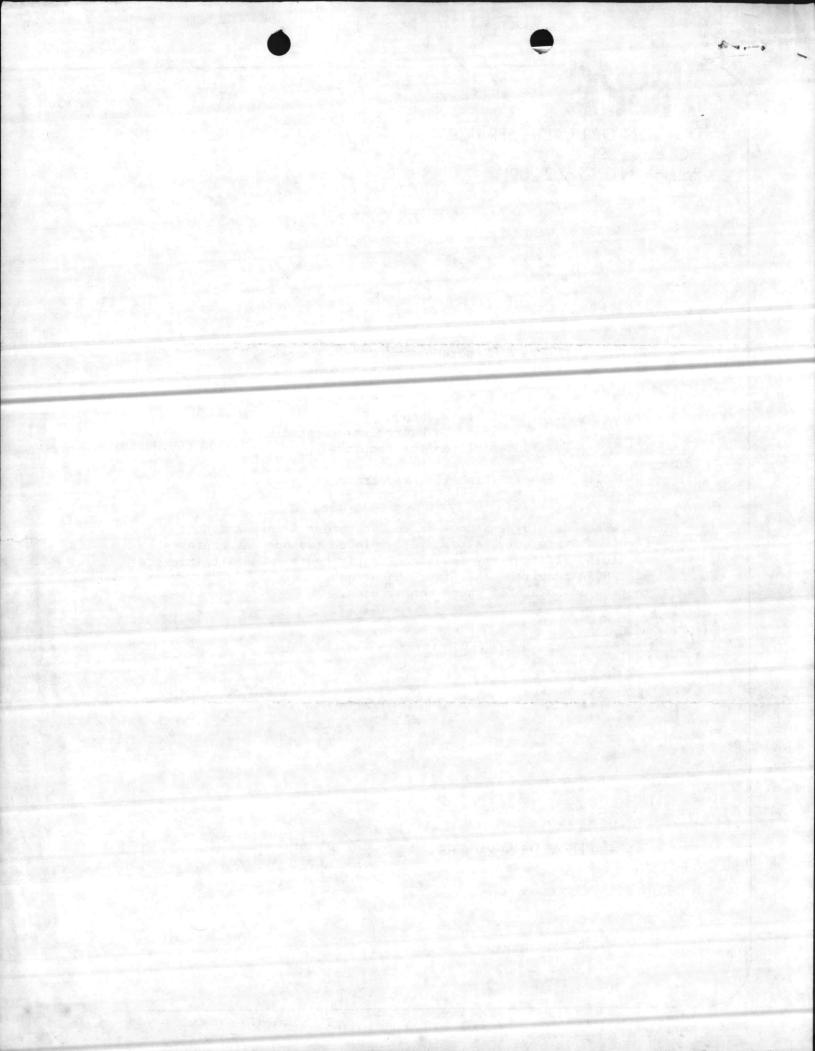
FROM:

SUBJECT: Financial/Liability Requirements

Environmental Health Section

The Solid & Hazardous Waste Management Branch and North Carolina State University have developed two one day conferences on financial/liability insurance requirements to assist industry meet RCRA requirements. (see the attached sheet) You may want to take advantage of these conferences.

OWS:sms



MAIN/DDS/th 6240

JUL 0 2 1982

From: Commanding General To: Distribution List

Subj: Locating Chemical Agent Identification Sets

Encl: (1) CO LANTHAVFACENGCOM 1tr 114:500:aed 6280 of 14 Jun 1982

1. The enclosure provides information regarding disposal of the subject items. It is recommended addressees conduct a search for other subject items and advise this command of type and quantity found. Negative reply requested.

2. Point of contact in this matter is Mr. Danny Sharpe, Natural Resources and Environmental Affairs Branch, Base Maintenance Division, extensions 2083/1690.

> R. F. CALTA By direction

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#### PARTMENT OF THE NAVY ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA 23511

TELEPHONE NO. 444-9565 AUTOVON 690-9565 IN REPLY REFER TO: 114:SGO:aed 6280

1 4 JUN 1982.

From: Commander, Atlantic Division, Naval Facilities Engineering Command To: Distribution

Subj: Locating Chemical Agent Identification Sets (CAIS)

Encl: (1) Department of the Army 1tr DRXTH-SE of 15 April 1982

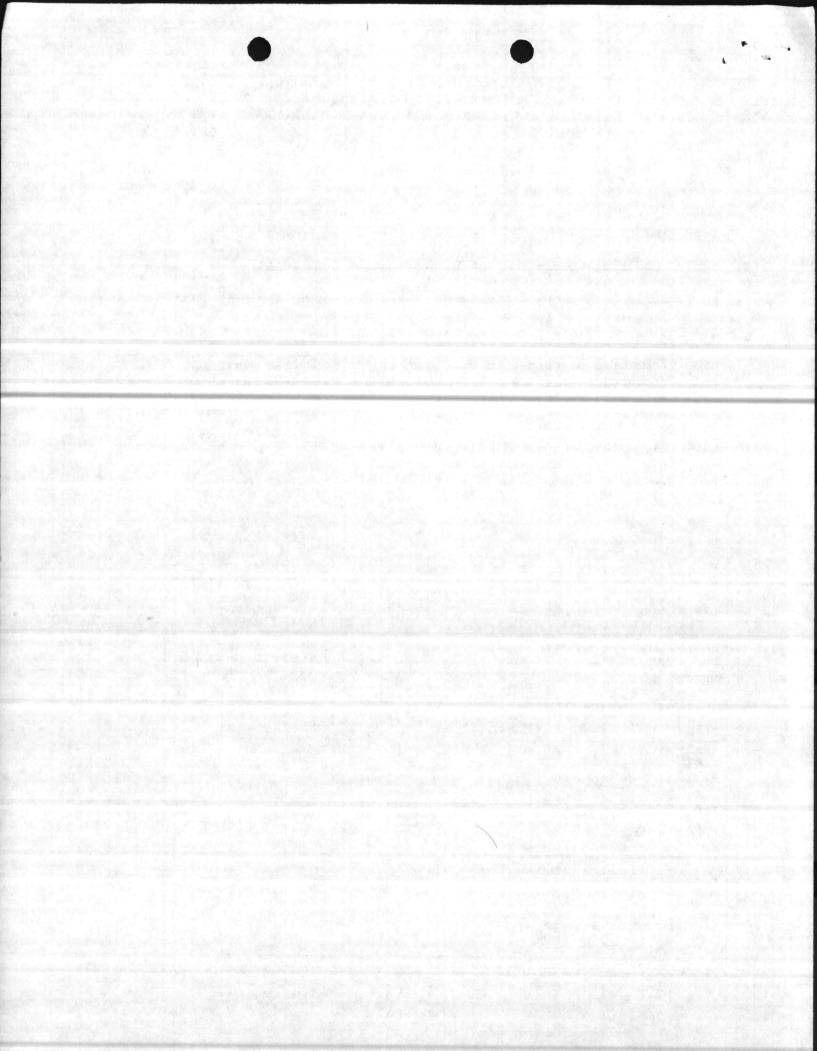
1. Enclosure (1) is forwarded to assist addressees in identifying and disposing of Chemical Agent Identification Sets (CAIS). Recommend addressees use information contained in enclosure (1) to conduct a final search for CAIS and if located advise the U.S. Army Toxic and Hazardous Materials Agency in accordance with enclosure (1).

2. Point of contact at this Command is Mr. Steve Olson, telephone (804) 444-9565, AUTOVON 690-9565 or FTS 954-9565.

P.E. By direction

Distribution: NAS OCEANA NAVPHIBASE LITTLE CREEK NAVFAC CAPE HATTERAS NAS NORFOLK PWC NORFOLK NAVSTA NORFOLK COMEODGRU TWO FLEASWTRACENLANT NORFOLK FLECOMBATRACENLANT VIRGINIA BEACH FITCLANT NORFOLK FLETRACEN NORFOLK AFXTRACTY CAMP PEARY NSC NORFOLK NSC CHEATHAM ANNEX NAVAIREWORKFAC CHERRY PT NAVAIREWORKFAC NORFOLK NAVSECGRUACT SABANA SECA NAVWPNSTA YORKTOWN NAVORDSTA LOUISVILLE

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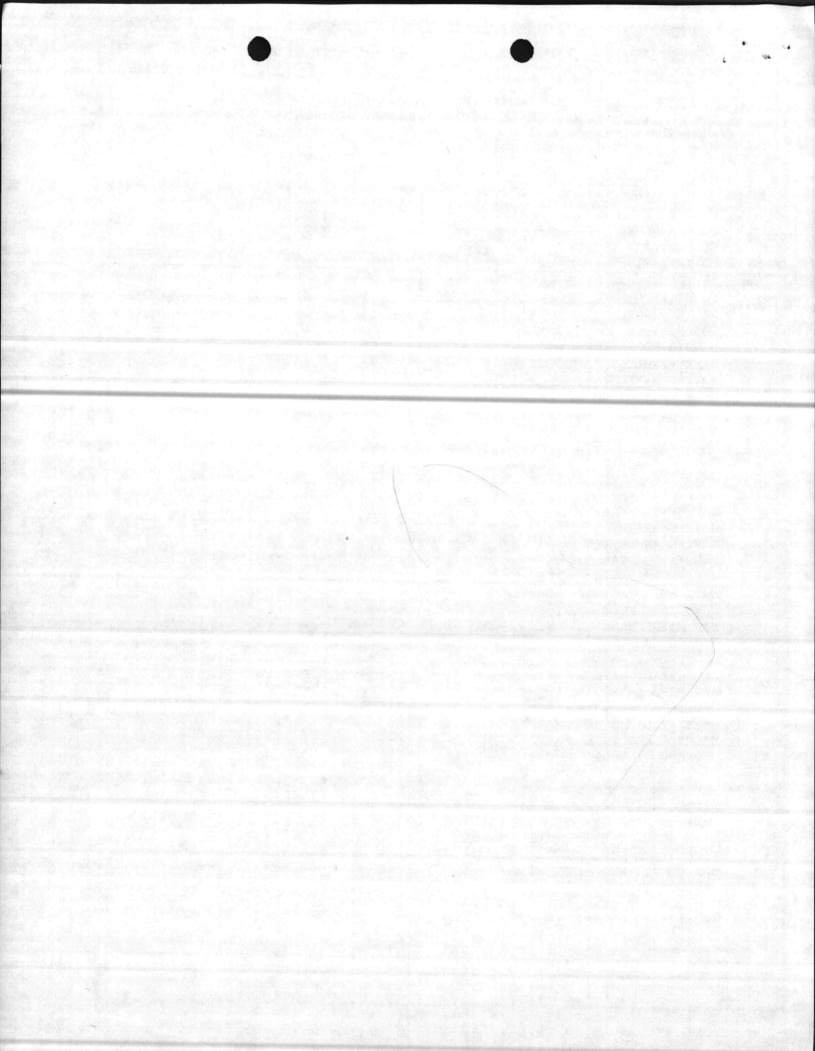


NREA

114:SG0:aed 6280

Distribution (continue) NORFOLKNAVSHIPYD PORTSMOUTH NAVREGMEDCEN PORTSMOUTH NAVSECGRUACT NORTHWEST NAVCAMSLANT NORFOLK MCAS H NEW RIVER CG MCAS CHERRY PT CG MCB CAMP LEJEUNE CG FMFLANT LANTFLT HEDSUPPACT COMDT AFSC COMTACWINGSLANT COMOPTEVFOR NAVSTA ROOSEVELT ROADS NAVENVIRHLTHCEN NORFOLK NAVENPVNTMEDU COMNAVBASE NORFOLK COMCBLANT NAS BERMUDA NAF LAJES NAS GUANTANAMO NAVSTA KEFLAVIK NAVFAC ARGENTIA NAVFAC BERMUDA NAVFAC BRAWDY NAVFAC KEFLAVIK NAVSTA GUANTANAMO NAVAVNWPNSFAC ST MAWGAN NAVAVNWPNSFAC DET MACHRIHANISH NAVACTDET HOLY LOCH NAF MILDENHALL NAS SIGONELLA NAVSUPPACT NAPLES NAVSUPPACT NAPLES DET GAETA NAVSUPPO LA MADDALENA NAVSTA ROTA NAVSUPPACT SOUDA BAY NAVMEDRSCHU THREE CAIRO NAVENPVNTMEDU SEVEN NAPLES NAVSECGRUACT AUGSBURG NAVSECGRUACT EDZELL NAVSECGRUACT KEFLAVIK NAVSECGRUACT SAN VITO DET NORMANNI NAVSECGRUACT TERCEIRA ISLAND NAVCOMMSTA KEFLAVIK NAVCOMMSTA NEA MAKRI NAVCOMMSTA THURSO

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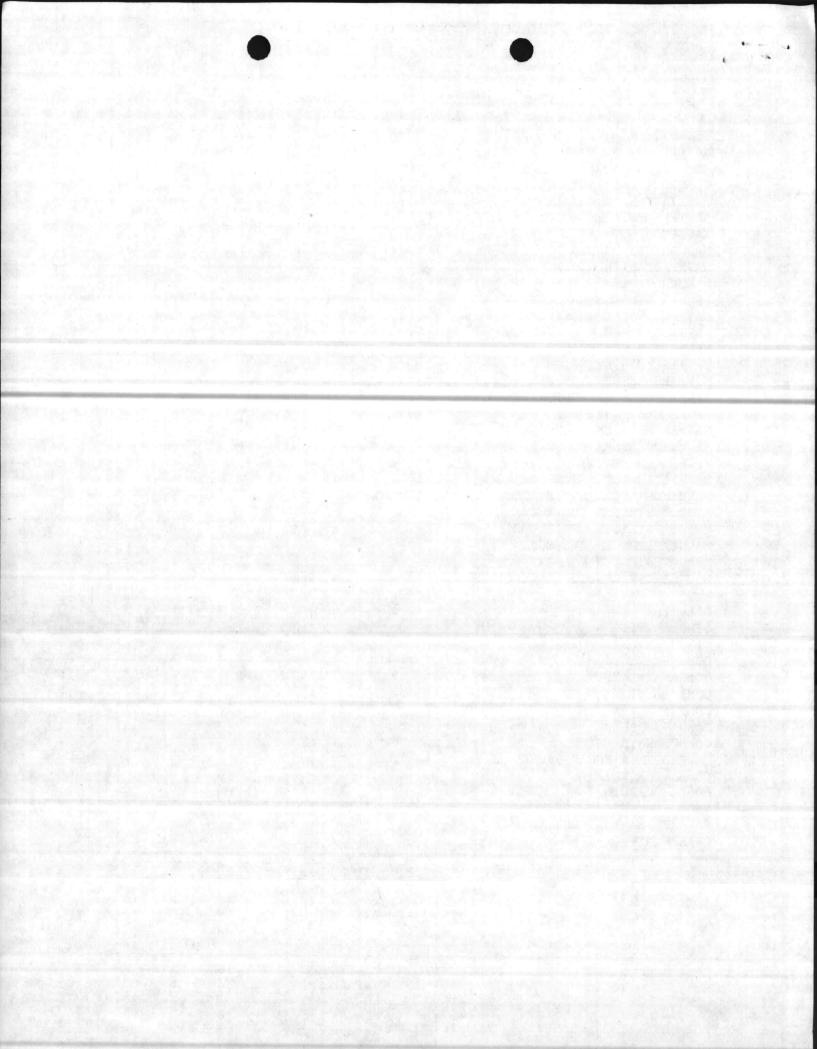
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114:SGO:aed 6280

Distribution: (continue) NAVCOMMDET SOUDA BAY ADMINSUPU BAHRAIN INACTSHIPFAC PORTSMOUTH NAVSTA PANAMA CANAL LANTFLTWPNTRAFAC ROOSEVELT ROADS NAVSECGRUACT GALETA NAVCOMMSTA BALBOA NAVMMACLANT NORFOLK NARU NORFOLK NAVMARCORESCEN WHEELING NAVRESCEN BALTIMORE NAVRESCEN SOUTH CHARLESTON NAVRESCEN CUMBERLAND NAVRESCEN HUNTINGTON NAVMARCORESCEN NORFOLK NAVMARCORESCEN NEWPORT NEWS NAVRESCEN PARKERBURG NAVMARCORESCEN RICHMOND NAVMARCORESCEN ROANOKE NAVRESCEN STAUNTON NAVRESCEN LEXINGTON NAVMARCORESCEN LOUISVILLE MARCORESTRACEN BALTIMORE MARCORESTRACEN LYNCHBURG MARCORESTRACEN RICHMOND MARCORESTRACEN ROANOKE MARCORESTRACEN SOUTH CHARLESTON

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DEPARTMENT OF THE ARMY US OF TOXIC AND HAZARDOUS MATERIALS A

DRXTH-SE

15 APR 1982

SUBJECT: Final Effort for Locating Chemical Agent Identification Sets (CAIS)

SEE DISTRIBUTION

1. The US Army Toxic and Hazardous Materials Agency (USATHAMA) is currently involved in destruction of obsolete CAIS in the Department of Defense inventory. This operation is to be completed by December 1982 at the Rocky Mountain Arsenal (RMA), Commerce City, CO.

2. Although all known stocks of these sets were shipped from world-wide locations in June 1980, small numbers of sets continue to be discovered in locations such as National Guard Armory storage areas and moth-balled naval vessels. The most cost effective way to dispose of these sets in accordance with Public Laws 91-121 and 91-441 is in the RMA demilitarization facility. Since that facility is intended to be decommissioned early in 1983, at the conclusion of current operations, it is requested that one final search of your inventories be made to identify any remaining sets. If sets are found, it is requested that you advise this Agency not later than 1 August 1982 so arrangement can be made to transport them to RMA for disposal.

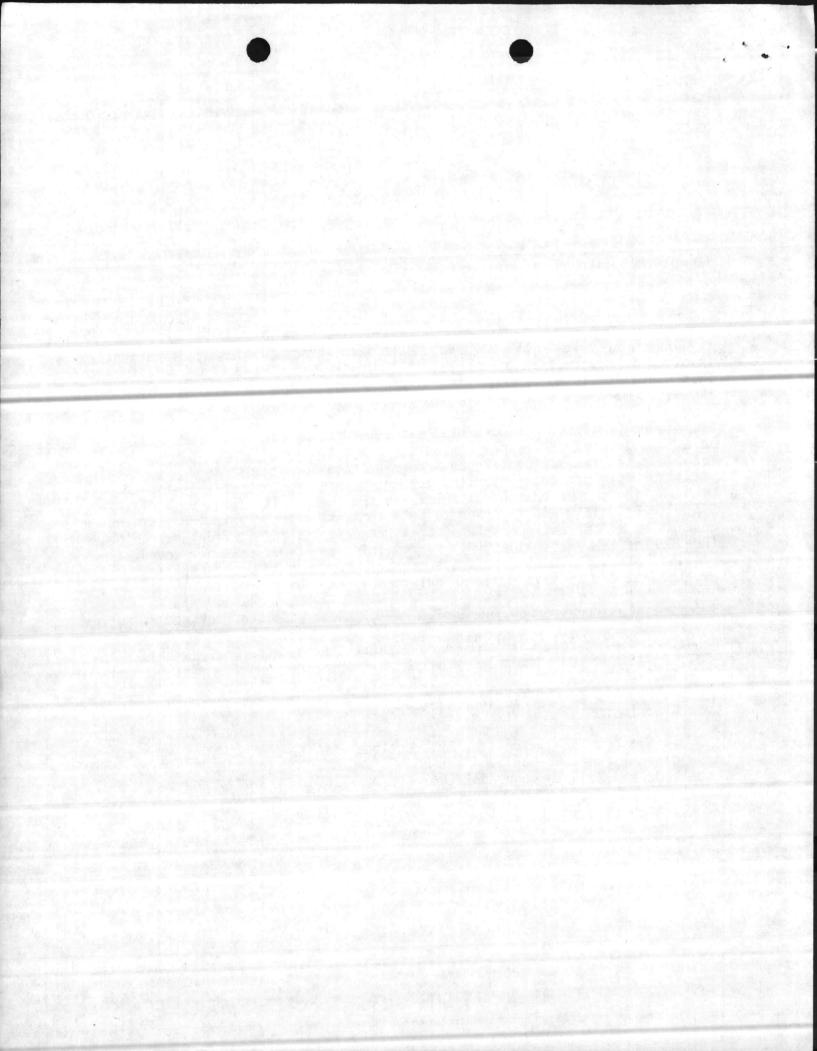
3. To assist your search, nomenclatures of these sets are provided as follows:

a. Training Set, Chemical Agent Identification, M72 (CAITS), FSN 1365-051-1807, DODAC Code K945 (Box 12" X 5 1/2" X 4").

b. War Gas Identification Set, Instructional, M1, FSN 1365-368-6154, DODAC Code K955 (Large Box 30 3/8" X 15 1/2" X 11 3/4").

c. Set Gas Identification, Instructional (NAVY): HN and Set Sample Replacement, FSN 1365-038-5183 and FSN 1365-608-5322 thru 1365-608-5329, DODAC Code X302 and X545 through X552 (Box 7 1/2" X 16" X 11 3/4").

ENCLOSURE (11



DRXTH-SE SUBJECT: Final Effort for Locating Chemical Agent Identification Sets

d. Toxic Gas Set, HD, M1, FSN 1365-219-8574, DODAC Code K941 (Pig).

e. Toxic Gas set, HD, M1, FSN 1365-563-4146; DODAC Code K942 (Pig or 10gallon pail).

f. War Gas Identification Set, Instructional, M1, FSN 1354-025-3273 and FSN 1365-025-3283, DODAC Code K951 and K952 (Pigs).

g. War Gas Identification Set, Instructional, AN-M1A1, FSN 1365-323-7728 and FSN 1365-338-0735, DODAC Code K953 and K954 (Pigs).

4. These sets can be found packaged in wooden boxes or in cylindrical steel shipping containers referred to as pigs. The sets are shown in the inclosed photographs. Both boxes and pigs are usually painted gray, blue, Army olive drab or black. Print on them is typically in black, green or yellow and usually refers to manufacture at Edgewood Arsenal, MD.

5. Points of contact for questions involving reporting, transporting and identification of these sets are Mr. William Brankowitz, USATHAMA, AV 584-2424/2556 or LT Lucas Polakowski, Technical Escort Unit, Edgewood Area of Aberdeen Proving Ground, AV 584-4331/3516.

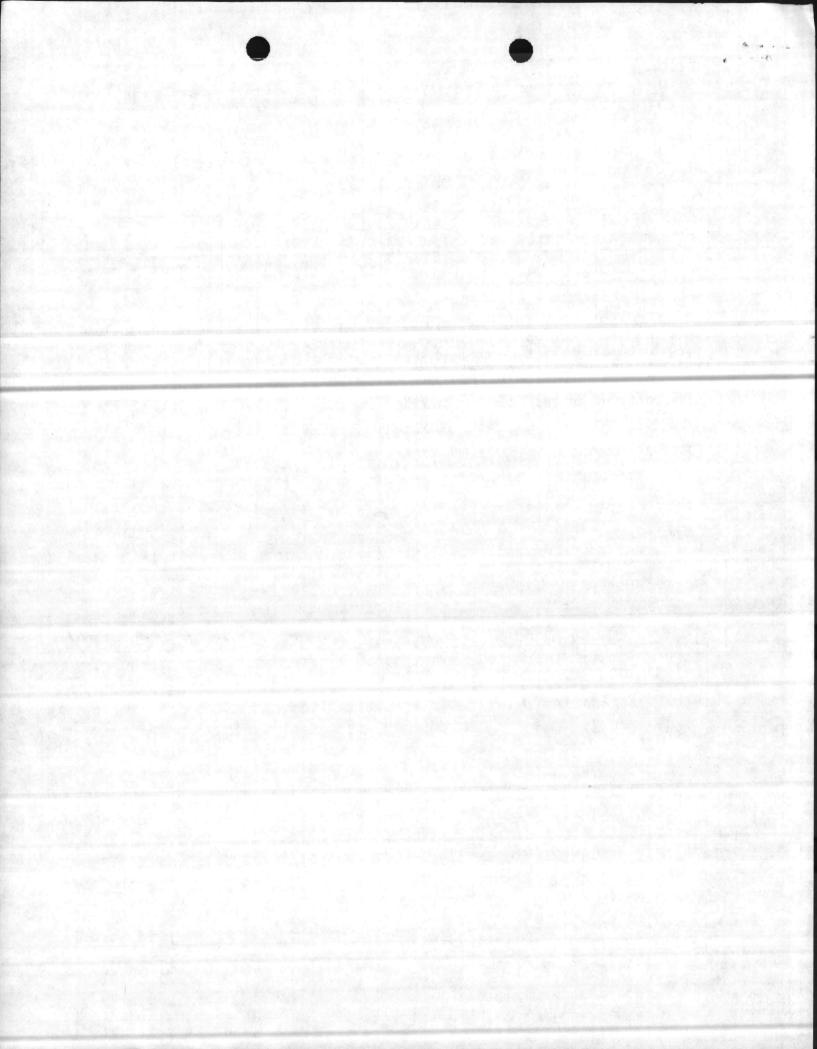
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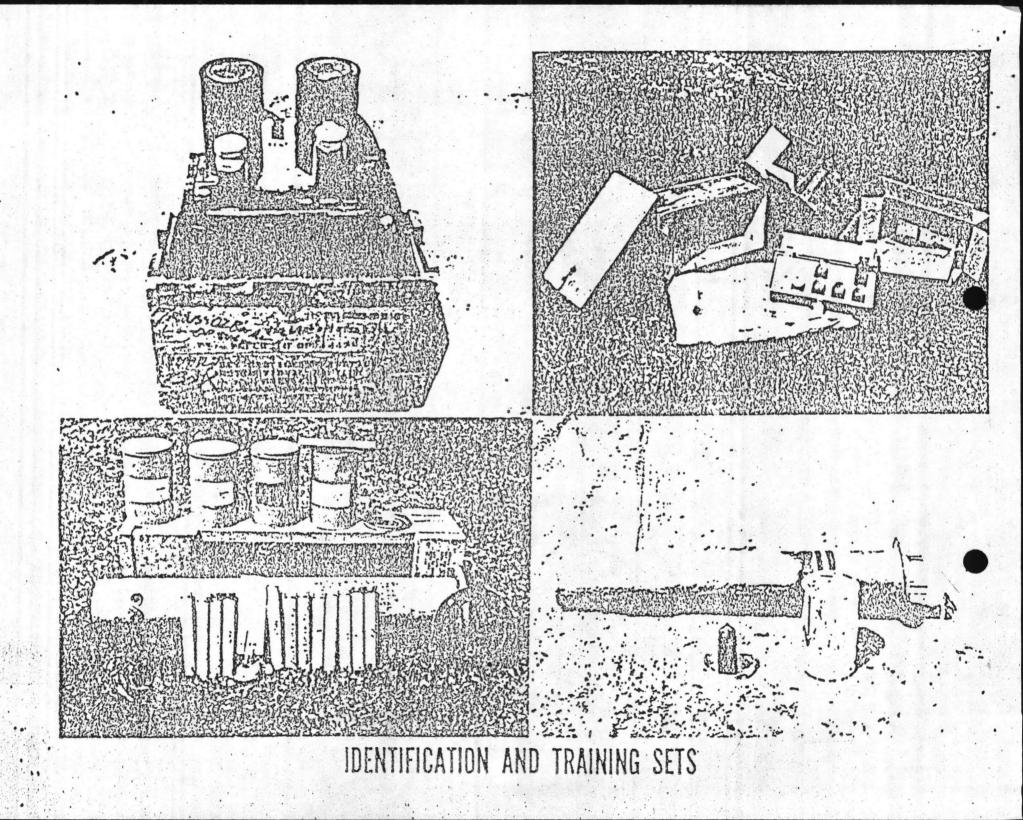
1

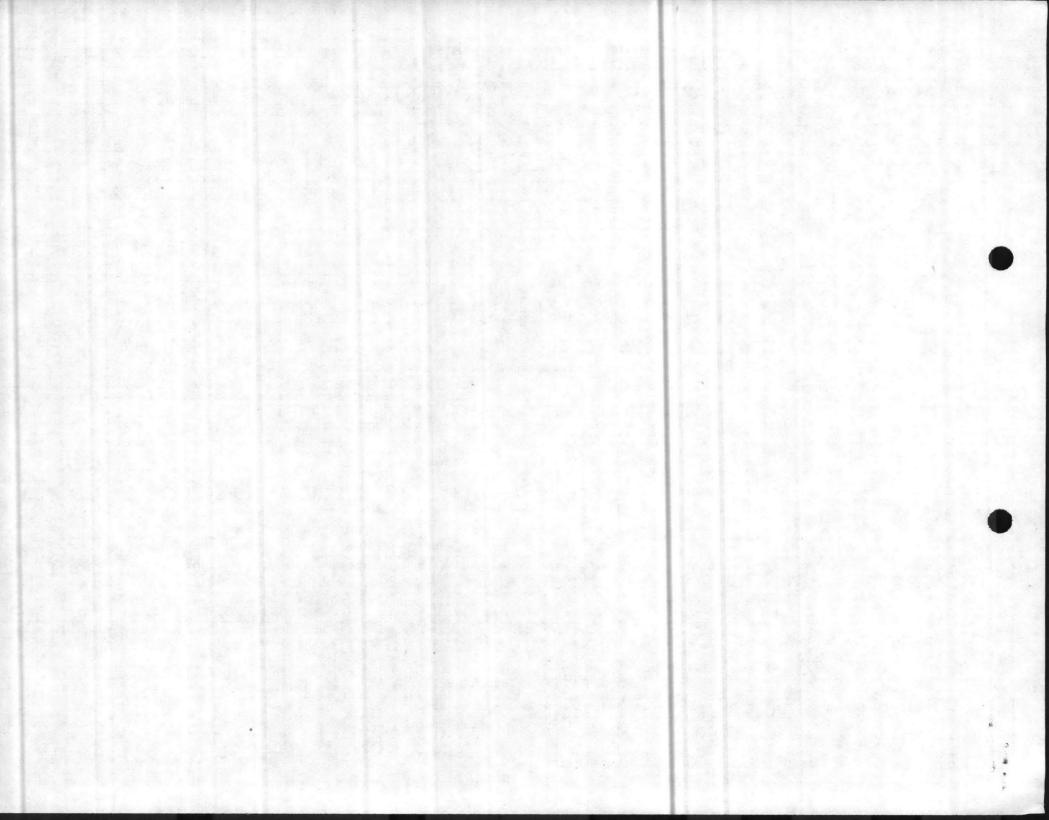
2 Inclosures

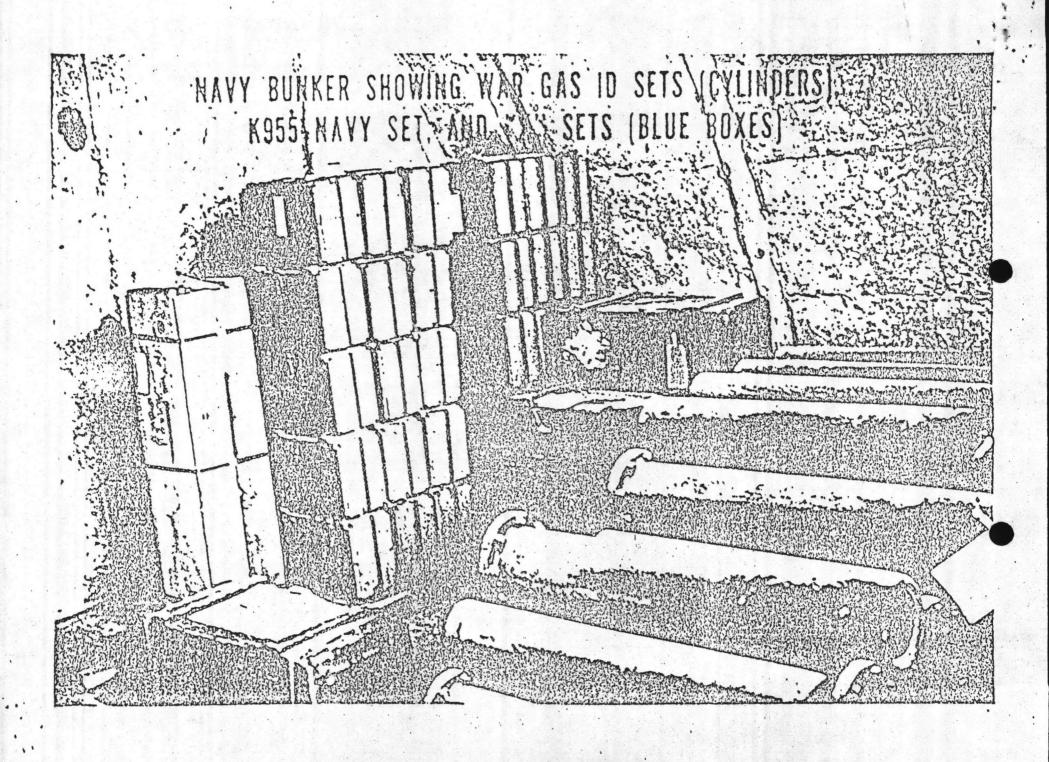
- Photo, Identification and Training Sets
- Photo, Navy Bunker w/Cylinders & Boxes

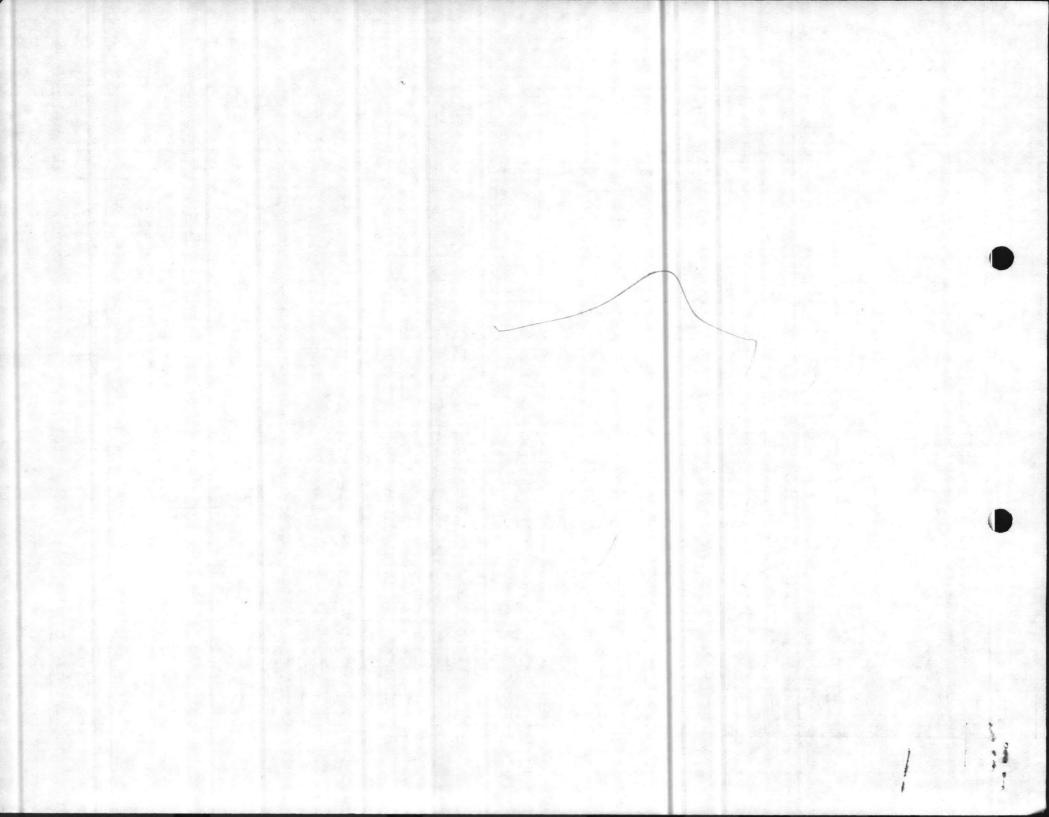
JOHN D. SPENCE Colonel, CmlC Commanding



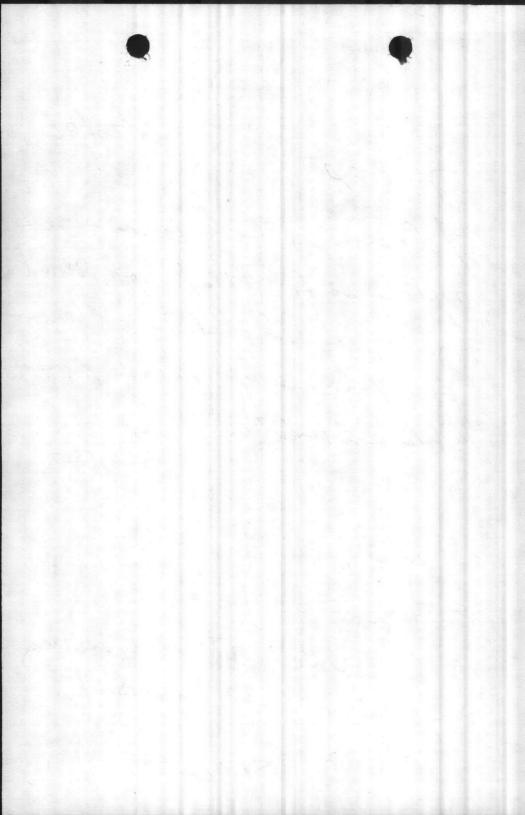








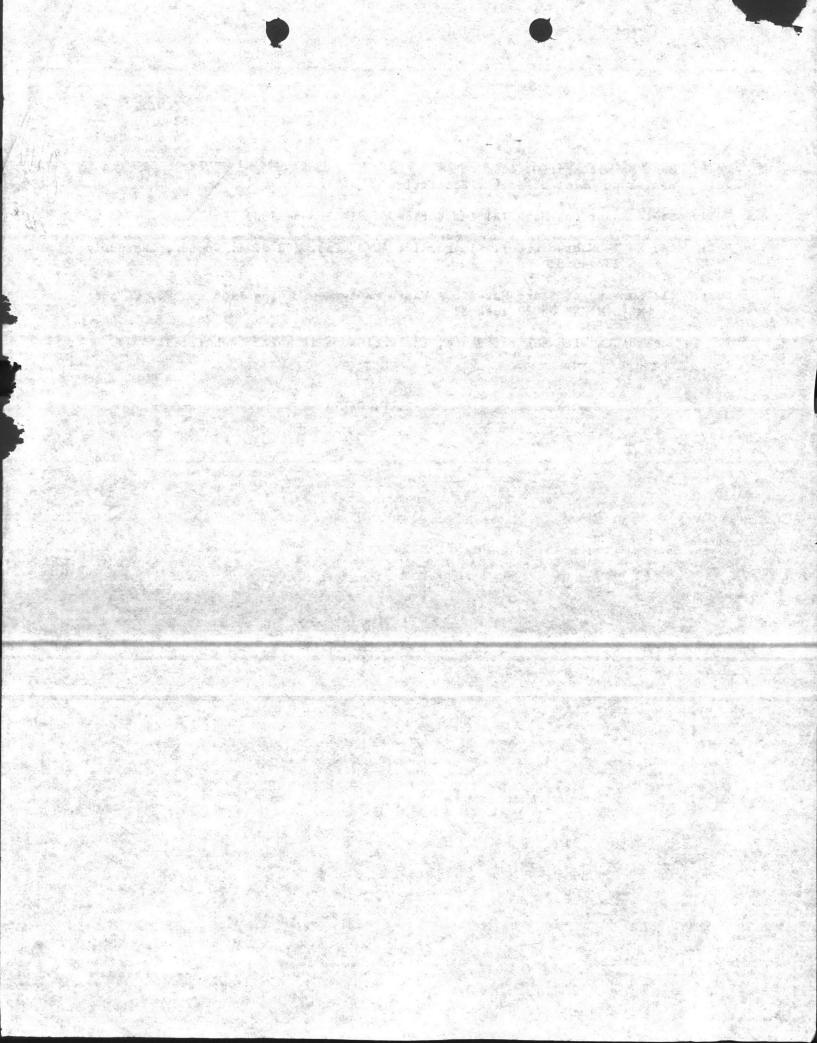
6240 BASE MAINTENANCE DIVISION Marine Corps Base Camp Lejeune, North Carolina 28542 From: Assistant Base Maintenance Officer  $\frac{6}{30}/82$ TO: MREA Subj: peliar - attached is some mise info that Col Mont had be holding, your for file etc. Alease give m Statu or Bata batton. Thy BUT PWO sent an ESR to Norfolk ON JUNE 9Th requesting Assistance with Disgisal. 8 1 W 2-24-80 D. Sharpe



MAIN/JIW/spk 6240 24 June 1982

- From: Base Maintenance Officer To: Assistant Chief of Staff, Facilities
- Subj: State Hazardous Material Inspection of 21-22 June 1982
- Ref: (a) FONECON btwn LtCol. Fitzgerald, AC/S, Fac. and J. I. Wooten, BMaintDiv on 23 Jun 82
- Encl: (1) Summary of State Hazardous Waste Management Inspection at MCB, CL and MCAS(H) NR on 22 June 82
- 1. In accordance with the reference, the enclosure is hereby submitted.

R. F. CALTA



MAIN/DDS/spk 6240 24 June 1982

From: Supervisory Ecologist To: Director, Natural Resources and Environmental Affairs Branch Subj: State and Federal Hazardous Waste Management Regulations

- Ref: (a) On-site inspection of MCB, by Mr. Jerry Rhodes and Ray Church, NC Dept. of Human Resources of 21 June 82
  - (b) On-site inspection of MCAS(H) NR, by Mr. Jerry Rhodes and Ray Church, NC Dept. of Human Resources of 22 June 82
- Encl: (1) Inspection for Interim Status Standards for Owner/Operator of Hazardous Waste Management Facilities.

1. During reference (a), State inspectors visited the following sites/organizations to determine compliance with subject regulations.

- a. Natural Resources and Environmental Affairs Branch
- b. Traffic Management Office (TMO)
- c. Long-term Storage Facility at TP-451
- d. Defense Property Disposal Office (DPDO)

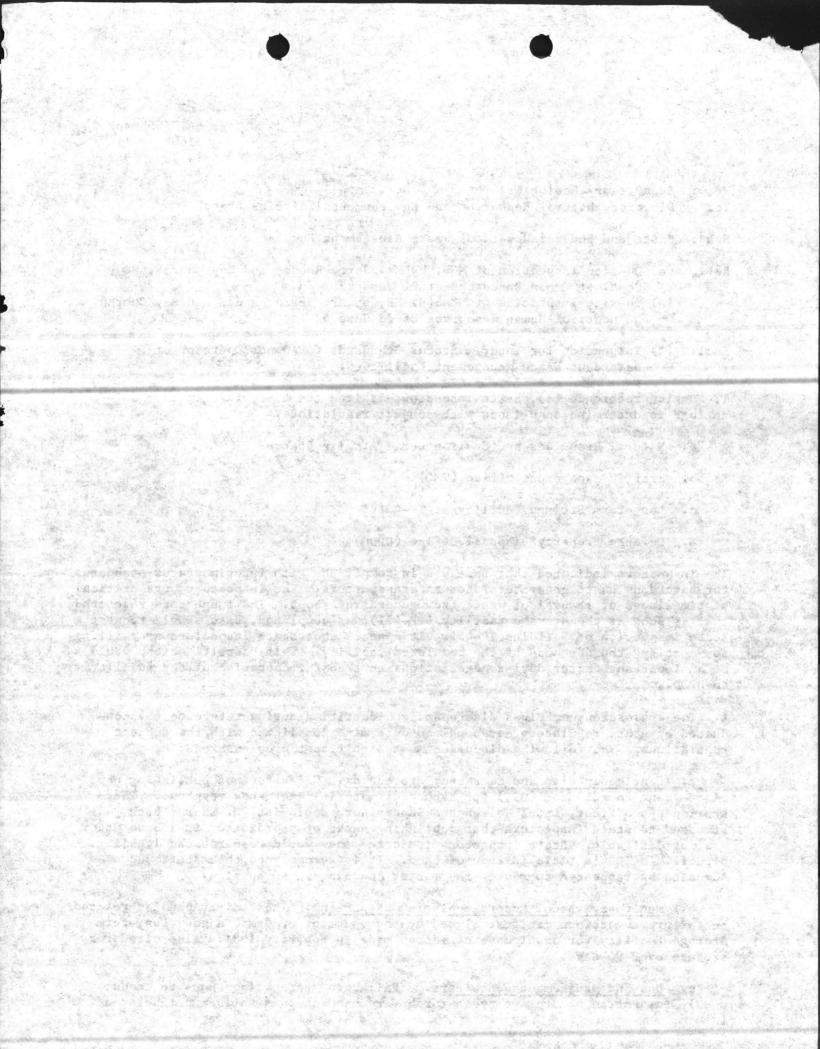
The inspectors indicated that Base was in compliance with interim status standards for hazardous waste generators/storers/transporters. The inspectors were critical of timeliness of removal of waste from generating shops. The inspectors recommended that as soon as the storage facility (TP-451) was completed, Base should request a state inspection of building TP-451. It appears that state inspectors are willing to "certify" the adequacy of the completed facility. This "certification" would be an important factor during negotiations to transfer operation of the facility to DPDO.

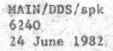
 The enclosure summarizes discrepancies identified during reference (b) conducted by state regulatory personnel to determine compliance with the subject regulations. The following discusses most significant problemsareas:

a. <u>Contigency Plan and Emergency Procedures</u>. Cited for not publishing name of on-scene coordinator (OSC) for hazardous material emergency response. The station S-4 officer, LtCol Nelson and Supervisory Ecologist, D. Sharpe both stressed to state inspectors that publishing names of coordinator in a Base Order was not desirable. State inspectors indicated they would research the legality of utilizing OSC's title in lieu of name. It is recommended that Staff Judge Advocate be requested to review the matter and express an opinion.

b. <u>Manifest,System, Recordkeeping and Reporting</u>. These discrepancies related to failure toobtain a manifest signed by the operator of Camp Lejeune Long-term Storage Facility for a shipment of wastes made in February 1981. Also cited for storage over 90 days.

c. Use and Management Containers. Failure of generating shops to conduct weekly inspection of storage areas for hazardous waste and failure to label and





Subj: State and Federal Hazardous Waste Management Regulations

close container properly.

3. State inspectors indicated that the formal state followup report would identify the failure of Base (i.e., DPDO/TMO) to move the wastes to Base storage facility as the major cause of MCAS(H) NR non-compliance with the 90 day limit. State inspectors appeared pleased with the efforts made by MAG(26) and MAG(29) supply organizations to assist with disposal of hazardous wastes. Inspectors advised MCAS(H) representatives that proposed chrome plating operation may require modification of MCAS(H) NR registration with EPA/State.

4. Shop visits and discussion with supply officers indicated the following management considerations:

a. Routine use of acetone, methyl ethyl ketone and other specifically regulated solvents, degreasers and paints.

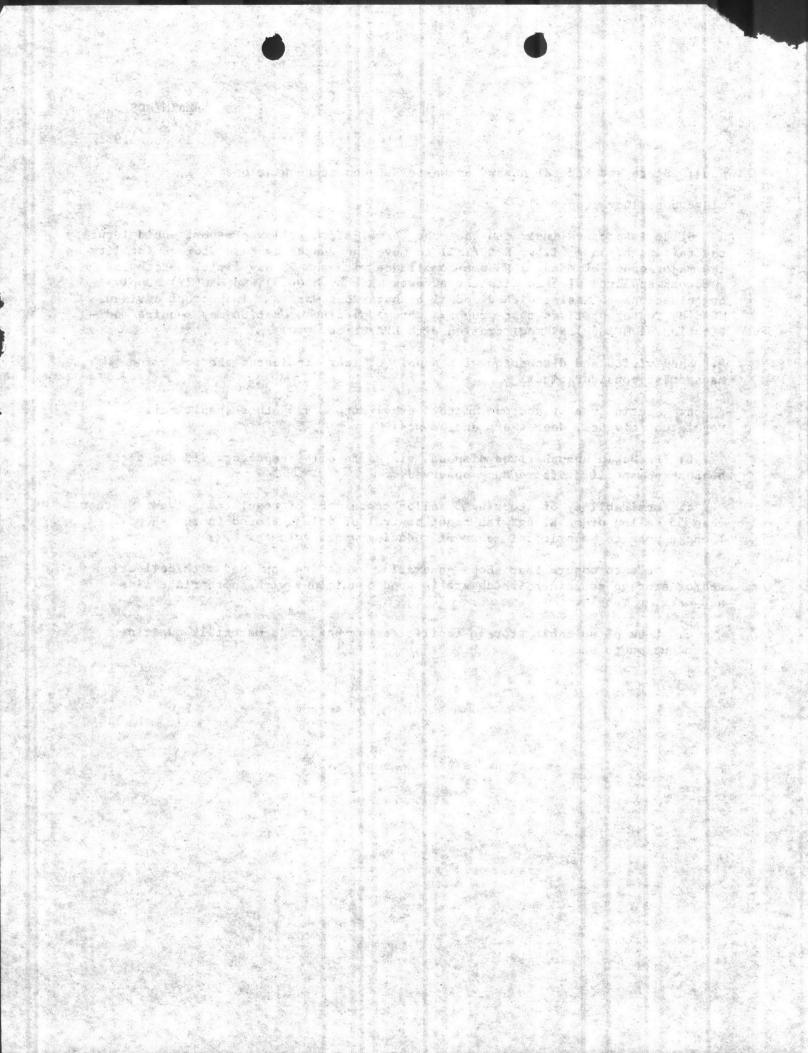
b. Probable unauthorized disposal via waste oil (inspectors did not cite because no specific discrepancy observed.

c. Desirability of stocking 5 gallon containers of regulated solvents rather than 55 gallon drums along with tight control of volume stored in the shops. These appear to be critical means of reducing waste volumes.

d. Need to ensure that shops generating waste are equipped with collection and/or storage containers which are in good condition, with appropriate lids and marking labels.

e. Lack of suitable storage facilities for hazardous materials awaiting distribution to shops.

D. D. SHARPE

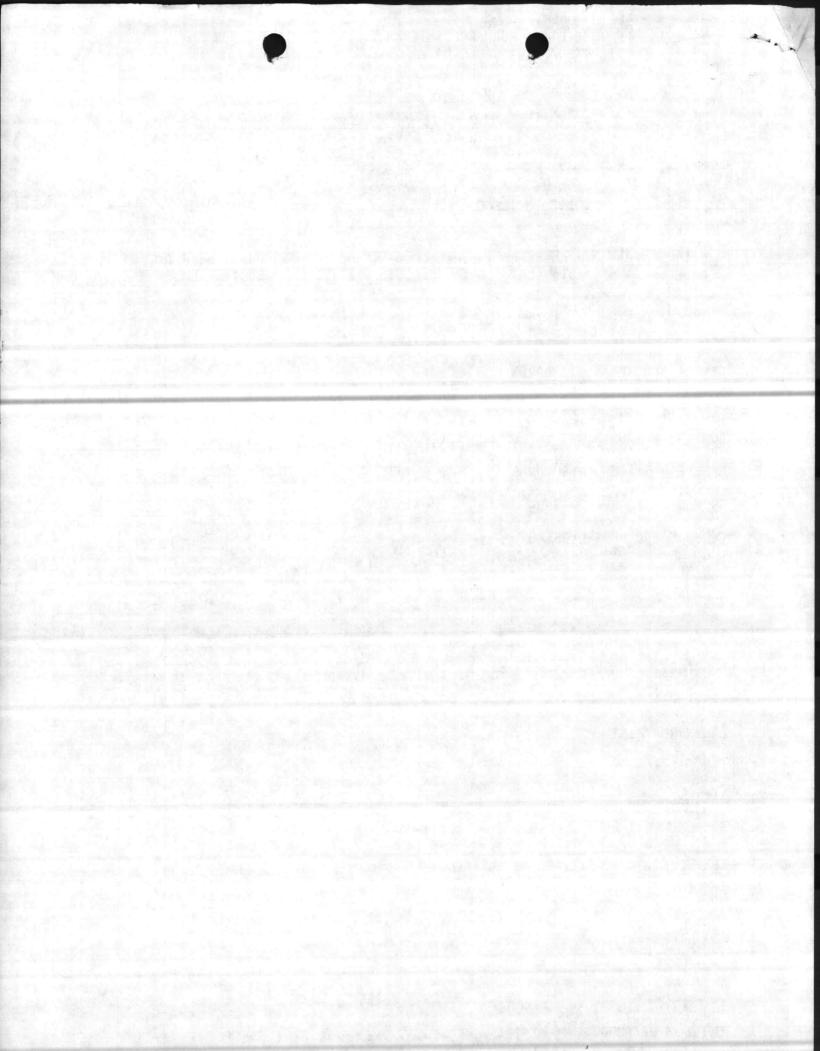


INSPECTION FORM FOR INTERIM STATUS STANDARDS FOR OWNER/CORATOR OF HAZARDOUS WASTE MANAGENT FACILITIES

Nam	e of Site EPA I.D.	2	Ons A Coun	ty		
J_	ation (	D.W.				
Date	e de	ignature				
INST	TRUCTIONS: Place a check to indicate Compliance		Compliance	(NC) on Not		
	Applicable (NA). Cite specific viola	tion by	Section No	(NC) OF NOC		
		<u>NO</u>	<u>NA</u>	Violation(s)		
1.	GENERAL					
2.	GENERAL FACILITY STANDARDS		~ ~	: : : : : : : : : : : : : : : : : : :		
3.	PREPAREDNESS AND PREVENTION					
4.	CONTINGENCY PLAN AND EMERGENCY PROCEDURES			265.52		
5.	MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING	V	<	262.31 3		
6.	GROUND-WATER MONITORING		~			
7.	CLOSURE AND POST-CLOSURE		~			
8.	FINANCIAL REQUIREMENTS		and provide	9		
	USE AND MANAGEMENT OF CONTAINERS	v	-	265.173		
).	TANKS		~			
í.	SURFACE IMPOUNDMENTS		-			
2.	WASTE PILES		~			
3.	LAND TREATMENT		-			
ı.	LANDFILLS		~			
i.	INCINERATORS		~			
5.	THERMAL TREATMENT		~			
7.	CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT		~			
8.	UNDERGROUND INJECTION		~			
1997						
Je.	~.	YE	<u>s</u>	<u>N0</u>		
	Imminent hazard	(	)	14		

SOLID & HAZARDOUS WASTE

Enclosure (1)

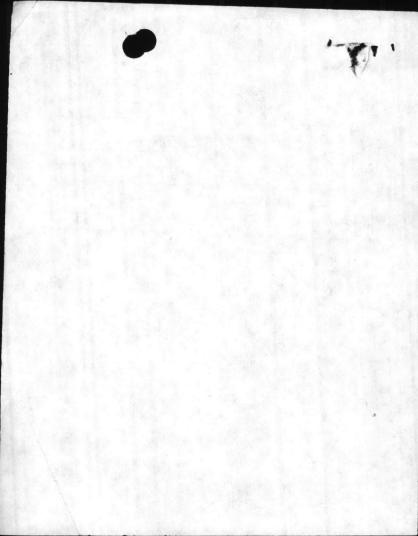


NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS BRANCH Base Maintenance Division Marine Corps Base Camp Lejeune, North Carolina 28542 Date 7- 15-82 From: Director, NREAB To: Damy Sie attach - What is Subj: this about ? Have you seen the 7 fem 12 the from EPA.? Julia Didnot get 7 June Letter, Eidenthy EPA People in Atlanta got Centured. about LANT DIUS 22 Feb 82 Letter See ND reason for us to take any Action. Sharpe

mr groß bot

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COMMENTS:





DEPARTMENT OF THE NAVY ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA 23511

TELEPHONE NO. (804) 444-9565 IN REPLY REFER TO: 114:SGO:aed 6280

2 3 JUN 1982

¥

U.S. Environmental Protection Agency Region IV 345 Courtland Street Atlanta, Georgia 30365

> Re: Marine Corps Base, Camp Lejeune - NC6170022580 Marine Corps Air Station, Cherry Point - NC1170027261 Naval Facility, Cape Hatteras - NC8170022570

Gentlemen:

With reference to your letter of 7 June 1982 concerning enclosure (1), be advised that the U.S. Navy is not attempting to withdraw Resource Conservation and Recovery Act (RCRA) hazardous waste permit applications and notifications previously forwarded by enclosures (2) and (3) for subject activities. Enclosure (1) was prepared in accordance with enclosure (2) to document the non-hazardous nature of Domestic Wastewater Treatment Plant sludges which were assumed to be non-hazardous when filing RCRA Hazardous Waste Part A permit applications. These sludges were assumed to be non-hazardous based upon minimal upstream industrial waste sources and manufacturing operations.

U.S. Naval Facility, Cape Hatteras is a small quantity generator not requiring submission of HW notification or Part A permit application. This Activity was referenced in enclosure (2) as a small quantity generator and as the owner of a Domestic Wastewater Treatment Plant.

In accordance with your letter of 7 June 1982, all future HW correspondence will be mailed to the State of North Carolina with copies to EPA Region IV.

Point of contact on this matter is Mr. Steve Olson telephone (804) 444-9565 or FTS 954-9565.

Sincerely yours,

J. R. BAILEY, P.E. Head, Environmental Quality Branch Utilities, Energy and Environmental Division By direction of the Commander

Enclosures

- (1) LANTNAVFACENGCOM letter 114:JGW 6280 of 22 Feb 1982 (Non-hazardous nature of WTP sludges
- (2) RCRA Part A Application letter 19 Nov 1980
- (3) HW notification letter 18 Aug 1980

Copy to: (See page 2)





2 3 JUN 1982

-	
	-

114:SGO:aed 6280

Copy to: Solid and Hazardous Waste Management Branch Environmental Health Services Branch Department of Human Resources P. O. Box 2091 Raleigh, NC 27602 Attn: Mr. O. W. Strickland, Head

Commanding General

Marine Corps Base Camp Lejeune, NC 28542

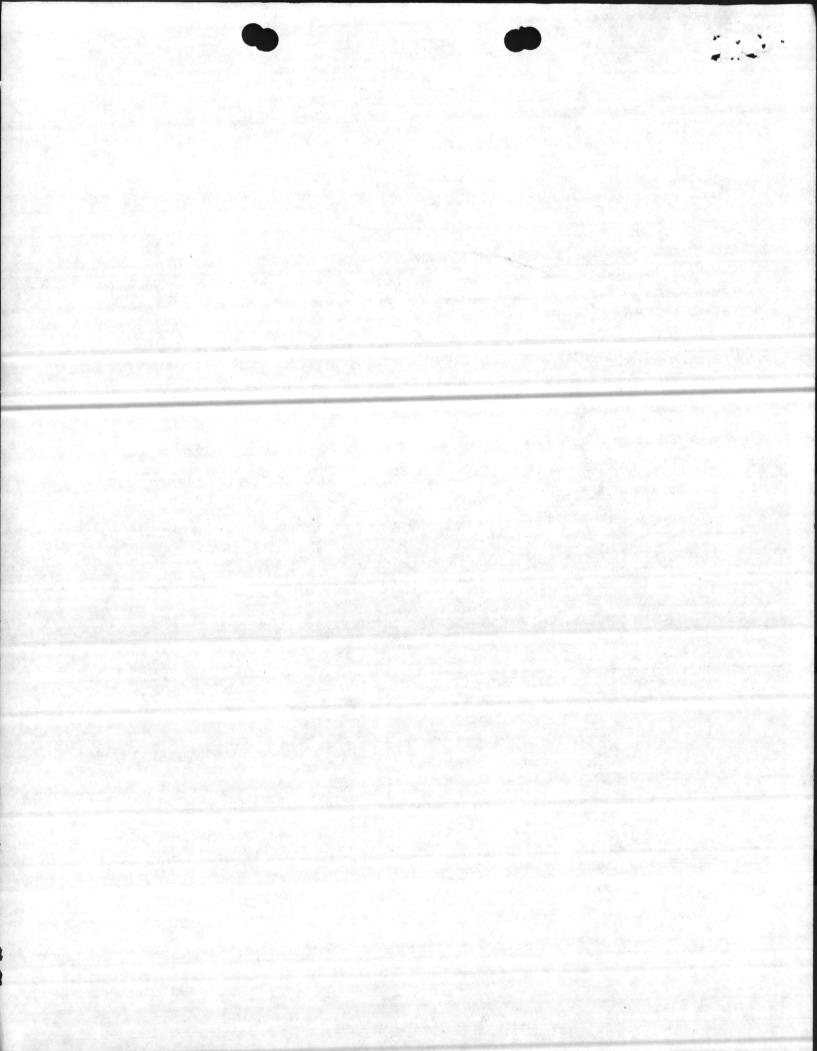
Commanding General Marine Corps Air Station Cherry Point, NC 28533

Commanding Officer Naval Facility Cape Hatteras Buxton, NC 27920

Commandant of the Marine Corps Headquarters, U.S. Marine Corps Washington, DC 20380

Commander Oceanographic Systems, Atlantic Box 100 Norfolk, VA 23511

Commander Naval Facilities Engineering Command 200 Stovall Street Alexandria, VA 22332 Attn: Code 112





444-9365 Autovon 690-9566

114:JGW 6289

2 2 FEB 1962.

U.S. Environmental Protection Agency Region IV RURA Activities 345 Courtland Street Atlanta, GA 30308

Gentlemen:

In reference to this Command's Hazardous Waste (HW) Permit Application transmittal latter of 18 Hovember 1980, the enclosed laboratory analysis data sheets are provided as verification of the non-HW nature of domestic wastewater treatment plant sludges from:

Harine Corps Base, Camp LejeuneSeven PlantsHarine Corps Air Station, therry PointThree PlantsHaval Facility, Cape EatterasOne Plant

You will note that the initial analyses of two sludges from Marine Corps Air Station, Cherry Point (Bogue and Atlantic), and one from Marine Corps Bass, Camp Lejeune (Camp Geiger) indicated high selenium levels. Unable to determine any source of selenium and suspecting analytical error, re-sampling and re-analysis were initiated which subsequently confirmed non-EW characteristics.

Should you have any questions concerning this matter, the point of contact is Mr. Jerry Wallmayer at telephone (804) 444-9566.

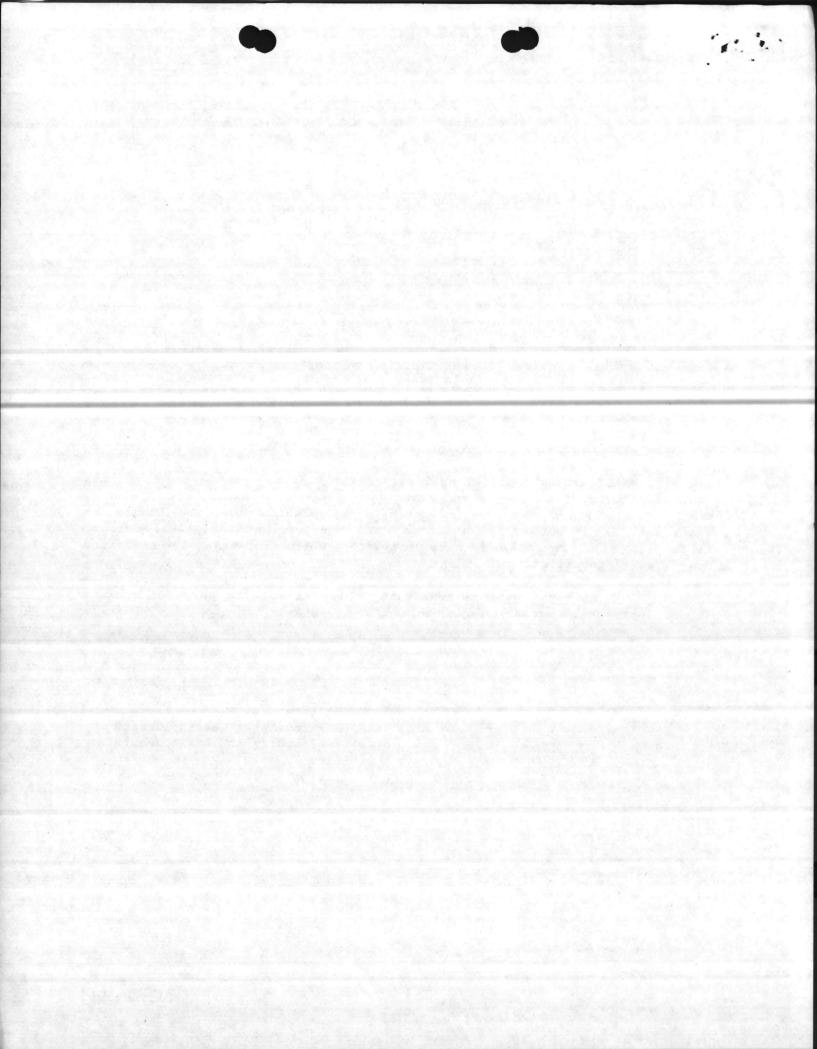
Sincerely yours,

J. R. BAILEY, P.E. Head, Environmental Quality Branch Utilities, Energy and Environmental Division By direction of the Commander

Copy to: (See page 2)

Wallmeyer Conners 2/19/82 nrs

Enclosure []] Attal int . .....



EPA REGION IV HAZARDOUS WASTE PERMIT APPLICATION SUMMARY

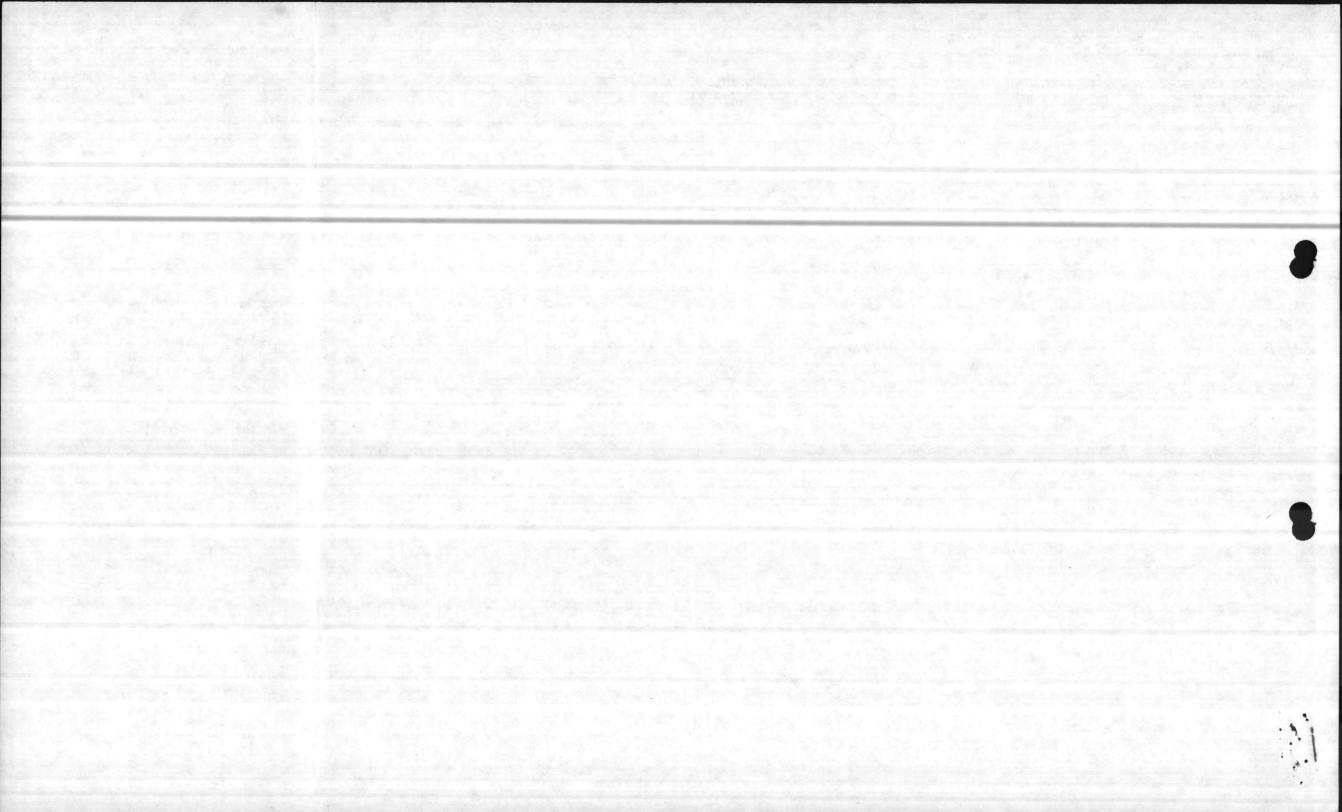
	General		Domestic WWTP*					
Activity EPA HW ID No.	Description	Location .	Sludge Total Avg. WWTP MGD	<u>Storer</u>	Treater	Disposer	Transporter	<u>Remarks</u>
1. Naval Ordnance Station, Louisville KY 5170024173	Ordnance/equipment storage/handling/ repair (including plating)	Louisville, Kentucky	No	Yes	Yes	No	No	Industrial Wastewater Treatment Plant (IWTP) will be upgraded via an IWTP upgrade currently under study (i.e., only HW treatment).
2. Marine Corps Base, Camp Le jeune NC 6170022580	Weapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)	Jacksonville, North Carolina	Yes ~7.5	Yes	No	Yes	Yes	Transport consists only of transport of HW from Marine Corps Air Station, New River. (See application for specifics on asbestos disposal) and HW transport to Marine Corps Air Station, Cherry Point IWTP.
3. Marine Corps Air Station, Cherry Pt. C 1170027261	Air station, air- craft repair (including plating)	Havelock, North Carolina	¥es №2.0	Yes	Yes	Yes	Yes	Transport consists only of transporting small quanti- ties from outlying facili- ties to Marine Corps Air Station, Cherry Point. Treatment consists only of an IWTP and a planned solvent recovery via distillation unit. Dis- posal consists only of asbestos and the IWTP sludge. (See application for specifics on asbestos disposal.) Application includes DPDO and NARF.

\*Wastewater Treatment Plant (flow of wastewater not sludge)



Activity EPA HW ID No.	General Description	Location	Domestic WWTP* <u>Sludge</u> Total Avg. WWTP MGD	Storer	<u>Treater</u>	Disposer	Transporter	Remarks
Marine Corps Air Station, New River NC \$170022570	Air station, air- craft (minor) repair	Jacksonville, North Carolina	No	No	No	No	No	Permit not required as on-site storage of HW will not exceed 90 days prior to off-site disposal.
Cape Hatteras	Collect oceano- graphic data	Cape Hatteras, North Carolina	Yes 0.030	No	No	No	No	Permit not required as on-site storage of HW will not exceed 90 days prior to off-site disposal.
Marvey Point - ummary: (3) Form 1 appli	Training .cations and (5) Form 3 appl	Harvey Point, North Carolina	No	No	No	No	No	Permit not required as on-site storage of HW will not exceed 90 days prior to off-site disposal.

(1) Primary intent of the activities in the LANTNAVFACENGCOM area is to contract out most HW disposal (e.g., most operations consist of stored drums awaiting contractor disposal).
 (2) There is no known underground injection of HW. UIC applications will be for Class V wells only.





(804) 444-4923

114:PAR 6280

8 TOY 1980

CERTIFIED MAIL RETURN RECEIPT REQUESTED

U.S. Environmental Protection Agency Region IV RCRA Activities 345 Courtland Street, N.E. Atlanta, GA 30308

Gantlemen:

In reference to this Command's Hazardous Waste Notification letter of 18 August 1980, Consolidated permit applications (Form 1) and Hazardous Waste (HW) permit applications (Form 3) are herein forwarded for the following activities:

a. Naval Ordnance Station, Louisville, Kentucky: Form 1 and Form 3.

b: Marine Corps Base, Camp Lejeune, North Carolina: Form 1 and Form 3.

c. Marine Corps Air Station, Cherry Point, North Carolina: 1 Form and a Form 3 for each of the following operators of onboard treatment, storage and disposal (TSD) operations:

1. Marine Corps Air Station, Cherry Point

2. Naval Air Rework Facility, Cherry Point

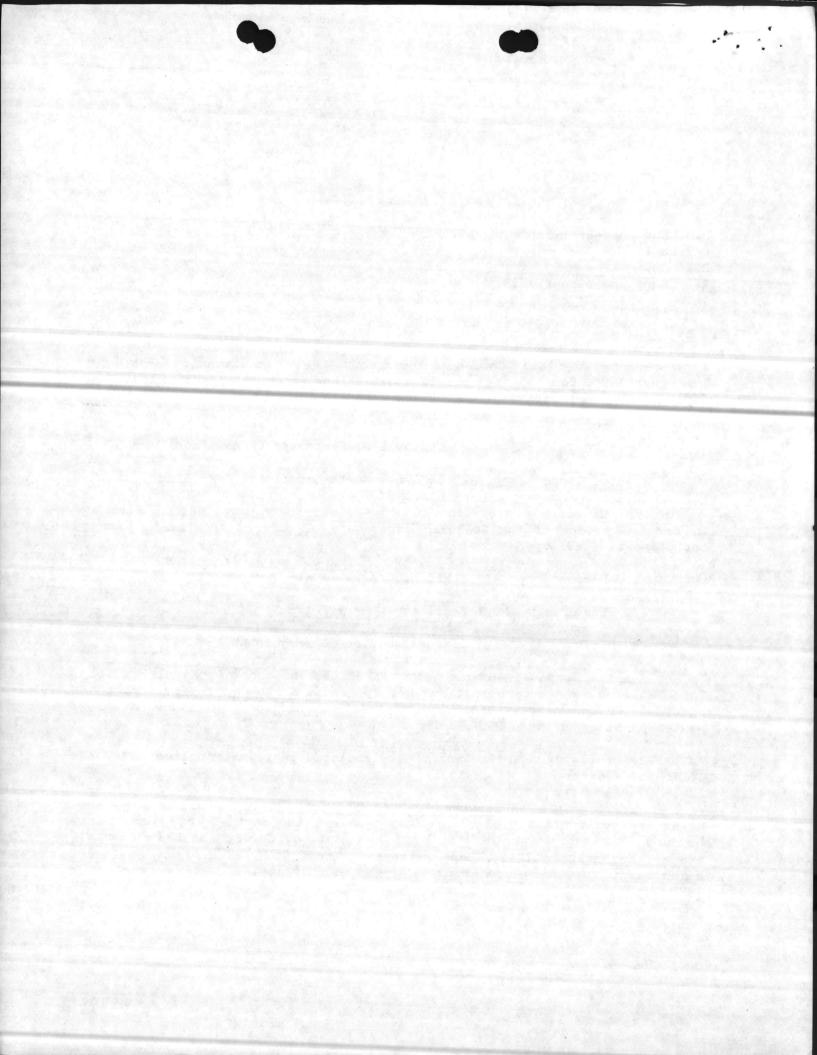
3. Defense Property Disposal Office, Cherry Point

d. Marine Corps Air Station, New River, North Carolina; Naval Facility, Cape Hatteras, North Carolina; and Harvey Point, North Carolina: Permit not required as these activities do not treat or dispose nor store hazardous wastes on-site for more than 90 days.

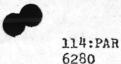
To ensure complete understanding of the enclosed HW permit applications, the following general statements apply:

1. Domestic Wastewater Treatment Plant Sludges - Domestic wastewater treatment plant sludges are generated at the Marine Corps Base, Camp Lejeune (7 plants), and Marine Corps Air Station, Cherry Point (3 plants), and at the Naval Facility, Cape Hatteras. These sludges are not considered RAKOWSKI hazardous waste based upon minimal upstream untreated industrial wastes or Brite 11/17/80

Enclosure (2)







manufacturing operations. These sludges will be analyzed for the characteristic of Extraction Procedure (EP) toxicity in accordance with 40 CFR 261.24. Results will not be available prior to 19 November 1980. These results and certification that the domestic wastewater treatment sludges at these activities should not be classified as a HW will be forwarded to you at a later date.

2. <u>Defense Property Disposal Office (DPDO)</u> - The DPDOs have been directed to assume responsibility for disposal of the majority of hazardous wastes generated by all Department of Defense activities. A Form 3 listing the MCAS CHERRY POINT DPDO as an operator of a HW treatment, storage or disposal (TSD) facility onboard the activity has been included. In many cases for the near future, the DPDOs will not be capable to physically accept custody of HW, but will be responsible for establishing disposal contracts.

3. Other TSD Operators - Major TSDs, tenants onboard an activity, have been identified as operators with the inclusion of a separate Form 3. A typical example includes the storage of large quantities of hazardous waste at a major industrial waste generator such as the Naval Air Rework Facility.

Please note that also herein forwarded is a summary of the hazardous waste permit applications including general descriptions, EPA HW identification numbers, activity locations, and a summary of the hazardous waste activity requiring interim status permits.

Sincerely yours,

J. G. DEMPSEY Lieutenant Commander, CEC, USN Acting Head Facilities Management Department By direction of the Commander

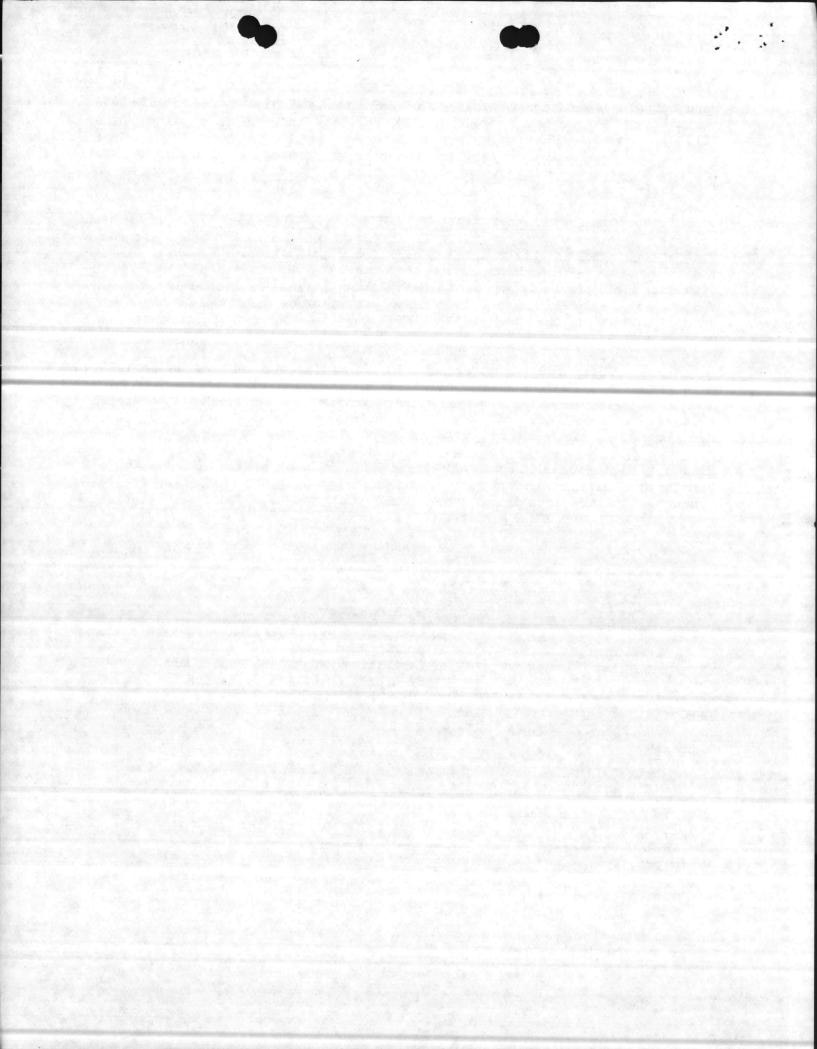
Copy to: Solid and Hazardous Waste Management Branch 306 North Wilmington Street Raleigh, NC 27602

Division of Environmental Health Solid Waste Program 275 East Main Street Frankfort, KY

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(Continued on Page 3)



## JENNINGS LABORATORIES, INC.

1118 CYPRESS AVENUE . P. O. BOX 851 . VIRGINIA BEACH, VA. 23451 . PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

> NATIONAL SOYBEAN PROCESSORS ASSOCIATION

Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

April 23, 1981

DATE:

## CERTIFICATE OF ANALYSIS

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLE OF DRIED SLUDGE

MARKED Onslow Beach, Decomposed Bed #1 Camp Lejeune MCB taken 3/30/81 @ 1140 ho

Sample delivered by Mr. Wallmeyer 3/31/31

OFFICIAL SAMPLE BY:

E.P.TOXICITY METALS	AS IS		LEACHATE
Arsenic	<0.01	ppm	<0.01 mg/l
Barium	119.40	ppm	0.33 mg/l
Cadmium	3.90	ppm	0.01 mg/l
Chromium	28.00	ppm	0.08 mg/l
Lead	130.30	ppm	0.08 mg/l
Mercury	0.022	ppm	<0.002 mg/l
Selenium	31.00	ppm	<0.005 mg/l
Silver	1.03	ppm	<0.005 mg/l

## E.P. TOXICITY ORGANICS

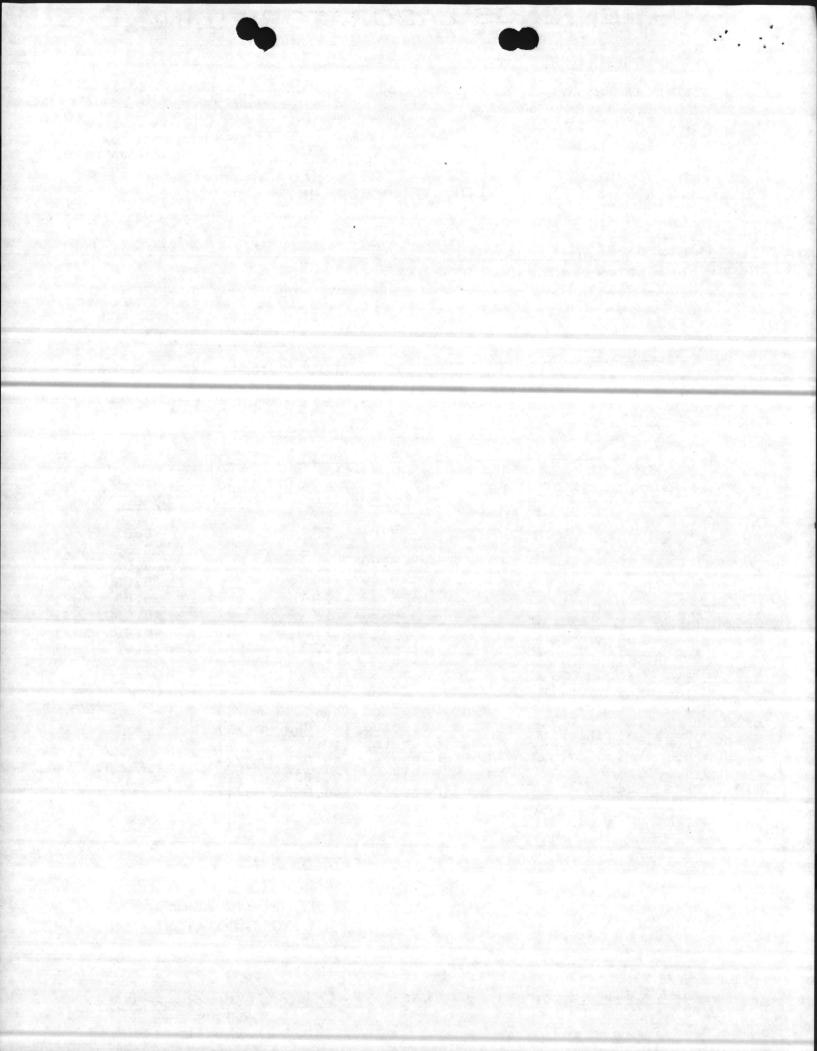
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Respectfully submitted, JENNINGS LABORATORIES, INC.

CHEMIST

Laboratory Analysis No. 110

OFFICIAL METHODS OF A.O.A.C., A.O.C.S., A.S.T.M., A.P.H.A., E.P.A. AND N.S.P.A. USED IN ALL ANALYSIS UNLESS OTHERWISE STATED



### JENNINGS LABORATORIES, INC. TICAL AND CONSULTING CHE

### 1118 CYPRESS AVENUE . P. O. BOX 851 . VIRCINIA BEACH, VA. 23451 . PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

> NATIONAL SOYBEAN PROCESSORS ASSOCIATION

Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

#### **CERTIFICATE OF ANALYSIS**

April 28, 1981 DATE:

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLE OF SLUDGE (Wet)

Rifle Range Decomposed, Bed #2 Camp Lejeune MCB N.C. taken 3/30/81 @ MARKED

1045 hours. Samples delivered by Mr. Wallmeyer 3/31/81

OFFICIAL SAMPLE BY:

E.P.TOXICITY METALS	<u>AS IS</u>	LEACHATE
Arsenic	<0.01 ppm	<0.01 mg/l
Barium	15.00 ppm	0.40 mg/l
Cadmium	0.60 ppm	0.01 mg/1
Chromium	4.20 ppm	0.06 mg/1
Lead	24.40 ppm	0.03 mg/l
Mercury	<0.002 ppm	<0.002 mg/1
Selenium	5.90 ppm	<0.005 mg/l
Silver	<0.005 ppm	<0.005 mg/1
	영국은 전쟁을 가지 않는 것이 있는 것이 없다.	

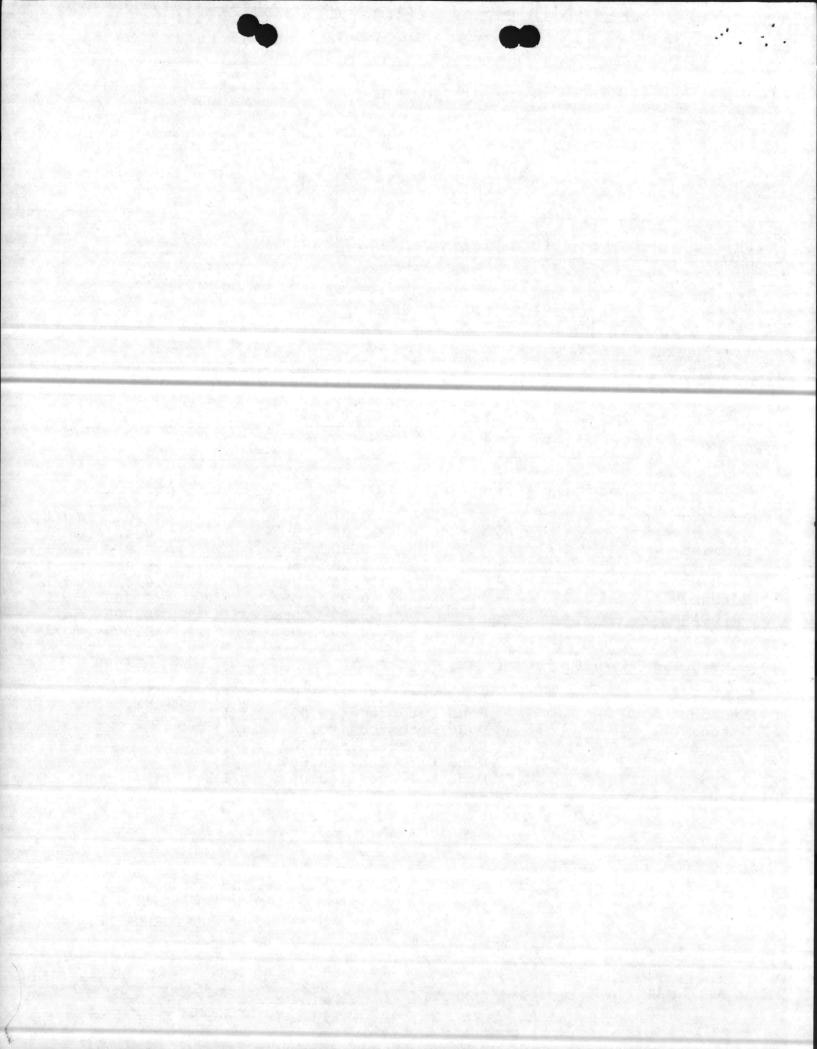
#### E.P. TOXICITY ORGANICS

Endrin	None	Detected	(<0.001	mg/1)
Lindane	None	Detected	(<0.002	mg/1)
Methoxychlor	None	Detected	(<0.1	mg/1)
Toxaphene	None	Detected	1<0.002	mg/1)
2,4 D	None	Detected	(<0.002	mg/1)
2,4,5 TP Silvex		Detected		mg/1)
		18 A		

Respectfully submitted, JENNINGS LABORATORIES, INC.

CHEMIST

Laboratory Analysis No. 111



## JENNINGS LABORATORIES, INC.

TICAL AND CONSULTING CHEM

: 1118 CYPRESS AVENUE • P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic Official Referee Chemists for:

AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

DATE: April 28, 1981

ASBESTOS ANALYSIS - NIOSH 582

#### **CERTIFICATE OF ANALYSIS**

TO: Mr. Dave Goodwin Building N- 23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLEOF SLUDGE (Wet)

MARKED Hadnot Point, Decomposed Bed #2 Camp Lejeune, MCB, N.C. 3/30/81 @ 1300 hou

Sample delivered to laboratory 3/31/81 by Mr. Wallmeyer

#### OFFICIAL SAMPLE BY:

E.P. TOXICITY METALS	AS IS		LEACHATE	
Arsenic	<0.01	ppm	<0.01 mg/1	
Barium	266.30	ppm	0.07 mg/l	
Cadmium	2.60	ppm	<0.005 mg/l	
Chromium	14.20	ppm	0.10 mg/l	
Lead	46.80	ppm	0.01 mg/1	-
Mercury	0.352	ppm	<0.002 mg/l	1
Selenium	11.10	ppm	0.52 mg/1	
Silver	. 8,32	ppm	<0.005 mg/l	

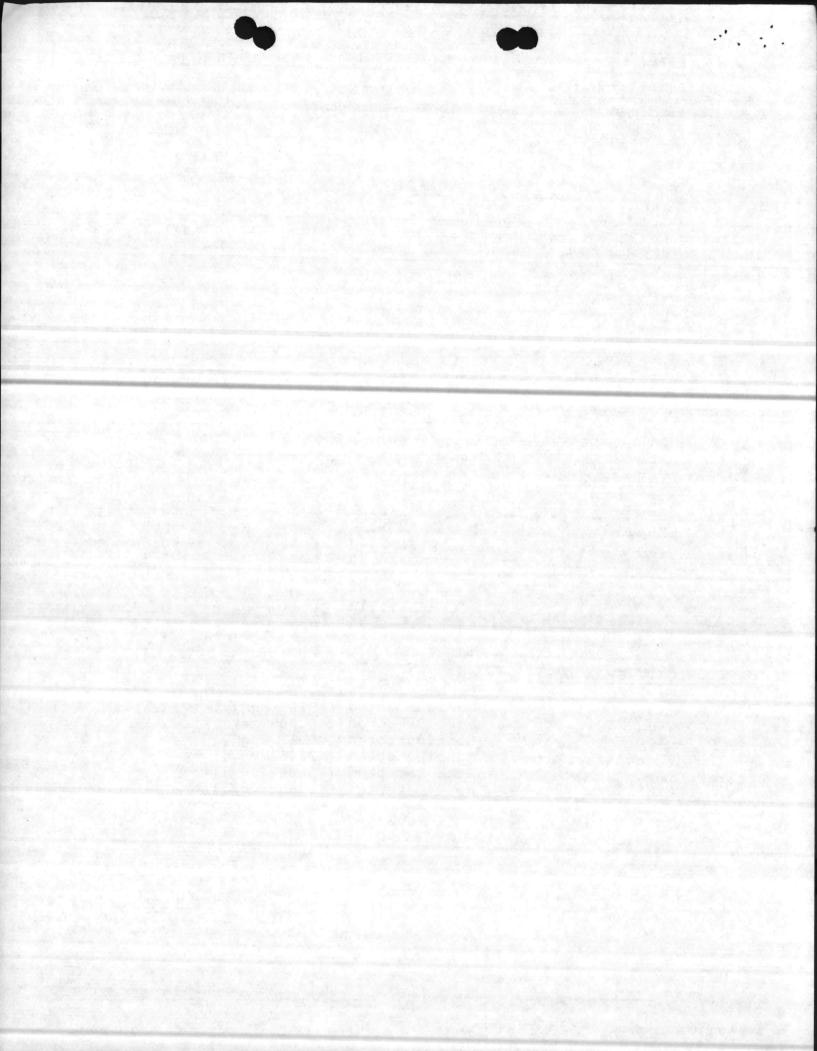
#### E.P. TOXICITY ORGANICS

Endrin	None	Detected	(<0.001	mg/1)
Lindane	None	Detected	(<0.002	mg/1)
Methoxychlor	None	Detected	(<0.1	mg/1)
Toxaphene	None	Detected	(<0.002	mg/1)
2,4, D	None	Detected	(<0.002	mg/1)
2,4,5, TP Silvex	None	Detected	(<0.002	mg/1)

Respectfully submitted, JENNINGS LABORATORIES, INC.

HEMIST

Laboratory Analysis No. 112



### ANALYTICAL AND CONSULTING CHEMISTS

#### 

## 2. O. BOX 851 • VIRGINIA BEACH, V + 14 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS

CERTIFIED OFFICIAL U.S.D.A. LABORATOF FOR MEAT ANALYSIS

April 28, 1981

DATE:

#### **CERTIFICATE OF ANALYSIS**

#### Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

#### SAMPLE OF SLUDGE (Dried)

MARKED Camp Johnson, Decomposed Bed #3 Camp Lejeune MCB N.C. 3/30/81 @ 0915 h

Sample delivered to laboratory 3/31/81 by Mr. Wallmeyer

OFFICIAL SAMPLE BY:

E.P. TOXICITY METALS	AS IS		LEACHAT	E
Arsenic Barium Cadmium Chromium lead Mercury Selenium Silver	<0.01 112.90 4.70 17.90 109.40 0.150 26.30 1.68	ppm ppm ppm ppm ppm	<0.01 0.09 0.01 0.08 0.07 <0.002 0.10 <0.005	mg/l

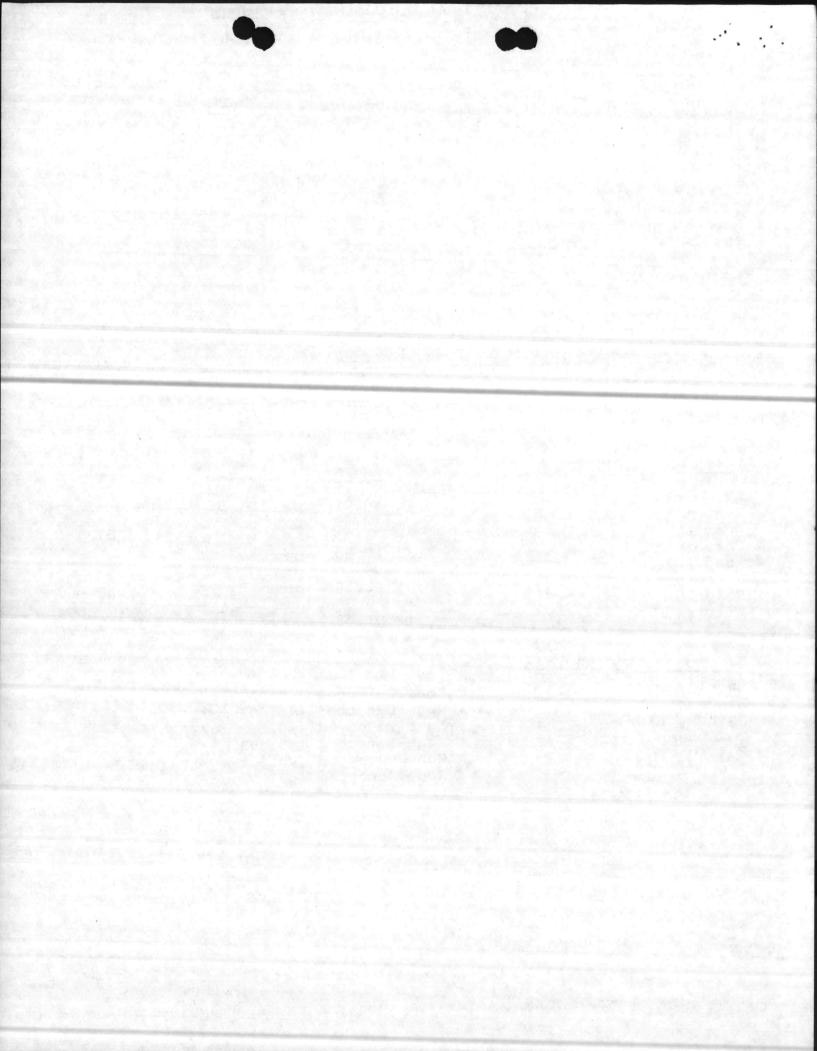
#### E.P. TOXICITY ORGANICS

Math and Ma	None De	etected etected etected	(<0.002 (<0.1	mg/1)
2,4, D	None De	etected etected etected	(<0.002	mc:/1)

Respectfully submitted, JENNINGS LABORATORIES, INC

CHEMIST

Laboratory Analysis No. 113



## JENNINGS LABORATOPIES, INC.

## 1118 CYPRESS AVENUE • P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) (ERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATOR FOR MEAT ANALYSIS

#### **CERTIFICATE OF ANALYSIS**

DATE: April 28, 1981

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLE OF SLUDGE (Semi-dry)

MARKED Courthouse Bay Bed #3 Camp Lejeune MCB N.C. 3/30/81 @ 1115 Hours

Delivered to laboratory 3/31/81 by Mr. Wallmeyer

OFFICIAL SAMPLE BY:

E.P.TOXICITY METALS	AS IS	LEACHATE
Arsenic	<0.01 ppm	<0.01 mg/1
Barium	77.30 ppm	0.14 mg/1
Cadmium	1.02 ppm	. 0.01 mg/1
Chromium	23.50 ppm	0.08 mg/1
Lead	79.80 ppm	0.11 mg/1
Mercury	0.115 ppm	<0.002 mg/1
Selenium	22.00 ppm	<0.005 mg/1.
Silver	0.99 ppm	<0.005 mg/1

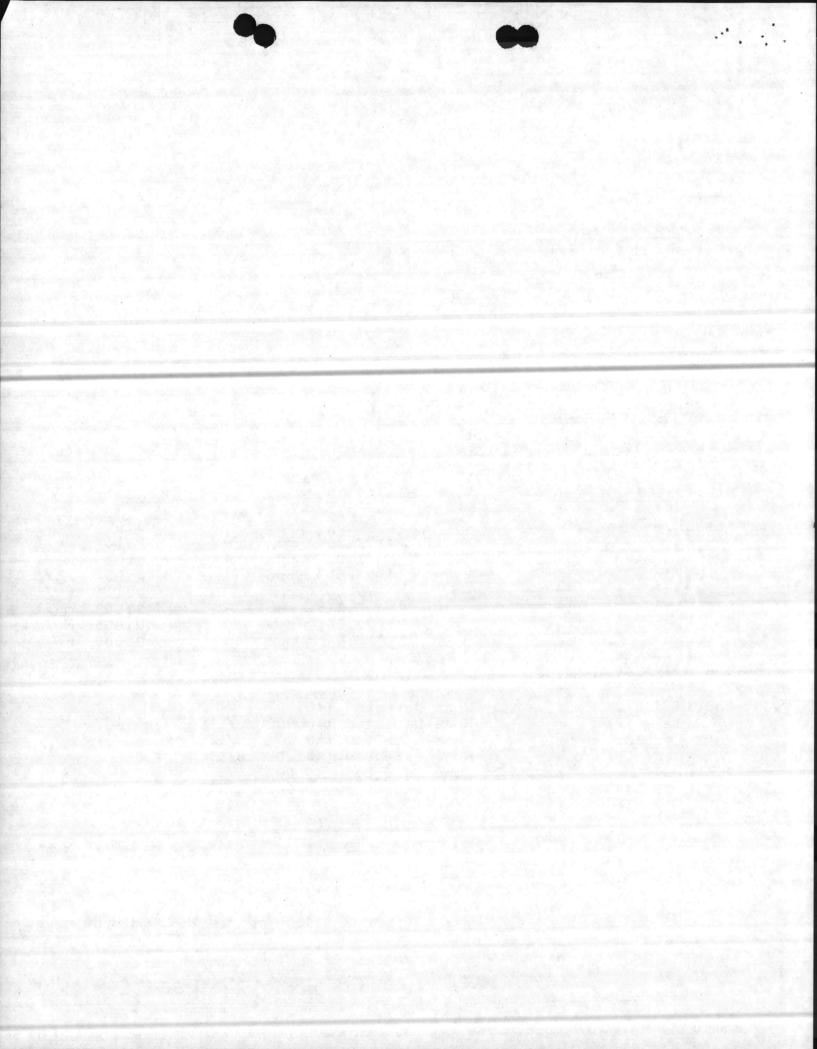
E.P. TOXICITY ORGANICS

Endrin	None	Detected	(<0.001 mg/1)
Lindane	None	Detected	(<0.002 mg/l)
Methoxychlor	None	Detected	(<0.1 mg/1)
Toxaphene	None	Detected	(<0.002 mg/1)
2,4 D	None	Detected	(<0.002 mg/1)
2,4,5 TP Silvex	None	Detected	(<0.002 mg/l)

Respectfully submitted, JENNINGS LABORATORIES, INC

CHEM

Laboratory Analysis No. 114



#### LABORATORIES.INC. ANALYTICAL AND CONSULTING C

STS

1118 CYPRESS AVEN P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION

Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATOR FOR MEAT ANALYSIS

## CERTIFICATE OF ANALYSIS

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

DATE: April 28, 1981

SAMPLEOF BLUDGE (Dried)

MARKED Camp Geiger, Decomposed Bed #4 Camp Lejeune MCB N.C. 3/30/81 @ 1015 Hou

Sample delivered to laboratory 3/31/81 by Mr. Wallmeyer

OFFICIAL SAMPLE BY:

E.P.TOXICITY METALS	<u>AS IS</u>	LEACHATE
Arsenic	<0.01 ppm	<0.01 mg/l;
Barium	62.80 ppm	0.80 mg/l;
Cadmium	4.0 ppm	<0.005 mg/l
Chromium	24.60 ppm	0.60 mg/l
Lead	33.60 ppm	0.40 mg/l
Mercury	0.620 ppm	<0.002 mg/l
Selenium	21.10 ppm	1.90 mg/l
Silver	0.35 ppm	<0.005 mg/l

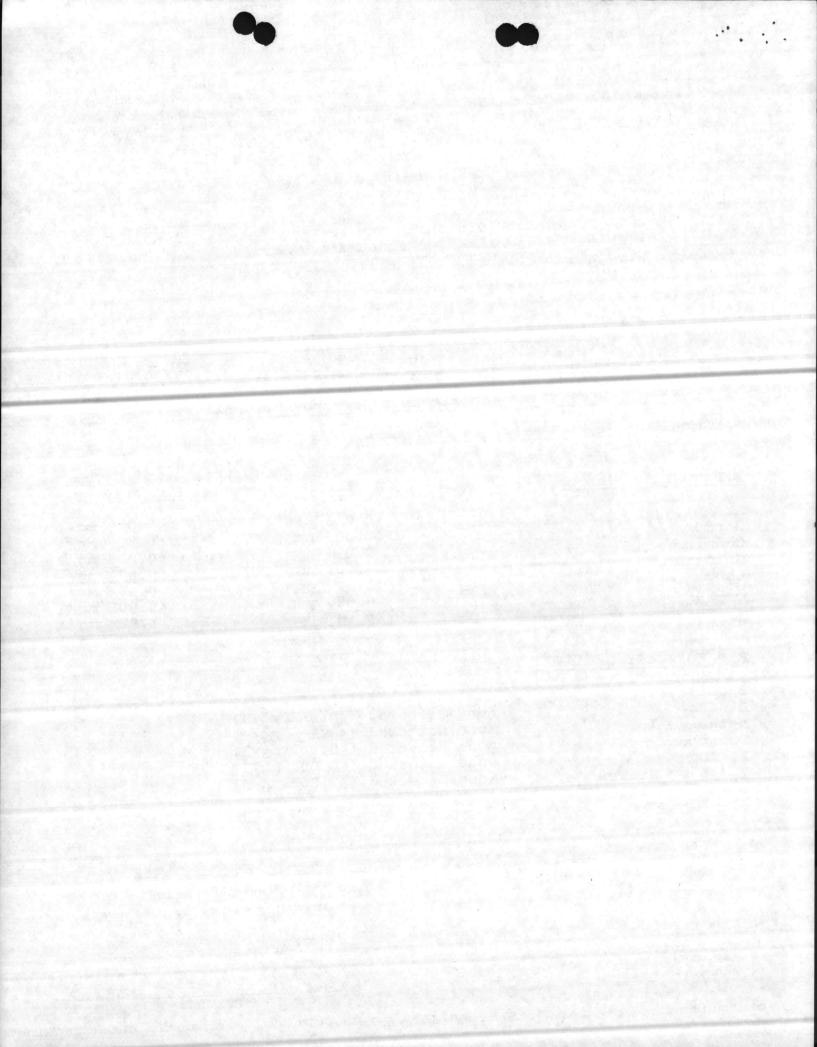
#### E.P. TOXICITY ORGANICS

				SAME AND TO DO TO
Endrin	None	Detected	(<0.001	ma /1)
Lindane	None	Detected	(<0,002	mg/1)
Methoxychlor	None	Detected	(<0 ]	mg/1)
Toxaphene	None	Detected	(<0.1	mg/1)
2,4 D	None	Detected	10.002	mg/1)
2,4,5 TP Silvex	None	Detected	(<0.002	mg/1)
Jele Ownich	None	Detected	(<0.002	mq/1)

Respectfully submitted, JENNINGS LABORATORIES, INC

W.K

Laboratory Analysis No. 115



## JENNINGS LABORATORIS, INC.

1118 CYPRESS AVENUE . P. O. BOX 851 . VIRGINIA BEACH, VA. 23451 . PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY NATIONAL SOYBEAN

PROCESSORS ASSOCIATION

Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

April 28, 1981

DATE:

#### **CERTIFICATE OF ANALYSIS**

<sup>TO:</sup> Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLE OF SLUDGE (Semi Dry)

MARKED Tarawa Terrace, Decomposed Bed #6 Camp Lejeune MCB, N.C. 3/30/81 @ 0945 h

Sample delivered to laboratory 3/31/81 by Mr. Wallmeyer

OFFICIAL SAMPLE BY:

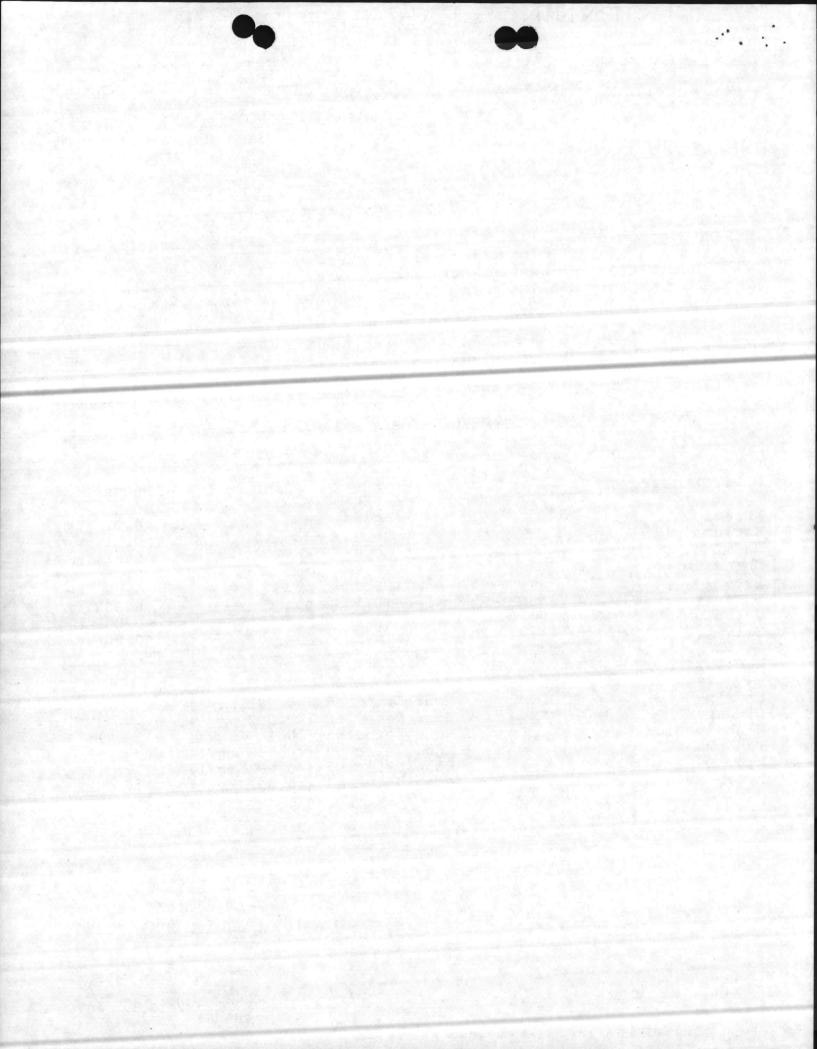
E.P. TOXICITY METALS	AS IS	LEACHATE
Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver	0.021 ppm 85.20 ppm 0.95 ppn 26.90 ppm 105.80 ppm 0.195 ppm 22.30 ppm 0.78 ppm	<pre>&lt;0.01 mg/l 0.11 mg/l 0.01 mg/l 0.06 mg/l 0.03 mg/l &lt;0.002 mg/l &lt;0.005 mg/l &lt;0.005 mg/l</pre>
E.P.TOXICITY ORGANICS		

Endrin	None Detected	(<0.001 mg/	(1)
Lindane	None Detected	(<0.002 mg/	11
Methoxychlor	None Detected	(<0.1 mg/	11
Toxaphene	None Detected	(<0.002 mg/	1
2,4, D	None Detected	(<0,002 mg/	1
2,4,5 TP Silvex	None Detected	(<0.002 mg/	1
		· · · · · · · · · · · · · · · · · · ·	

Respectfully submitted, JENNINGS LABORATORIES, INC.

Laboratory Analysis No. 116

OFFICIAL METHODS OF A.O.A.C. A.O.C.S. A.S.T.M APHA FPA AND NOPA HEED IN ALL AMAL VOIC HALL FOR OTHER TOP OTHER

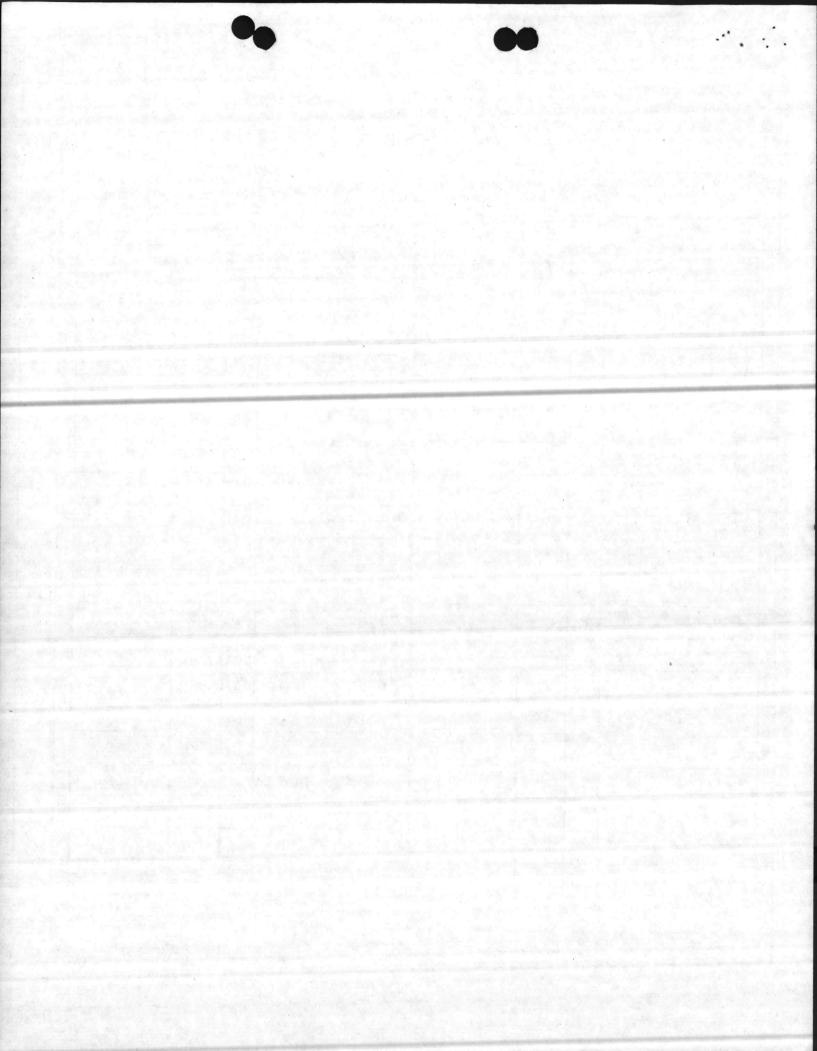


					· · · · ·	SAUD!			56
				Sudday of		AMPLE	1	AMPLE SAMPLE	
ND	LANTDIV 9-11330/3 (4-75)		DUTNO		COLL	ATE		LECTION STATION	
M(	Y BETZ & HUNEYC	TTC	SLUDGE	2 month	s old	DAY	YEAR	0.2400	
	Seatory wave			그 가슴 그 같아.	and the second	1 /0	,		
-	ENNINGS LABORAT	1 1	DATA		12/2	T	DATA	VALUE	4
P	ARAMETER DESCRIPTION	UNITS	ELEMENT NUMBER	VALUE	PARAMETER DESCRIPTION	GVIIS	ELEMENT NUMBER	· ·	
I	TOTAL SUSPENCED SOLIDS (NON FILTERABLE RESIDUE)	MG/L	00530	1. 1. S. J. S.	ALUMINUM, TOTAL	₩G/L	01105		2
01102	TOTAL SOLIDS (TOTAL RESIDUE 103-105)	461L	00500		ARSENIC. TOTAL	vig/L	01002		
sol	SETTLEABLE SOLIDS. (SETTLEABLE PESIDUE)	ML/ L/HR	00545		CADMIUM. TOTAL	MG/L	01027	And Later	
	TOTAL DISSOLVED SOLIDS (FILTERABLE RESIDUE)	55/L	70300		CHRCHIUM, TOTAL	MG/L	01034		1. 1.
NUTRIENTS .	N-ANDANIA (AS N)	NG/L	00610		COPPER. TOTAL	46/L	01042	58	5
	N-NITRATE TOTAL (AS N)	MG'L	00520		IRON. TOTAL	MG'L	01045	<u></u>	ETALS
	N-NITRITE TOTAL (AS N)	WG/L	00615		LEAD. TOTAL	VG/L	01051		EAVY M
	TOTAL N (KJELDAHL)	MG/L	00525		MAGNESIUM. TOTAL	MG/L	00927	و ومرجعه مرجع	HE
	ORTHOPHOSHATE	MG'L	00660		MANGANESE, TOTAL	MG/L	01055		V. 11
	TOTAL PHOSPHC-US (AS P)	MG/L	00678		VERCURY, TOTAL	NG/L	71900		
	SULFATE	MG/L	00945	er de cardo	POTASSIUM, TOTAL	NG/L	00937		
	PH LABSRATORY		00403		SILVER, TOTAL	VG./L	01077		
	CHLORIDE	MG/L	00940		ZINC. TOTAL	MG/L	01092	Sector also	
ETER	TURBIDITY LAB	JTU/ FTU	¥0072		TOTAL COLIFORM	NFC/	31503		
PARAMETER	BOD	NG/L	00310		FECAL COLIFORM	NEC /	31616		IF ORM
	COD	MG L	00340		TOTAL COLIFORM	MPN / 100ML	31506		COL
TEGOR	тос	MG/L	00680		FECAL COLIFORM	MPN / 100AIL	31620		17.
NON-CATEGORIZED	OIL AND GREASE	MG/L	70350		Selenium (As Is	<b>P</b>	<u> </u>	<0.005	PARAMETERS
N	PHENOLS	MG/L	32730		Selenium (Leach	ate	1	<0.005	_
	VBA5	MG/L	38260	and the second		-	lin	14 . 12 39 17 8 4 . S	DITIONAL
	CYANIDE	MG 'L	00720				Lun	15. 1	ADDIT
	14p* h-1 *		5. C. S.	- 199			•	1	5120

#602 4 12/29/81 \$100.00

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## JENNINGS LABORATORUS, INC.

1118 CYPRESS AVENUE • P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY NATIONAL SOYBEAN PROCESSORS ASSOCIATION Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

April 24, 1981

#### CERTIFICATE OF ANALYSIS

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLE OF SLUDGE

Cleaning Method #2

DATE:

MARKED MCAS CHERRY POINT N.C. DRYING BEDS taken 4/07/31 3 1000 hours

Sample delivered to laboratory 4/12/81 (iced)

Mr. J. Flovd

OFFICIAL SAMPLE BY:

E.P. TOXICITY METALS	AS IS	LEACHATE			
Arsenic Barium	<0.01 ppm 24.4 ppm	<0.01 mg/1 0.11 mg/1			
Cadmium	32.9 ppm	0.03 mg/1			
Chromium	785.0 ppm	- 0.05 mg/l			
Lead	60.0 ppm	0.13 mg/1 -			
Mercury	0.545 ppm	<0.002 mg/1			
Selenium	33.60 ppm	0.18 mg/l			
Silver	1.10 ppm	<0.005 mg/l -			

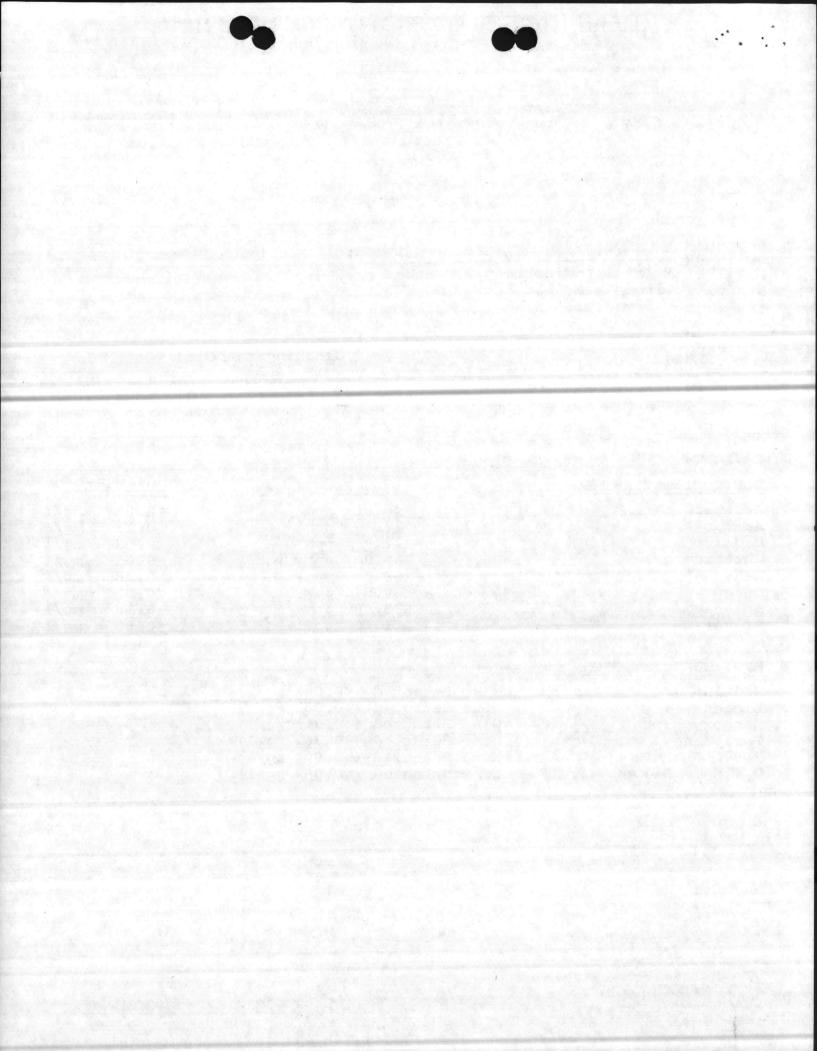
#### E?P. TOXICITY ORGANICS

Endrin	None Detected	(<0.001 mg/1)
Lindane	None Detected	(<0.002 mg/1)
Methoxychlor	None Detected	(<0.01 mg/1)
Toxaphene	None Detected	(<0.002 mg/1)
2,4,D	None Detected	(<0.002 mg/1)
2,4,5 TP Silvex	None Detected	

Respectfully submitted, JENNINGS LABORATORIES, INC.

1/1h

Laboratory Analysis No. 147



### JENNINGS LABORATORIES, INC. **FICAL AND CONSULTING CHEMI**

#### 1118 CYPRESS AVENUE • P. O. BOX 851 • VIRGINIA BEACH, VA. 23451 • PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY NATIONAL SOYBEAN PROCESSORS ASSOCIATION

Laboratory Certified by VA. STATE WATER **CONTROL BOARD** for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

#### CERTIFICATE OF ANALYSIS

April 24, 1981 DATE:

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SLUDGE/WATER SAMPLE OF

Cleaning Method #2

MCOLF-ATLANTIC, N.C. AEROBIC DIGESTION PONUS taken 4/6/81 @ 1330 hours MARKED

Sample delivered to laboratory 4/12/81

ICIAL SAMPLE BY:	M. Chapman				
E.P.TOXICITY METALS		AS IS		LEACHAT	<u>e</u> •
Arsenic		<0.01	ppm	<0.01	mg/l
Barium		0.54	ppm	0.09	mg/l
Cadmium	where the first of the second second	0.40	ppm	<0.005	mg/l
Chromium	일 같은 것 같은 것 같아.	1.40	ppm	0.04	mg/1
Lead		8.80	ppm	0.08	mg/l
Mercury		<0.002	ppm	<0.002	mg/l
Selenium		28.90	ppm	1.20	mg/l
Silver		0.30	ppm	<0.005	mg/l
E.P.TOXICITY ORGANICS					
Endrin	None Dete	ected (<0	0.001 mg/1)		
Lindane			0.002 mg/1)		
Methoxychlor	None Dete	ected (<0	0.01 mg/1)		
Toxaphene	None Dete	ected ( <c< td=""><td>0.002 mg/1)</td><td></td><td></td></c<>	0.002 mg/1)		
2,4,D	None Dete	ected (<0	0.002 mg/1)		

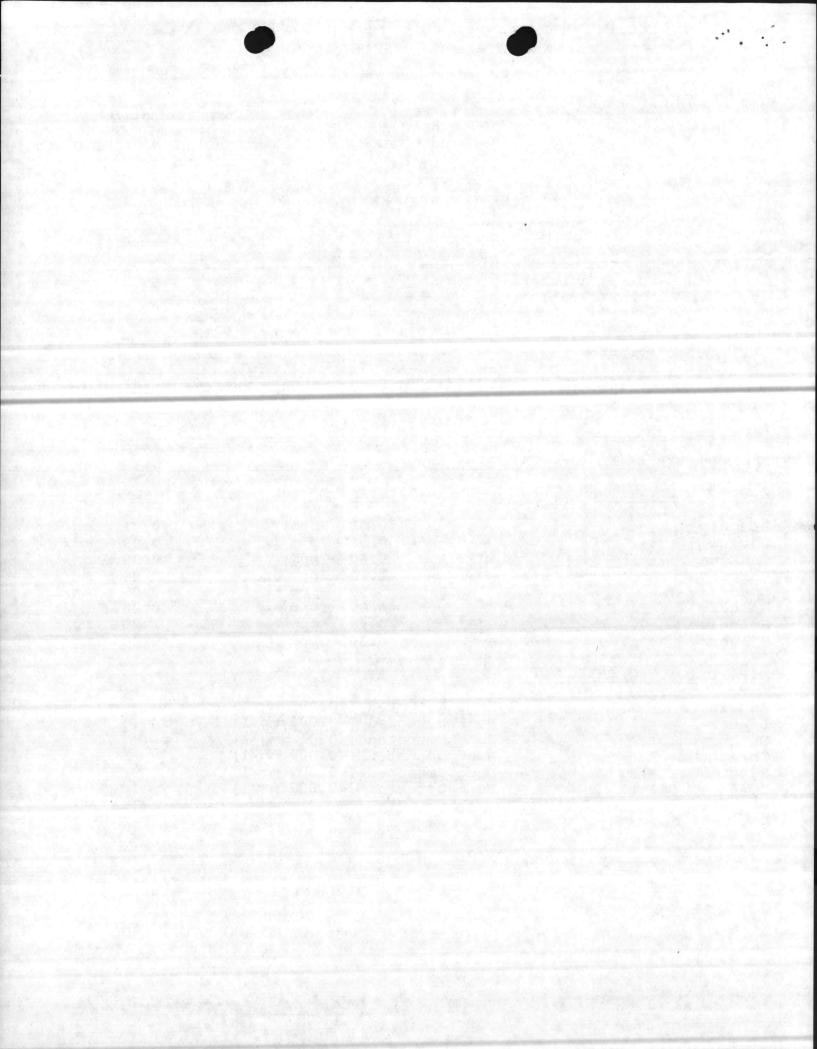
None Detected (<0.002 mg/1)

Respectfully submitted,

JENNINGS LABORATORIES, INC.

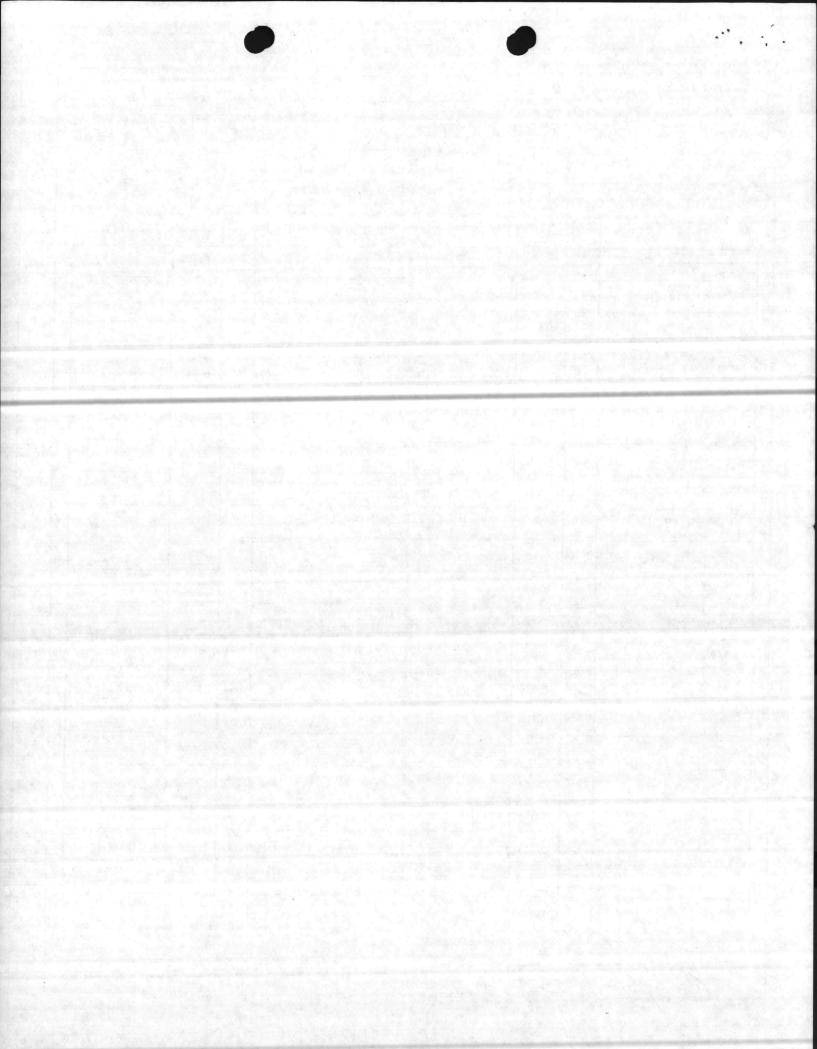
Laboratory 148 Analysis No.

2,4,5 TP Silvex



LABORATORY PIPLE PARAMETER WATER QUALITY ANALYSIS CORD

					k	C	F 105			
		117 (Ch.) 				VPLE	EIDEN	SAMPLE	SAMPLE	
	. TY NEVE				COLL	ECTION	C	TIME	STATIO NUMBER	
AC	AS CHERRY POIN	т "А	TLANTI	C FIELD #:	1 & #3 composite	1 DAY	YEAR	0-2-00		
	NNINGS LABORAT	ORIE	S, INC	· Sector day	<u> </u>	. 1	, ]			
Р.	ARAMETER DESCRIPTION	UNITS	DATA ELEMENT NUMBER	VALUE	PARAMETER DESCRIPTION	UNITS	DATA ELEMENT NUMBER	v	ALUE	
	TOTAL SUSPENDED SOLIDS (NON FILTERABLE RESIDUE)	MG/L	00530		ALLWINUM, TOTAL	MG/L	01105	( the second	··	
	TOTAL SOLIDS (TOTAL RESIDUE 103-105°)	MG/L	00500	and the special sector	ARSENIC, TOTAL	MG/L	01002	1 and	a terran de	
1 100	SETTLEABLE SOLIDS 3 (SETTLEABLE RESIDEE)	ML/ L/HR	C0545		CADNIUM, TOTAL	MG/L	01027	in the second	e ne stat a station	
	TOTAL DISSOLVED SOLIDS (FILTERABLE RESIDUE)	MG/L	70300		CHRONIUM, TOTAL	MG/L	01034	· · · · · ·		
T	N-AMMONIA (AS N)	MG/L	00610	- 1	COPPER, TOTAL	MG/L	01042	•		
S	N-NITRATE TOTAL	MG/L	00620		IRON, TOTAL	NG/L	01045			
	N-NITRITE TOTAL	MG/L	00515		LEAD, TOTAL	NG/L	01051			
NUTKIENIS	TOTAL N (KJELDAHL)	MG/L	00625		MAGNESIUM, TOTAL	MG/L	00927			
NUIN	CRTHOPHOSPHATE (AS POA)	MG/L	00660		MANGANESE, TOTAL	NG/L	01055	1.4.1.4		
	TOTAL PHOSPHORUS	MG/L	00678		MERCURY, TOTAL	MG/L	71900			
	SULFATE	MG/L	00945		POTASSIUM. TOTAL	MG/L	00937			
1	PH LABORATCRY	T	00403			SILVER, TOTAL	MG/L	01077		ار میں ا تقریرہ
ł	CHLORIDE	MG/L	00940		ZINC, TOTAL	MG/L	01092		·	
ER.	TURBIDITY LAS	JTU/	w0072		TOTAL COLIFORM	NEC/	31503	· · · · · ·		
SAME T	BOD	FTU MG/L	00310		FECAL COLIFORM	NEC/	31610			
D PA	COD	MG/L	00340	en dere ser	TOTAL COLIFORM	MPN/	31500			
NON-CATEGORIZED PARAMETER	тос	MG/L	00680		FECAL COLIFORM	MPN/	31620	,		
CATE	OIL AND GREASE	MG/L	70350		Selenium (as Is	1	ppm	0.	.01	
NON	PHENOLS	MG/L	32730		Selenium(Leacha	1	1	1	.005	
	MEAS	MG/L	38260							
	CYANIDE	MG/L	00720	· · · ·	•			· · · · ·		
	•		11			<u> </u>	<u>L</u>		- MB	
43:-		Ć_		10			DATE	ary 2		



# JENNINGS LABORATORIES, INC.

1118 CYPRESS AVENUE . P. O. BON 851 . VIRGINIA BEACH, VA. 23451 . PHONE (804) 425-1498

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological, Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

April 27, 1981

w. .

DATE:

### **CERTIFICATE OF ANALYSIS**

TO: Mr. Dave Goodwin Building N-23 Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511

SAMPLE OF SLUDGE/WATER SAMPLE

MARKED MCALF, BOGUE, N.C. AEROBIC DIGESTION PONDS 4/6/81 @ 0800

Sample delivered 4/12/81 by Mr. Wallmeyer.

OFFICIAL SAMPLE BY:

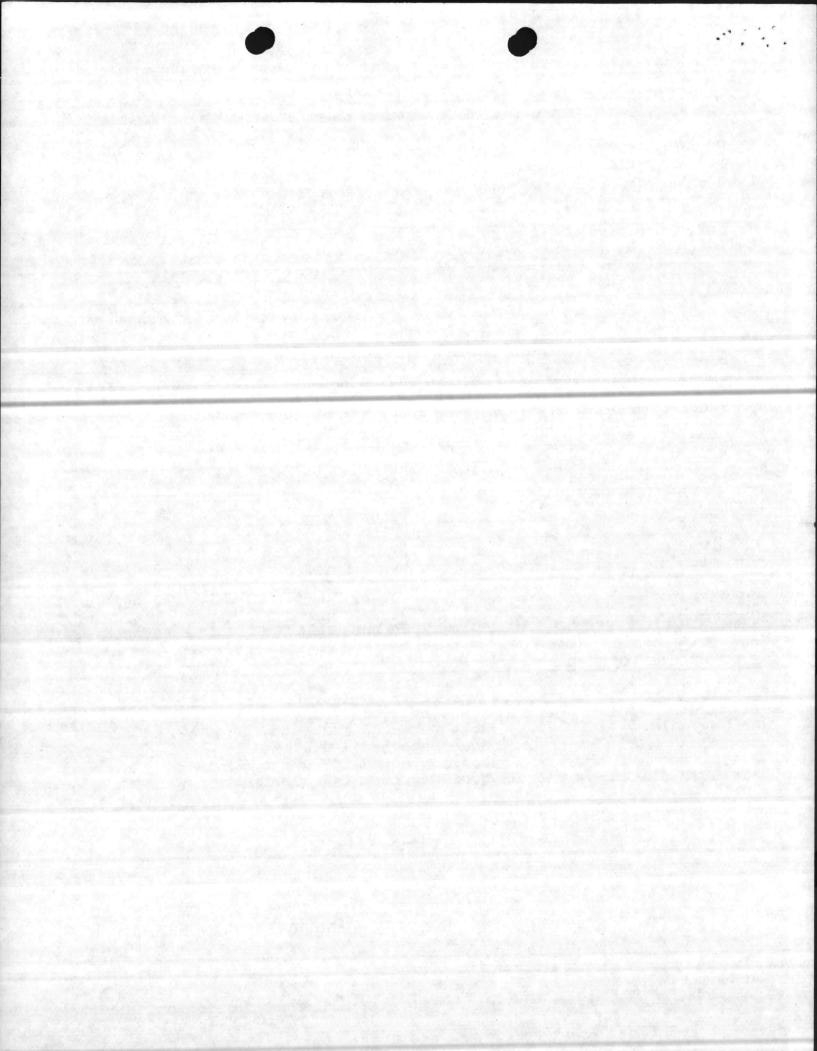
E.P.TOXICITY METALS	AS IS	LEACHATE
Arsenic	<0.01 ppm	<0.01 mg/l
Barium	6.50 ppm	0.03 mg/l
Cadmium	0.20 ppm	0.01 mg/l
Chromium	0.50 ppm	0.01 mg/l
Lead	19.60 ppm	0.22 mg/l
Mercury	<0.002 ppm	<0.002 mg/l
Selenium	20.8 ppm	1.52 mg/l
Silver	<0.005 ppm	<0.005 mg/l

#### E.P. TOXICITY ORGANICS

	100 C 100 C 100 C			
Endrin	None	Detected	(<0.001	mg/1)
Lindane	None	Detected	(<0.002	mg/1)
Methoxychlor	None	Detected	(<0.1	mg/1)
Toxaphene		Detected		
2,4,D		Detected		
2,4,5 TP Silvex		Detected		

Respectfully submitted, JENNINGS LABORATORIES, INC.

Laboratory Analysis No. 149



50	0-030-3900/2 (327. 10-74) 0-01-190-0022											
		1. 1. L.					SAMP	LE IDEN	TIFICATION	1	-	
	11/111 NAME					COL	AMPLE LECTIO DATE		SAMPLE OLLECTION TIME	SAMPL STATIC NUMBE	N	
	CAS CHERRY POIN	T BC	GUE FI	TELD #1 &	#2 Composit	2donte	DAY	YEAR	0-2430			
-	ENNINGS LABORAT	ODTE	C TNC									
0	ENNINGS LABORAL	URIE	DATA	•		<u> </u>	11	11	<u>, , , l</u>	11	1	
	PARAMETER DESCRIPTION	UNITS	ELEMENT NUVBER	VALUE	PARAMETER DESCR	IPTION	UNITS	DATA ELEMENT NUMBER	VAL	UE.		
	TOTAL SUSPENDED SOLIDS (NON FILTERABLE RESIDUE)	MG/L	00530		ALUMINUM, TOTAL		MG/L	01105				
OLIUS	TOTAL SOLIDS (TOTAL RESIDUE 103-105°)	MS/L	00500		ARSENIC, TOTAL		MG/L	01002				
sol	SETTLEABLE SCLIDS (SETTLEABLE RESIDUE)	ML/ L/HR	00545		CADMIUM, TOTAL	:	MG/L	01027	-		1	
	TOTAL DISSOLVED SOLIDS (FILTERABLE RESIDUE)	wG/L	70300		CHRONIUM, TOTAL	CHRONIUM, TOTAL				•	1	
	N-ANMONIA (AS N)	MS/L	00510		COPPER, TOTAL		MG/L	01042			1	
	N-NITRATE TOTAL	MS/L	00520		IRON, TOTAL		MG/L	01045			115	
Ì	N-NITRITE TOTAL (AS N)	MG/L	00615		LEAD. TOTAL		MG/L	01051	1974 - 197 1977 - 1977 - 1977	σĽ.	MET	
NUTRIENTS	TOTAL N (KJELDAHL)	MS/L	00625		MAGNESIUM, TOTAL	1	NG/L	00927		HEAVY		
NON	ORTHOPHOSPHATE (AS PO4)	115/L	00650		MANGANESE, TOTAL		MG/L	01055				
Ī	TOTAL PHOSPHERUS (AS P)	MG/L	00578		MERCURY, TOTAL		WG/L	71900		-		
	SULFATE	MG/L	00945		POŢASSIUM, TOTAL		MG/L	00937			1	
	PH LABORATORY		00403		SILVER, TOTAL		MG/L	01077			1	
ſ	CHLORIDE	MG/L	00940		ZINC, TOTAL		NG/L	01 092		.,:		
101	TURBIDITY LAB	JTU/ FTU	wC072		TOTAL COLIFORM		MEC/	31503			T	
IMANNI	BOD	MG/L	00310		FECAL COLIFORM		NFC/	31616		1994 (S) 1994 (S) 1994 (S)	FORM	
NON-CALEGORIZED FARAMETER	CCD	546/L	00340		TOTAL COLIFORM		MPN/	31506			COLIF	
	TOC	MG/L	00630	h an sin d	FECAL COLIFORM	Sala	MPN/ 100-1	31620	and and	Gui	1	
	OIL AND GREASE	ss./L	70350		Selenium(As	Is)	x	ppm	0.007	7	TERS	
	PHENOLS	NS/L	.32730		Selenium(Le	achat	e)	ppm	<0.00	5	PARAMETERS	
	MBAS	MG/L	38250						Color and	:	4	
T	CYANIDE	so/L	00720								ADDITIONAL	
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SIGNATUPE

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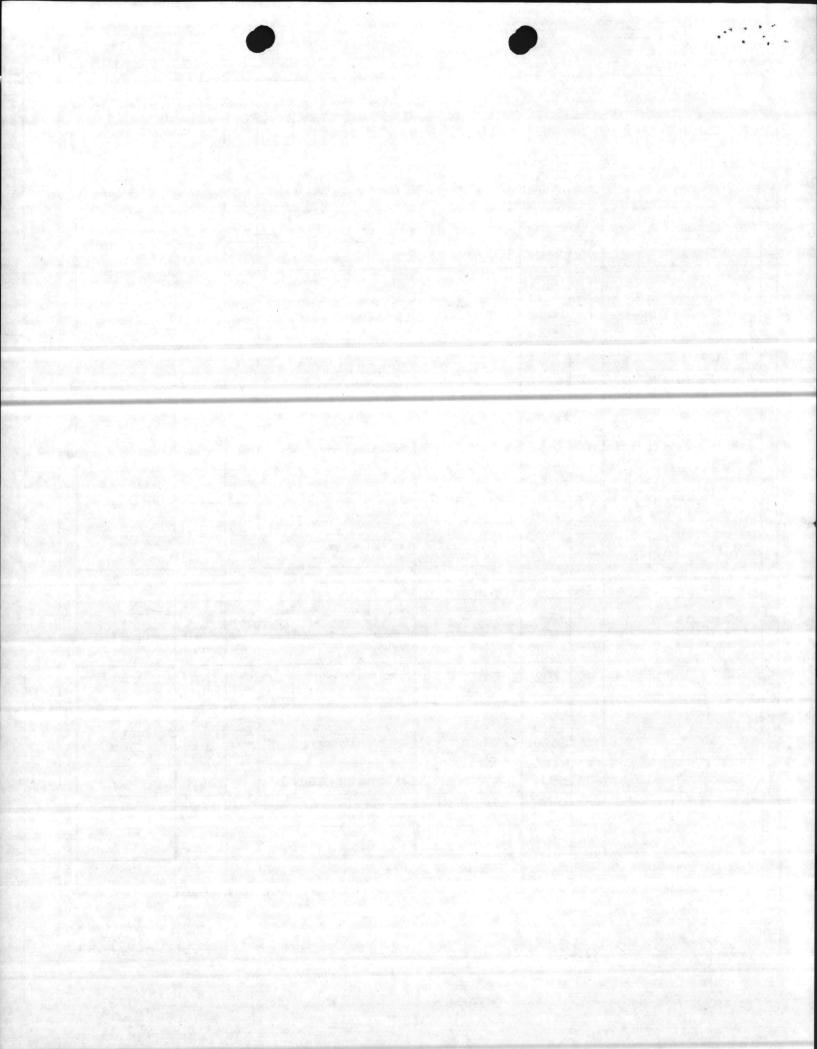
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## ANALYTICAL AND CONSULTING CHEMISTS

BOX 851 • VIRGINIA BEACH, VA. 234

#### 1118 CYFRESS AVENUE .

VA (EPA) CERTIFIED LABORATORY for Drinking Water Analysis - Microbiological. . Inorganic and Organic

ASBESTOS ANALYSIS - NIOSH 582

Official Referee Chemists for: AMERICAN OIL CHEMISTS SOCIETY

NATIONAL SOYBEAN PROCESSORS ASSOCIATION

CERTIFICATE OF ANALYSIS

Laboratory Certified by VA. STATE WATER CONTROL BOARD for Analysis of Effluents for NPDES PERMITS CERTIFIED OFFICIAL U.S.D.A. LABORATORY FOR MEAT ANALYSIS

PHONE (804) 425-1498

DATE: May 20, 1981

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LEACHATE

0.04

<0.002

0.19

<0.005

<0.01

<0.01 mg/1 0.06 mg/1

<0.005 mg/1

mg/1

mg/l

mg/1

mg/1\_

mq/]

Mr. Dave Goodwin Building N-23 Atlantic Division TO: Naval Facilities Engineering Command Norfolk, Virginia 23511

SEWAGE WASTE (Bottom Sludge before Sand filter) SAMPLE OF

Taken from NAVFAC CAPE HATTERAS BUXTON, N.C. 27920 MARKED

Sample delivered to laboratory 5/08/81

OFFICIAL SAMPLE BY:

UT-1 Pete J. Raif

rsenic	<0.01 ppm
arium	21.80 ppm
admium	2.00 ppm
hromium	4.10 ppm
ead	37.70 ppm
lercury	0.124 ppm
elenium	12.30 ppm
ilver	0.03 ppm

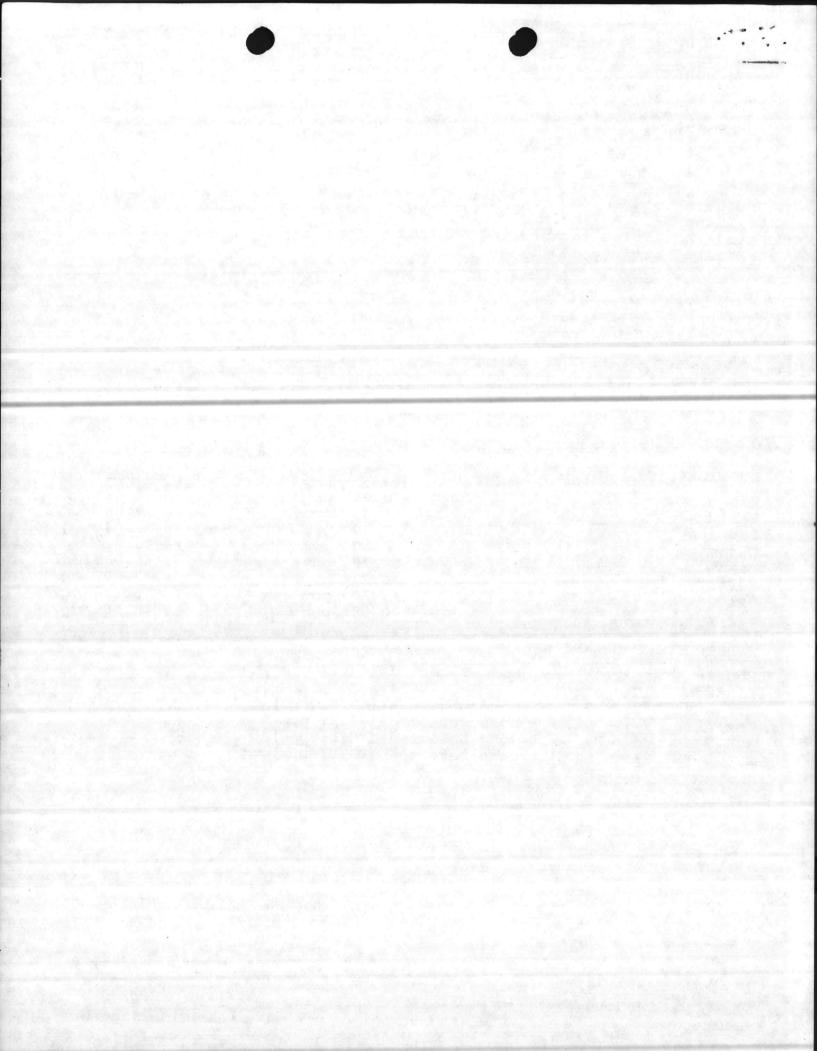
#### E.P. TOXICITY ORGANICS

Endrin	None Detected (<0.01 ppm)	
Lindane	0.04 ppm	
Methoxychlor	None Detected (<0.01 ppm)	
Toxaphene	None Detected (<0.01 ppm)	
2,4,D	None Detected (<0.01 ppm)	
2,4,5 TP Silvex	None Detected (<0.01 ppm)	1

Respectfully submitted, JENNINGS LABORATORIES, INC.

Navy Laborato:y Analysis No. 201

\$460.00





(804) 444-7313

114:DPG 6280

18 AUG 1980

CERTIFIED MAIL RETURN RECEIPT REQUESTED

U.S Environmental Protection Agency Region IV RCRA Activities 345 Courtland Street, N.E. Atlanta, GA 30308

Centlemen:

Hazardous Waste Notifications are herein forwarded for the following activities:

a. Naval Ordnance Station, Louisville, Kentucky.

b. Marine Corps Base, Camp Lejeune, North Carolina. This activity notification is being filed directly and is not attached to this letter.

c. Marine Corps Air Station, New River, North Carolina.

d. Marine Corps Air Station, Cherry Point, North Carolina (including Naval Air Rework Facility, Cherry Point; Marine Corps Auxiliary Field, Bogue; Marine Corps Cutlying Field, Atlantic; Bluethental Field - New Hanover Municipal Airport, Wilmington, North Carolina; Pamilco Target Area; Brant Island Target Area; MAW Point Target Area; and Cat Island Target Area).

Please note that also herein forwarded is a summary of the Hazardous Waste Notifications, including the required general descriptions and locations.

Sincerely yours,

ANDRES TALTS, P.E.

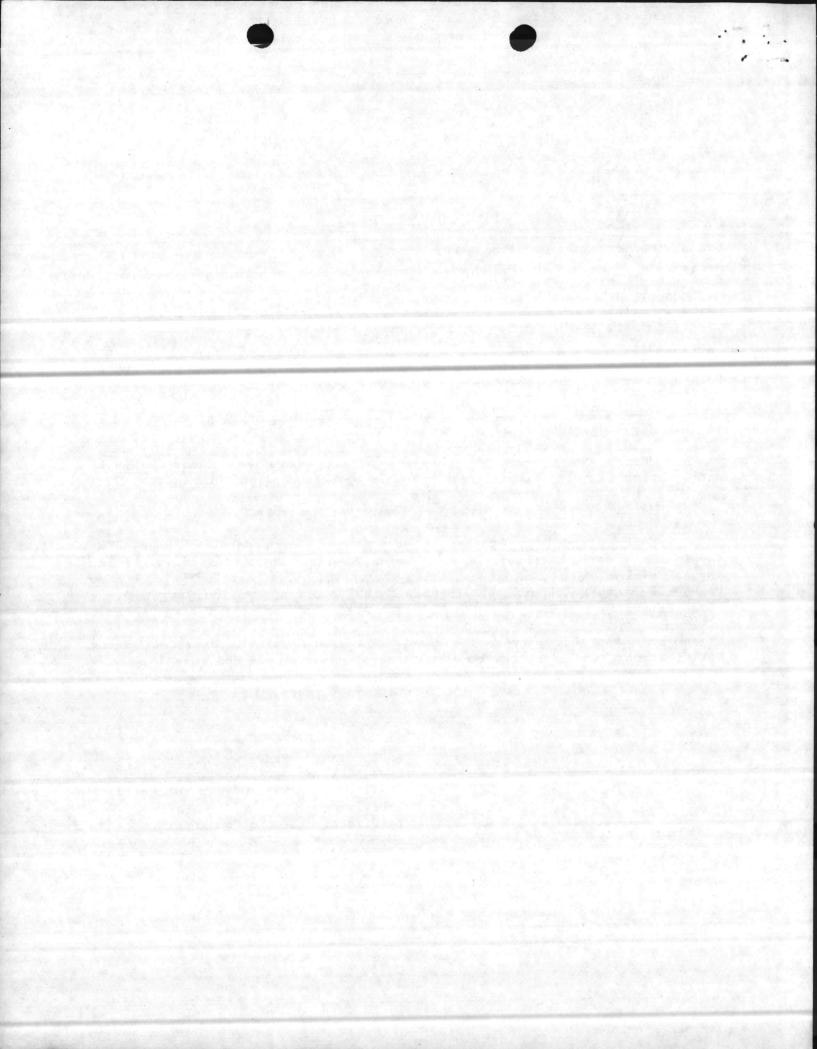
Head, Environmental Quality Branch Utilities, Energy and Environmental Division

By direction of the Commander

Enclosures

GOODWIN Brite 8/18.80

Enclosure (3



## EPA REGION IV HAZARDOUS WASTE NOTIFICATION SUMMARY

Activity	Ceneral Description	Location	Generator	Storer	Treater	Disposer	Transporter	Remarks
Naval Ordnance Station, Louisville	Ordnance/equipment storage/handling/ repair (including plating)	Louisville, Kentucky	Yes	Yes	Yes	No	No	Treatment consists of an Industrial Wastewater Treatment Plant.
Marine Corps Base, Camp Lejeune	Weapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)	Jacksonville, North Carolina	Yes	Yes	No	No	Yes	Transport consists of transport to Marine Corps Air Station, Cherry Point.
Marine Corps Air Station, New River	Aic station, air- craft (minor) repair	Jacksonville, North Carolina	Yes	No	No	No	Yes	Temporary storage only. Tenant of Marine Corps Base, Camp Lejeune. Trans- port to Camp Lejeune.
Marine Corps Air Station, Cherry nt	Air station, air- craft repair (including plating)	Havelock, North Carolina	Yes	Yes	Yes	Yes	2	Transport may consist of transport from outlying facilities to Marine Corps Air Station, Cherry Point. Treatment consists of an Indus- trial Wastewater Treatment Plant and (planned) solvent distillation. Dis- posal consists of the Industrial Wastewater Treatment Plant sludge disposal.
	Naval Ordnance Station, Louisville Marine Corps Base, Camp Lejeune Marine Corps Air Station, New River Marine Corps Air Station, Cherry	Naval OrdnanceOrdnance/equipmentStation,storage/handling/Louisvillerepair (includingplating)plating)Marine CorpsWeapons training,Lejeuneordnance storage/handling (fueltanks/warehouses/magazines)Air station, air-Marine CorpsAir station, air-repairAir station, air-New Riverrepair	ActivityDescriptionLocationNaval Ordnance Station, LouisvilleOrdnance/equipment storage/handling/ repair (including plating)Louisville, KentuckyMarine Corps Base, Camp LejeuneWeapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)Jacksonville, North CarolinaMarine Corps Air Station, New RiverAir station, air- craft (minor) repairJacksonville, North CarolinaMarine Corps Air Station, CherryAir station, air- craft repairJacksonville, North Carolina	ActivityDescriptionLocationGeneratorNaval Ordnance Station, LouisvilleOrdnance/equipment storage/handling/ repair (including plating)Louisville, KentuckyYesMarine Corps Base, Camp LejeuneWeapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)Jacksonville, North CarolinaYesMarine Corps Air Station, New RiverAir station, air- repairJacksonville, North CarolinaYesMarine Corps Air Station, CherryAir station, air- craft repairJacksonville, North CarolinaYes	ActivityDescriptionLocationGeneratorStorerNaval Ordnance Station, LouisvilleOrdnance/equipment storage/handling/ repair (including plating)Louisville, KentuckyYesYesMarine Corps Base, Camp LejeuneWeapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)Jacksonville, North CarolinaYesYesMarine Corps Air Station, New RiverAir station, air- craft (minor) repairJacksonville, North CarolinaYesNo	ActivityDescriptionLocationGeneratorStorerTreaterNaval Ordnance Station, LouisvilleOrdnance/equipment storage/handling/ repair (including plating)Louisville, KentuckyYesYesYesWeapons training, fuel/supplies/ LejeuneWeapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)Jacksonville, North CarolinaYesYesNoMarine Corps Air Station, New RiverAir station, air- repairJacksonville, North CarolinaYesNoNoMarine Corps Air Station, CherryAir station, air- craft repairHavelock, North CarolinaYesYesYesMarine Corps Air Station, CherryAir station, air- craft repairHavelock, North CarolinaYesYesYes	ActivityDescriptionLocationGeneratorStorerTreaterDisposerNaval Ordnance Station, LouisvilleOrdnance/equipment storage/handling/ repair (including plating)Louisville, KentuckyYesYesYesNoMarine Corps Base, Camp LejeuneWeapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)Jacksonville, North CarolinaYesYesNoNoMarine Corps New RiverAir station, air- craft (minor) repairJacksonville, North CarolinaYesNoNoNoMarine Corps Air Station, CherryAir station, air- craft repairHavelock, North CarolinaYesYesYesYesYes	ActivityDescriptionLocationGeneratorStorerTreaterDisposerTransporterNaval Ordnance Station, LouisvilleOrdnance/equipment storage/handling/ repair (including plating)Louisville, KentuckyYesYesYesNoNoMarine Corps Base, Camp LejeuneWeapons training, fuel/supplies/ ordnance storage/ handling (fuel tanks/warehouses/ magazines)Jacksonville, North CarolinaYesYesNoNoYesMarine Corps Air Station, New RiverAir station, air- craft (minor) repairJacksonville, North CarolinaYesNoNoNoYesMarine Corps Air Station, CherryAir station, air- craft repairJacksonville, North CarolinaYesYesYesYesYes?

1.

. <u>Activity</u>	General Description	Location	Generator	Storer	Treater	Disposer	Transporter	Remarks
5. Naval Facility, Cape Hatteras	Collect oceano- graphic data	Cape Hatteras, North Carolina	No	No	No	No	No	

NOTE: (1) No underground injection of hazardous waste.

(2) <u>Temporary</u> storage only (awaiting contract disposal) for all of the above activities and their outlying facilities except for the "disposal"
 (2) <u>Temporary</u> storage) site list from Marine Corps Air Station, Cherry Point.

(3) There are Defense Property Disposal Offices (DPDOs) located at Marine Corps Air Station, Cherry Point; Marine Corps Base, Camp Lejeune; and Naval Ordnance Station, Louisville. The Hazardous Waste Notifications will be forwarded via separate correspondence since DPDOs are Department of Defense activities (i.e. not in the USN chain of command). Please be advised that the DPDOs have recently been directed to dispose of hazardous wastes for all of the armed services. Point of contact for DPDOs is Defense Logistics Agency, Cameron Station, Alexandria, VA 22314 (202-274-7503).

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(804) 444-7313

114:DPG 6280

18 AUG 1980

CERTIFIED MAIL RETURN RECEIPT REQUESTED

U.S Environmental Protection Agency Region IV RGRA Activities 345 Courtland Street, N.E. Atlanta, GA 30308

Gentlemen:

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d. Marine Corps Air Station, Cherry Point, North Carolina (including Naval Air Rework Facility, Cherry Point; Marine Corps Auxiliary Field, Bogue; Marine Corps Cutlying Field, Atlantic; Bluethental Field - New Hanover Municipal Airport, Wilmington, North Carolina; Pamilco Target Area; Brant Island Target Area; MAW Point Target Area; and Cat Island Target Area).

Please note that also herein forwarded is a summary of the Hazardous Waste Notifications, including the required general descriptions and locations.

Sincerely yours,

ANDRES TALTS, P.E.

Head, Environmental Quality Branch Utilities, Energy and Environmental Division

By direction of the Commander

GOODWIN Brite 8/18.80

Enclosure (3)

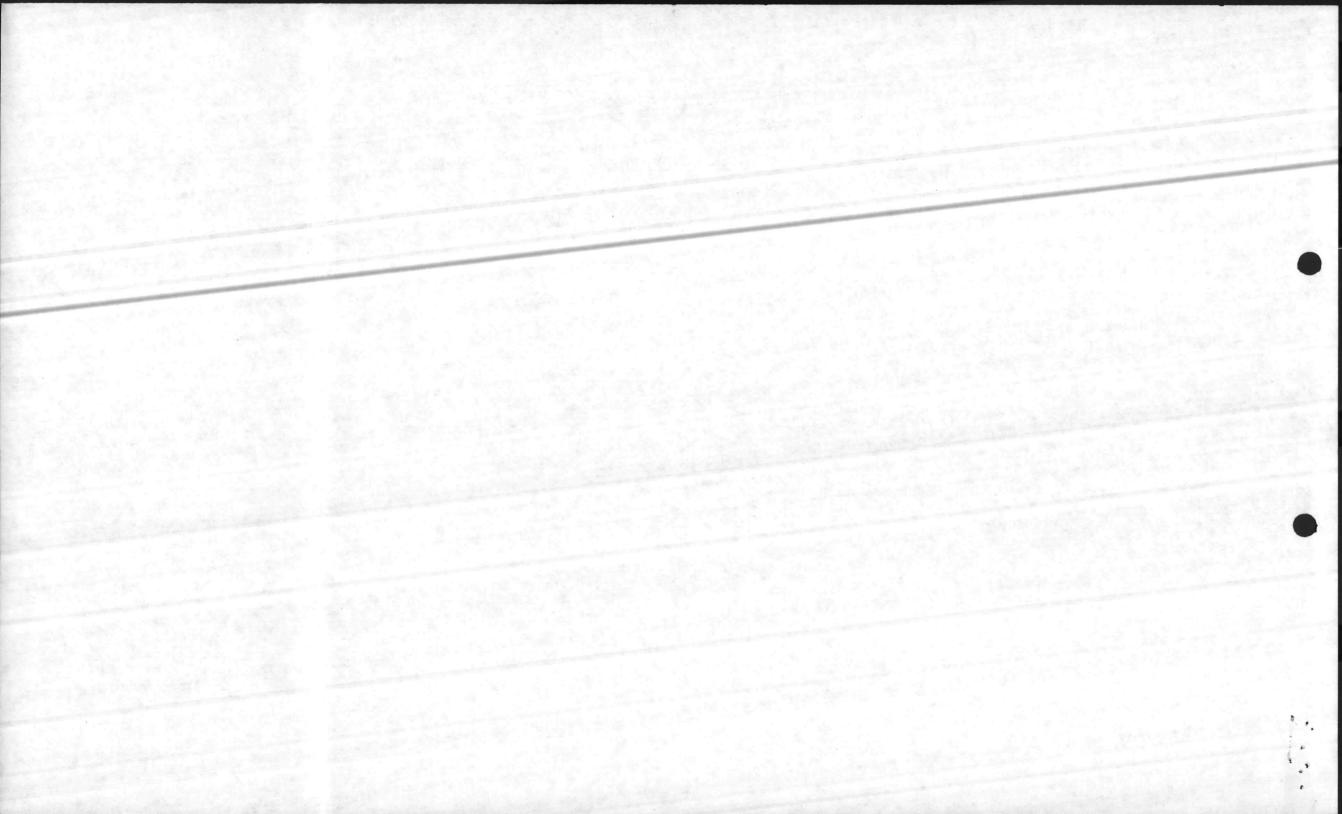
Enclosures



#### EPA REGION IV HAZARDOUS WASTE NOTIFICATION SUMMARY

	Activity	Ceneral Description	Location	Generator	Storer	Treater	Disposer	Transporter	Remarks
•	Naval Ordnance Station, Louisville	Ordnance/equipment storage/handling/ repair (including plating)	Louisville, Kentucky	Ye s	Yes	Yes	No	No	Treatment consists of an Industrial Wastewater Treatment Plant.
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	Marine Corps Air Station, New River	Air station, air- craft (minor) repair	Jacksonville, North Carolina	Yes	No	No	No	Yes	Temporary storage only. Tenant of Marine Corps Base, Camp Lejeune. Trans- port to Camp Lejeune.
•	Marine Corps Air Station, Cherry int	Air station, air- craft repair (including plating)	Havelock, North Carolina	Ye s	Yes	Yes	Yes	?	Transport may consist of transport from outlying facilities to Marine Corps Air Station, Cherry Point. Treatment consists of an Indus- trial Wastewater Treatment Plant and (planned) solvent distillation, Dis-

4. 16 posal consists of the Industrial Wastewater Treatment Plant sludge disposal.

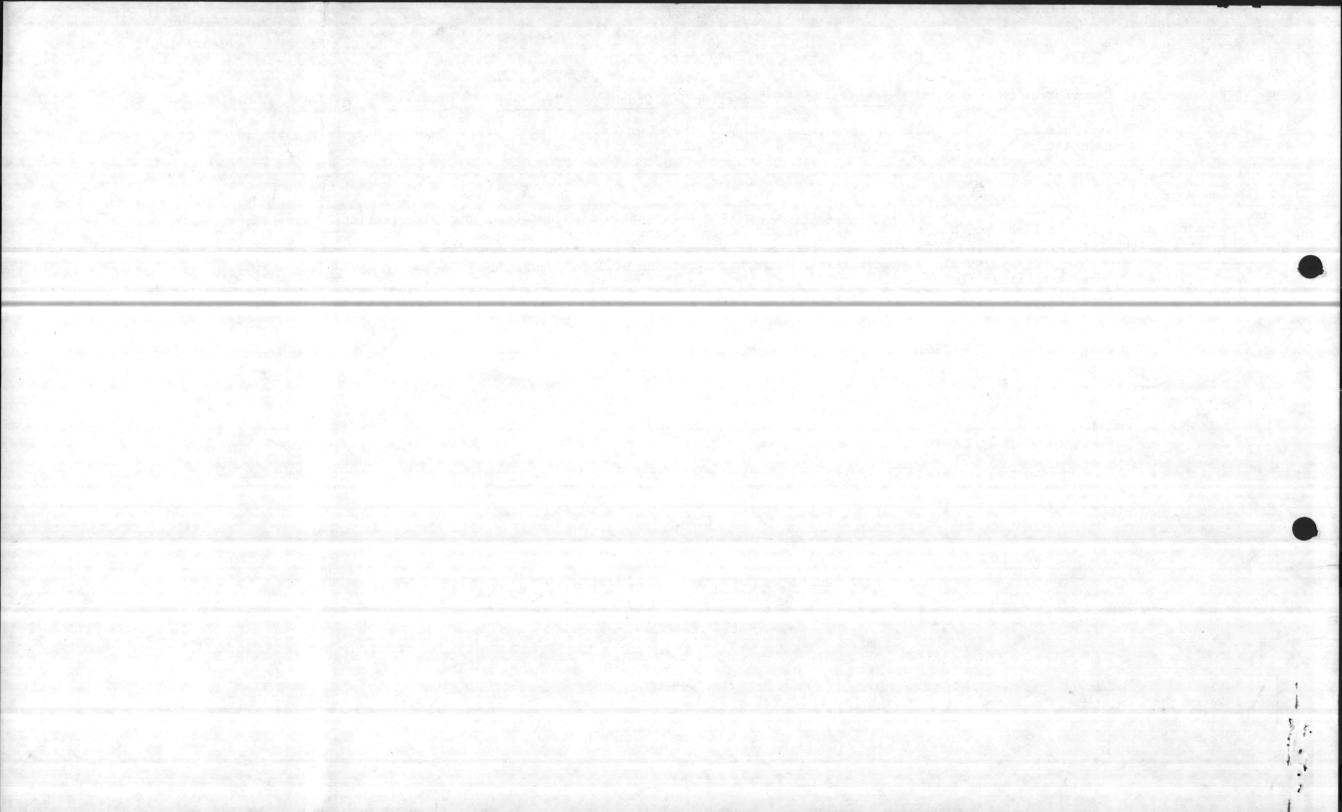


. <u>Activity</u>	General Description	Location	Generator	Storer	Treater	Disposer	Transporter	Remarks	
5. Naval Facility, Cape Hatteras	Collect oceano- graphic data	Cape Hatteras, North Carolina	No	No	No	No	No	a seconda	·

NOTE: (1) No underground injection of hazardous waste.

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MAIN

JUN 17 21 05 282 DISTRIBUTION CERMO PTTUZYUW RUEBDOA 8352 1671530-UUUU -- RUEBDOB RUEBDOD RUEBNMA AUVE JABMO ZNR UUUUUU du NREAD P 1717462 JUN 82 Admin D. FM CG MCB CAMP LEJEUNE NC Oper D. TO RUEBDOD/CG SECOND MARDIV MER D. RUEBDOB/CG SECOND FSSG RUEBNMA/MCAS H NEW RIVER NC C ber ZEN/NAVREGDENCEN CAMP LEJEUNE NC HA O. ZEN/NAVREGMEDCEN. CAMP LEJEUNE .NC top O. BT MME. UNCLAS //N06280// Maint NCO SUBJ: COMPLIANCE WITH STATE/FEDERAL HAZARDOUS WASTE (HW) Secretary

REGULATIONS A. DIV OF HEALTH SERVICES LTR OF 3 JUN 82 (NOTAL) B. CG MCB MSG 042133Z DEC 81

1. REF A ADVISED THIS. COMMAND THAT A FOLLOW-UP INSPECTION TO THE 13 OCT 1981 INSPECTION WOULD BE CONDUCTED TO INSURE COMPLIANCE WITH SUBJECT REGULATIONS AND TO ASCERTAIN STATUS OF CORRECTIVE ACTION TO RECTIFY DISCREPENCIES NOTED DURING THE 13 OCT INSPECTION. 2. ADDRESSES ARE REQUESTED TO INSURE THAT ACTIONS RECOMMENDED IN PAR 4 OF REF A RELATIVE TO WEEKLY INSPECTIONS OF SHOPS AND WORKSITES ROUTINELY HANDLING OR STORING USED SOLVENTS, BATTERY ACID

PAGE 02 RUEBDOA 8352 UNCLAS
AND OTHER HW HAVE BEEN IMPLEMENTED.
3. THIS IS TO ADVISE THAT THE INSPECTION TEAM MAY DESIRE TO VISIT SHOPS OR WORKSITES IN ANY OF THE ADDRESSEES AREAS. QUESTIONS
REGARDING THIS MATTER SHOULD BE DIRECTED TO MR. D. SHARPE, NATURAL
RESOURCES AND ENVIRONMENTAL AFFAIRS BRANCH, BASE MAINTENANCE
DIVISION, TELEPHONE 451-2083.
BT

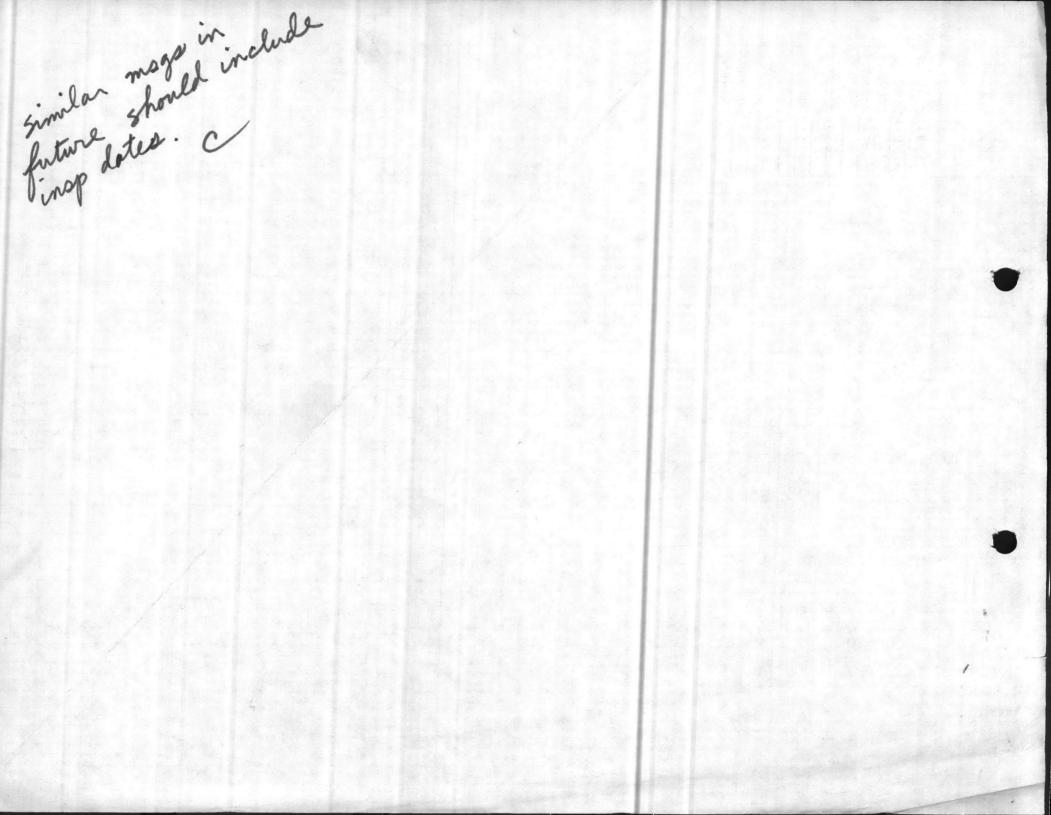
1717462 gun 82

#8352

REL; K.P. MILLICE, JR., COL, AC/S FAC DIST; GEN & SSTF, OCDR NRMC, NRDC /319

NNNN

462JUN82



LAND FILL Permit Except

PERMIT NO.	67-03
DATE ISSUED	7/20/82

## SOLID WASTE PERMIT

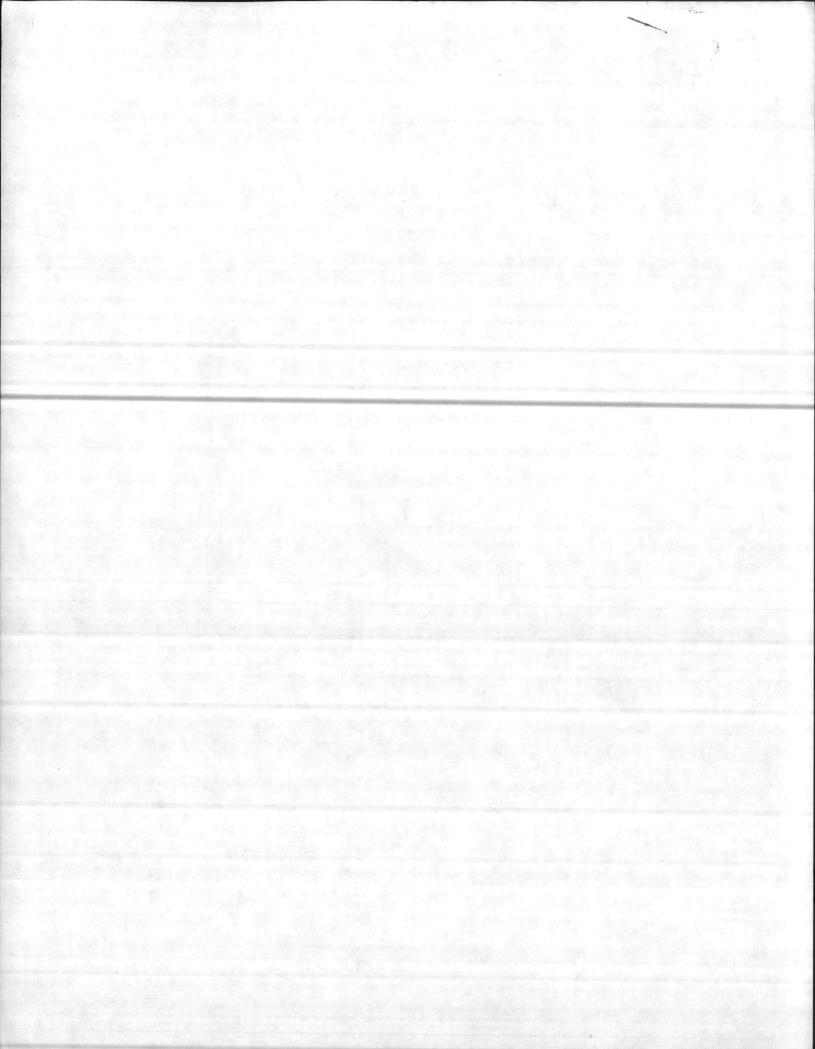
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#### Conditions of Permit:

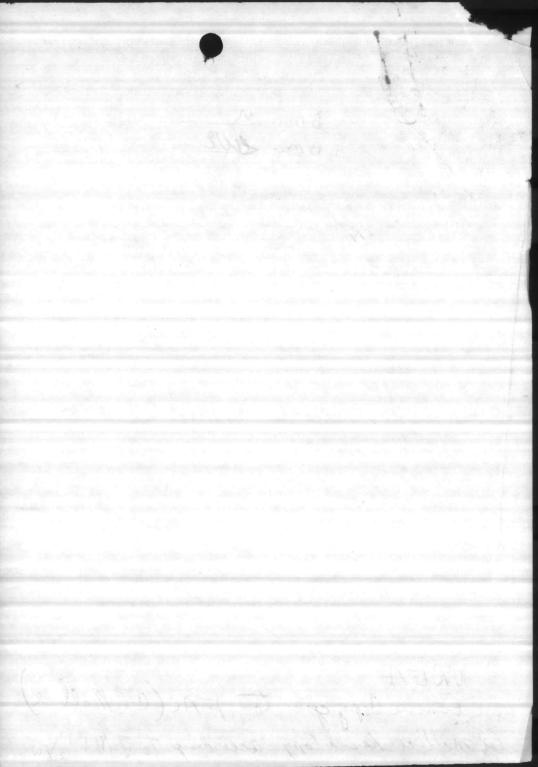
- This permit may be subject to review at an administrative hearing upon petition of anyone whose legal rights, privileges and duties may have been affected by the issuance thereof.
- This permit shall not be effective unless the certified copy is filed in the register of deeds' office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located.
- The "Certification of Recordation of Solid Waste Permit" returned to the Solid & Hazardous Waste Management Branch prior to receiving solid waste at the site.
  - This solid waste disposal site is permitted to receive solid waste as defined in 10 NCAC 10G, .0101(31), except that hazardous waste, liquid waste and any other wastes that may pose a threat to the environment or the public health are prohibited from disposal at this site unless prior authorization is obtained from the Division of Health Services.
- 5. This permit is for construction according to plans by McDowell-Jones, P.A., dated March, 1982. Any modification or deviation from the approved plans shall be approved by the N.C. Solid & Hazardous Waste Management Branch.
- 6. The fly ash area is operated so as to provide cover on the horizontal surface daily. The working slope of the area will not require daily cover if the fly ash does not become airborne. The fly ash should be graded and compacted daily, when disposed. Top cover for the fly ash may be other demolition material.
- 7. The grease holding pond is not part of this permit.
- Ground-water monitoring wells are installed as shown in red on pages 1 and 2 of the plans per the enclosed specification.
- Water quality monitoring will be the responsibility of Camp Lejeune Marine Corps Base. Parameters and sampling procedures will be outlined and forwarded. Results of water quality tests shall be forwarded to this office annually.

DHS Form 2871 (Rev. 11/80)

Solid & Hazardous Waste Management Branch



NATURAL RESOURCES AND ENVIRONMINAL AFFAIRS DIVISION BASE MAINTENANCE DEPARTMENT MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542 A BMO MIL June 81 Hoyman From: Director, NREA Division To: Bmo Subj: attached DLA Memo Subjection appeared in NREA office this date. It appears DLA has or is attempting to serve MCB. They are coming up with admin. road-block and not carring out Those responsibility as assigned by DOD. NREA Enourie Copy goes to FAC (Col Mallice) I millice her a Copy according to TMI AND





### DEFENSE PROPERTY DISPOSAL SERVICE DEFENSE PROPERTY DISPOSAL SERVICE DEFENSE PROPERTY DISPOSAL REGION OFFICE MEMPHIS 2163 AIRWAYS BLVD. MEMPHIS, TENNESSEE 38114

REFER TO DPDR-MPW (Mr. Delaney/(AV)966-9872/jr)

20 May 1981

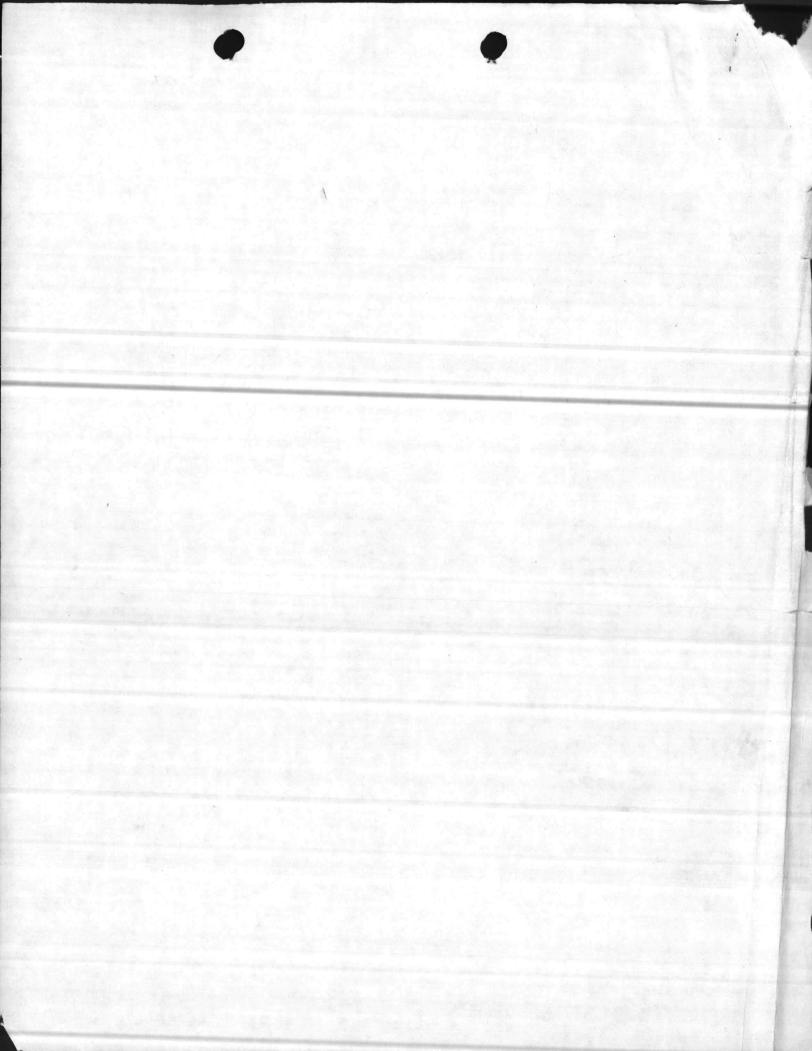
SUBJECT: Hazardous Waste Storage Facility Meeting

TO: DPDO-Lejeune (ZWM)

1. Reference USMC Memorandum to Record, 7 May 1981, subject as above.

2. Re Paragraph 4 of the referenced MFR. Mr. Delaney agreed that the DPDO could accept custody with the understanding that the modifications to the building were accomplished and with the concurrence of DPDS Headquarters. Subsequent communications with DPDS has resulted in the decision that DPDS/DPDO will not accept accountability for facilities until full conformity to current accepted standards. In this regard, please coordinate this information to Mr. Dan Sharp, Environmental Affairs Office and the Host ISA Coordinator as changes to the ISA cannot be initiated until the facilities are completed.

CHAEL A. FUCCI Colonel, USA Commander



## ROUTING SLIP



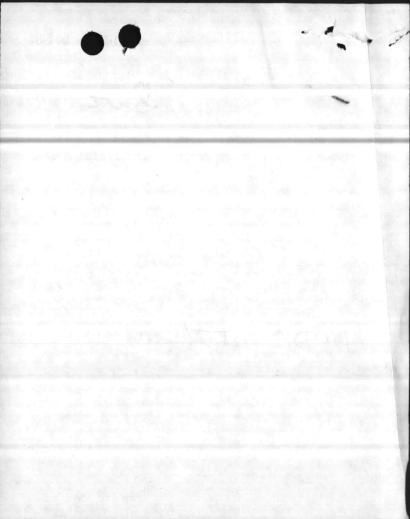
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DPDO strikes again

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#### ASSISTANT CHIEF OF STAFF, FACILITIES HEADQUARTERS, MARINE CORPS BASE

DATE .

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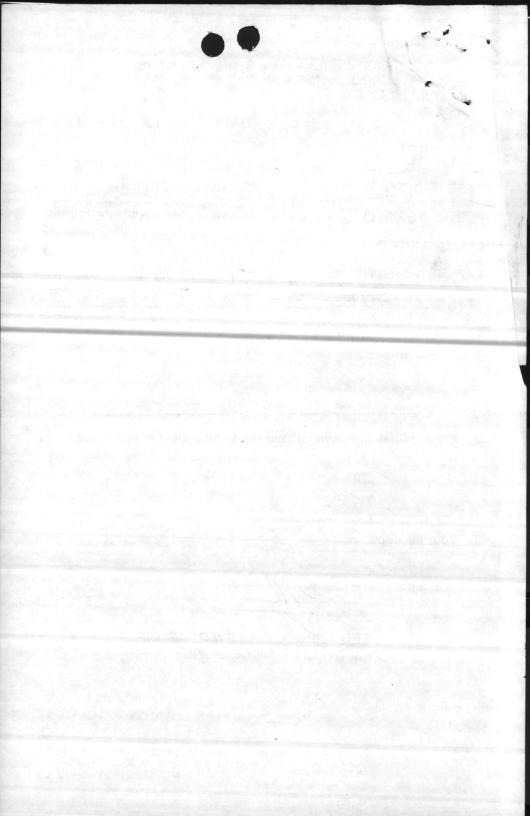
BASE MAINT O	DIR, FAMILY HOUSING
PUBLIC WORKS O	DIR, UNACCOMPANIED PERS HSG
COMM-ELECT O	BASE FIRE CHIEF
MOTOR TRANSPORT O	TO BMO
1. Attached is forwarded for in	fo <del>/action.</del>

2. Please initial, or comment, and return all papers to this office.

3. Your file copy

TO:

"LET'S THINK OF A FEW REASONS WHY IT CAN BE DONE"





DEFENSE LOGISTICS AGENCY DEFENSE PROPERTY DISPOSAL SERVICE DEFENSE PROPERTY DISPOSAL REGION OFFICE MEMPHIS 2163 AIRWAYS BLVD. MEMPHIS, TENNESSEE 38114

REFER TO DPDR-MPW (Mr. Delaney/(AV)966-9872/cp)

SUBJECT: Responsibilities of the DPDO in Accepting Accountability of Hazards and Toxic Material

9 JUN 1981

TO:

Commander United States Marine Corps Facilities Operations Office ATTN: Major J. A. Marapoti Camp Lejeune, North Carolina 28542

1. Reference conference telephone conversation, 2 June 1981, between Colonel K. P. Millice, USMC; Mr. Marvin King, Defense Property Disposal Officer, Camp Lejeune; Lt Col Wallace R. Pyne, USAF, Chief, Operations Division, DPDR; and Mr. Bishop Delaney, Chief, Facilities and Equipment Office, DPDR, subject as above.

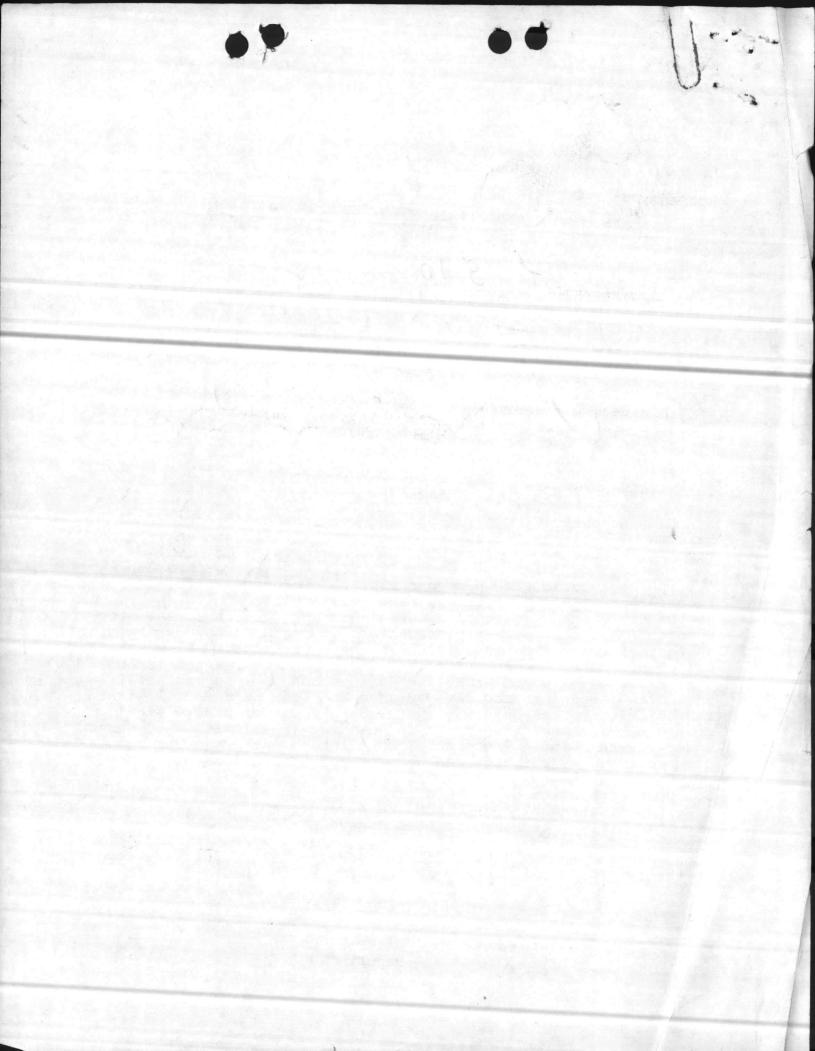
2. This letter is to confirm the agreements between the personnel in the above telephone conversation.

3. Camp Lejeune, USMC, will proceed with the modification of Building TP-451 and the construction of a similar pre-engineered metal structure as shown on USMC Drawing 14224, 7 May 1981.

4. In the interim time period during which construction is being accomplished, Supply Division, USMC, will utilize Building TP-451 as the designated Hazardous Material Storage facility, retaining it upon the base real property accountability records and maintaining custody of the stored material. The Defense Property Disposal Office will accept accountability of the material stored in Building TP-451 as "accepted-in-place" status and will provide assistance in storing/locating properly packaged and labeled material within the building in consonance with the Base Environmental Office's guidance. The material stored in Building TP-451 will be covered under the Base Spill Prevention Control Plan and any other regulatory controls as pertains to the storage of hazardous materials.

5. Upon completion of the modification of Building TP-451 and the erection of the additional storage structure and ancilliary construction, i.e., fencing, lighting, paving, etc., the Defense Property Disposal Office will accept the accountability for this storage compound and it will be included in the property agreement in the Inter-service Support Agreement with the Host.

iss and DAVID W. GREEN Deputy



MAIN/DDS/spk 6240

MAY 1 7 1982

To: Via:	Public Works Officer (PWO) Assistant Chief of Staff, Facilities
Subj:	Disposal of Low-Level Radioactive Wastes; request for assistance with
Ref:	<ul> <li>(a) NAVSUPINST 5101.9B</li> <li>(b) FONECON btw Ns. Irene Uselski, NSC, and Mr. D. Sharpe, BMainzDiv, of 8 Feb 82</li> </ul>
Encl:	<ul> <li>(1) CG NCB ltr HAIN/BWE/th 6240 of 9 Sep 1982</li> <li>(2) West Nuclear Corps ltr of 31 Mar 1982</li> </ul>
	he subject materials, described in enclosure (1), were generated by the Medical Field Research Laboratory formerly located aboard Camp Leieune.

Fromt Base Maintenance Officer

Naval Medical Field Research Laboratory formerly located aboard Camp Lejeune. Enclosure (1) requested assistance from Naval Supply Center (NSC), Norfolk, (Code 105.1) in accordance with reference (a) and provided required funding documentation. This command initiated enclosure (1) with the understanding that NSC would handle the disposal including providing all technical expertise required. However, during reference (b), Marine Corps Base, Camp Lejeune personnel were advised that MSC's role would be basically clerical in nature. NSC also advised that the contractor would deal directly with Camp Lejeune. MSC advised that after all technical problems were addressed and necessary permits obtained, NSC would draw up the disposal contract. Enclosure (2) outlines information/action required.

2. Base Maintenance Division does not have technical expertise in this area. Therefore, it is requested PWO submit an Engineering Service Request requesting assistance from the Engineering Field Division, Norfolk with this matter. In that the NSC has apparently entered some type of arrangement with West Nuclear Company (see enclosure (2)), the possibility of contracting for technical assistance from West Nuclear should be pursued.

3. Point of contact in this matter is Mr. Danny Sharpe, Natural Resources and Environmental Affairs Branch, telephone 2083.

B. W. ELSTON

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Said Start Robert

State of Washington Department of Social and Health Services HEALTH SERVICES DIVISION RADIATION CONTROL PROGRAM



PERMIT NO. 1443

# Site Use Permit

Low Level Radioactive Waste

REGISTRANT U.S. Marine Corps. Assistant Chief of Staff, Facilities Marine Corps Base Camp Lejeune, North Carolina 28542

The person or firm to whom this certificate is issued is subject to the provisions of Chapter 70.98 of the Revised Code of Washington.

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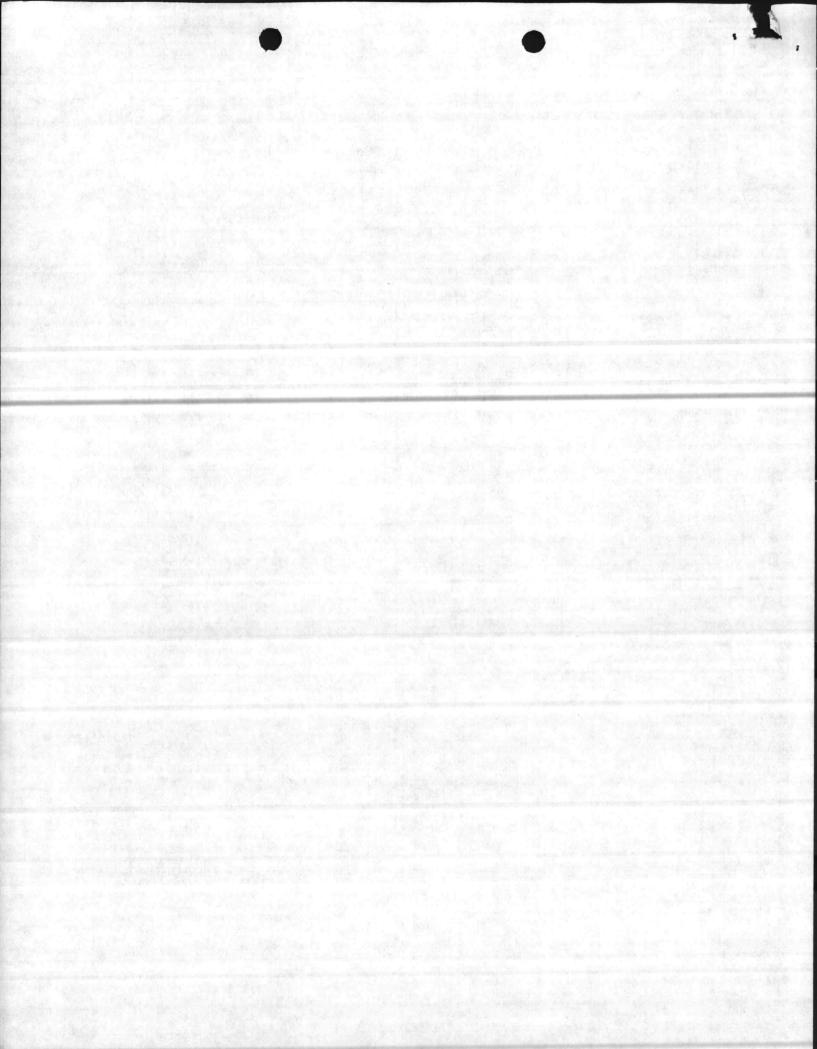
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EXPIRES: January 31, 1984

DSHS 13-437 Rev. 6/80

PERMIT DOES NOT IMPLY APPROVAL

3





ALAN J. GIBBS Secretary

STATE OF WASHINGTON

## DEPARTMENT OF SOCIAL AND HEALTH SERVICES

Olympia, Washington 98504

April 28, 1982

TO: All Site Use Permit Holders

**IOHN SPELLMAN** 

Governor

FROM: E. Lee Gronemyer, Manager Radioactive Waste Program

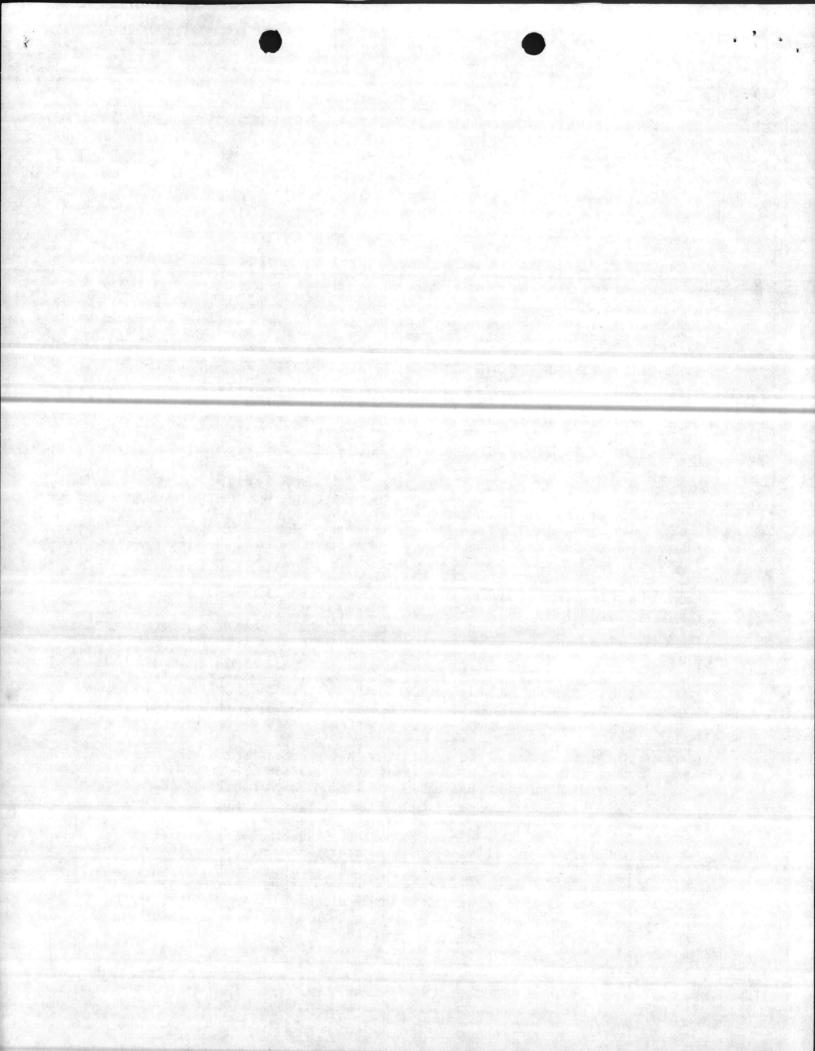
SUBJECT: WASHINGTON STATE RADIOACTIVE WASTE DISPOSAL INFORMATION

The increasing volumes of low level waste handled at Washington's disposal facility near Richland calls for a restatement of policies and procedures consistent with the requirements of the United States Department of Transportation (DOT), the United States Nuclear Regulatory Commission (NRC), the State of Washington Administrative Code (WAC), and conditions of the license issued by the department to U S Ecology, Inc., for its operation of the site. Our intention is to address the disposal practices and procedures which have been modified and "fine tuned" over a period of time, and to bring our several previous guidance memoranda together in one policy statement.

As a holder of a Washington State Site Use Permit you have received a copy of our regulations, WAC 402-19-530. These regulations state clearly that each generator/packager and each broker must have a site use permit whenever both are involved in the shipment of low-level radiactive waste (LLW) to Washington.

In the case of brokered shipments, the broker must ascertain that generators have current, unencumbered site use permits prior to receipt of LLW from those generators. The term "letter of intent" is obsolete.

Washington's regulations require that both the generator and the broker(s), when both are in any way involved, must sign the form certifying to the State of Washington that applicable regulations have been met and that the State of Washington is indemnified from all losses associated with the waste shipments in question. In both of these situations, i.e., permits and certification forms, it has come to our attention that all generators of radioactive waste have not applied for site use permits, nor have all generators and brokers been signing the certification form. We are alert to these situations and are informed by our assistant attorney general that irregularities in thse areas constitute a clear violation of "Washington State Rules and Regulations for Radiation Protection" and may result in the suspension of site use permits.



U S Ecology, Inc., has recently revised its Radioactive Shipment Report (RSR) to clearly identify the generator of each package of waste received at the site. This generator information is important. Please be advised that the information on the RSR, the certification(s) and the site use permits must be coordinated. Failure to do so may result in the delay of a shipment being accepted for disposal or perhaps not being accepted.

#### Shipment Certification

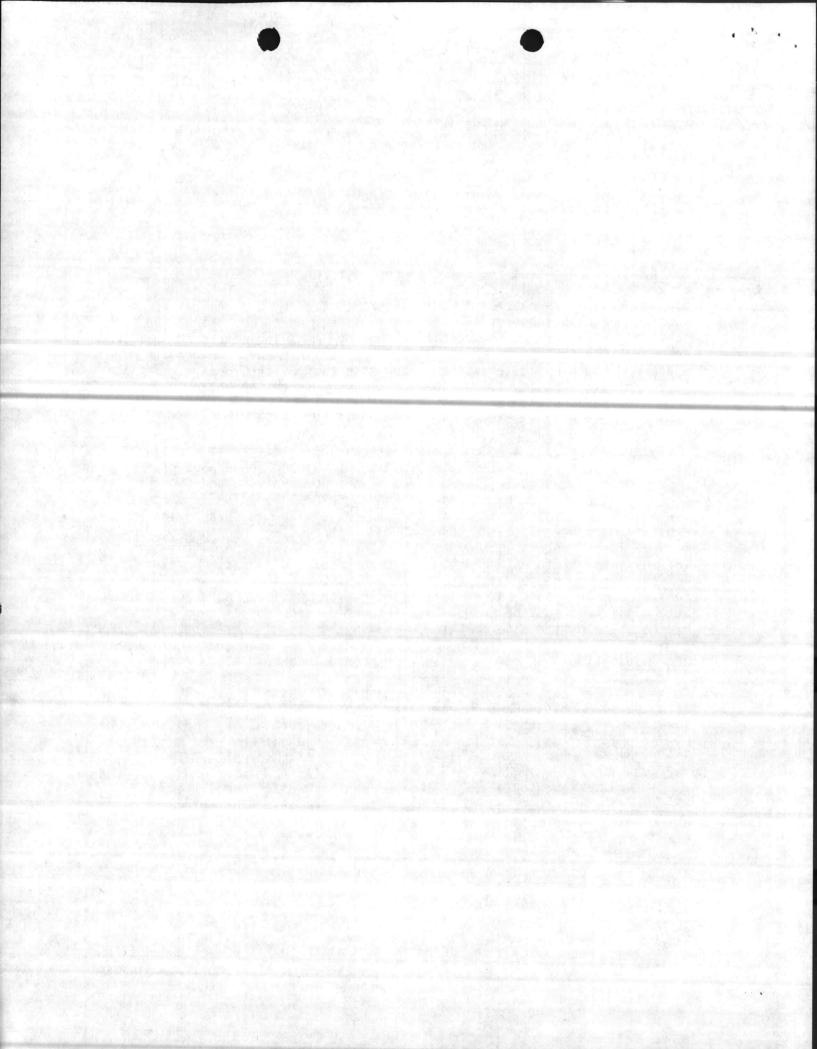
Clarification has been requested in the past concerning what constitutes brokerage; for example, does a simple telephone call to arrange transportation constitute "brokerage"? Our Assistant Attorney General has opined that such action does indeed fall within the definition of brokerage; the broker's section (Section B) of the certification form must indicate such involvement. However, if no broker is involved with a given shipment, the generator/ shipper must so indicate in the broker's section of the form (e.g., "No broker used)". Waste will not be accepted unless the brokerage status of the shipment is indicated.

A properly completed certification form must accompany each shipment of radioactive waste to the low level waste burial site. "Certification", as used here, is a statement signed by: (1) the shipper/ generator of a shipment of radioactive waste, (2) the broker, if one is involved, and (3) the carrier of that shipment of waste. The signators "certify" in part, that the shipment has been inspected for compliance with the laws, rules and regulations relevant to the shipment and that no items of noncompliance were found. The signators, acting as representatives of the permittee, also indemnify the State of Washington, within specified limits, for claims, losses, etc. connected with the material. The certification shall be submitted to a Department of Social and Health Services inspector or designee at the site and must be judged to be properly executed prior to acceptance of the waste by the site operator. The instrument of certification is DSHS form RHF-31A for commercial generators, form RHF-31B for state governments and institutions, or form RHF-31C for federal generators.

It is required that each package of radioactive waste be clearly identified as being so certified and is coming to Washington from a quickly and clearly identifiable, permitted generator. It is intended that one form be executed by one shipper/ generator for one shipment; "shipment" as used here means one truck or semi-trailer as it arrives at the disposal site. The use of individual miniaturized and often poorly executed forms for each package in a shipment imposes a time consuming and unnecessarily onerous inspection procedure. It is sufficient that the single certification relevant to one generator's share of a mixed shipment (two or more generators involving one broker in one truck) be completed only by the generator in Section A, provided that the broker executes one additional form keyed to all the others and completed by broker and carrier in Sections B and C.

#### Reinstatement Procedure

Contrary to what you may be hearing or seeing, the State of Washington has not changed its policy with regard to the reinstatement of suspended site use permits. Following a suspension, reinstatement of a permit to dispose



of low-level radioactive waste in Washington will be made only after the permit holder's waste generation procedures and quality assurance program have been evaluated and found adequate.

We strongly recommend, but do not require, that the radioactive materials licensing agency with jurisdiction (either NRC or an Agreement State) inspect the permit holder's waste generation facilities and procedures prior to our reinstatement. The basis for the review and audit of the permit holder's waste generation facilities and procedures should be the audit program developed by the Waste Generation Committee of the Atomic Industrial — Forum or an equivalent procedure.

It is again suggested, but not required, that the Washington Radiation Control Section receive a written report from the permit holder's regulatory agency describing the results of that inspection.

#### DISPOSAL OF LIQUIDS

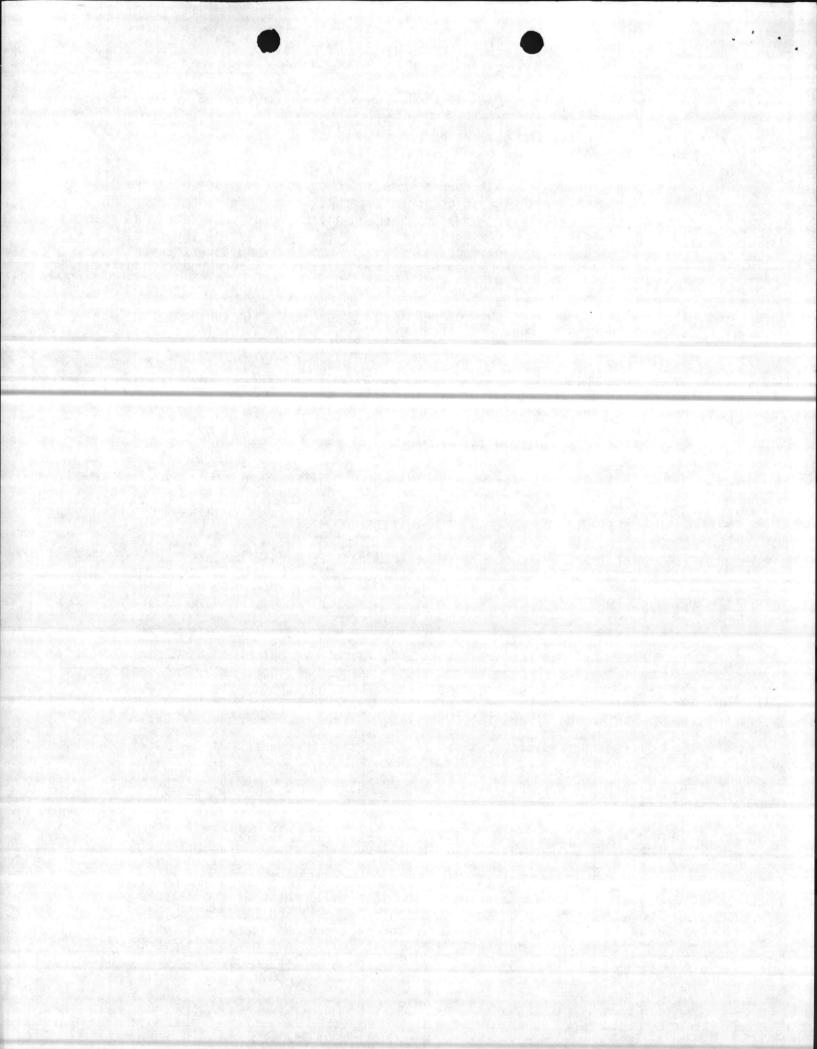
<u>General</u> - Liquids must be treated before they can be accepted at the Washington disposal site. For most liquids such treatment must be either by absorption or solidification processes.

Implicit in the approval of any medium for the treatment of liquids is the requirement that the resultant waste be in compliance with the provisions of DOT, NRC, WAC and the site operator's license. The definition of "free standing liquid" is pertinent to solidified waste. It does not apply to absorbed liquids since the specified "...enough absorbent material to absorb at least twice the volume of radioactive liquid..." provides no leeway.

#### Absorbents

A condition of the site operator's license specifies in part, "...the licensee shall not receive any liquids which have not been absorbed or solidified". It further states, "Only absorbents approved by the department shall be used". Since the department lacks the capabilities and facilities for testing and approving absorbents, we are approving only those which have been proven successful over time and through routine use. Capitalizing on information and records of use from the many waste generators, the established list of absorbents is based on acceptable use results and/or individual company testing criteria. The department has reasonable confidence that absorbents listed in Attachment 1 can be used with acceptable results.

The department recognizes the need to keep pace with improving technology and recognizes also that the list of absorbents approved at this time is not all inclusive. We realize that several absorbents in common use have not been listed. We further realize that as experience is gained with absorbents some will be added to the list and perhaps others deleted. Continued acceptance and use of an absorbent will be based on our program of routine surveillance and monitoring of packaged radioactive wastes. The unlisted absorbents currently used by generators are not being overlooked or rejected. The department will approve, on a case by case basis and as data



are supplied, the use of absorbents which do not appear on the list. In order to obtain the department's approval of an absorbent that is not listed in the attachment, testing data must be submitted indicating documented and reproducible experience with the absorbing capabilities of the materials in question. Documentation should describe all details of a quality assurance program including proportions, materials description, temperature, vibration effects and types of liquids absorbed. Attachment II details procedures for the use of such absorbents in the packaging of some specific wastes.

## Solidification

The alternative treatment for liquids is solidification and Attachment III lists media approved by the department. The mechanism of approval is the same as for absorbents.

#### Waste Forms .

Attachment IV, listing license conditions and redundant in part, is an excerpt from a previously issued memo which is included for its substance.

#### Regulations

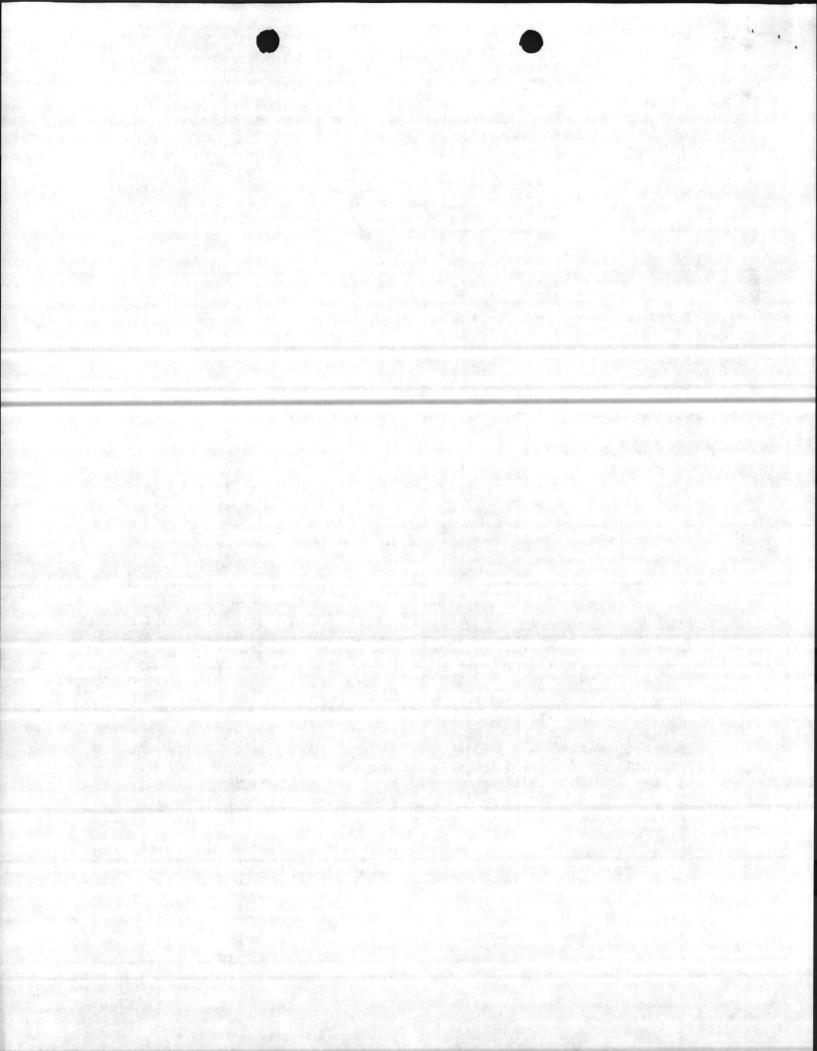
Attachment V is the text of WAC 402-19-530. Requirements for users of the Washington commercial low-level waste disposal site. The department will inform permit holders prior to any changes in license conditions or regulations which may result from implementation of the Northwest Interstate Compact for Low Level Radioactive Waste Management.

#### Summary

These statements of clarification concerning Washington's regulations are made in an attempt to further assure that existing state and federal regulations governing the generation, preparation, packaging, and transportation of low-level radioactive waste have been adhered to before such waste arrives in the State of Washington; and to eliminate any misunderstanding or misinterpretation of the permit and certification requirements in the regulations of the State of Washington and the conditions in the U S Ecology, Inc. radioactive materials license.

Recognizing that new questions and problems will arise, we invite inquires regarding the disposal of LLW in the State of Washington. Please feel free to call Earl Ingersoll at (206) 753-3353, or Lee Gronemyer at (206) 753-3462.

-4-



ATTACHMENT I

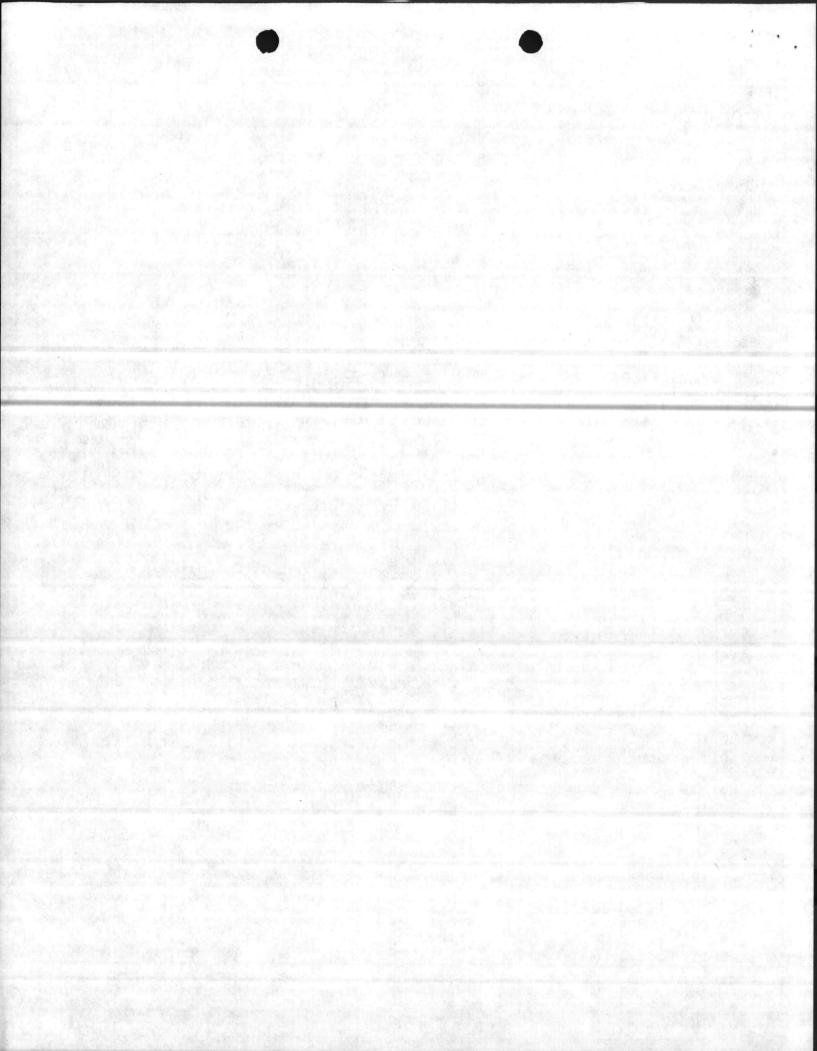
## TABLE I - ABSORBENTS

A. Diatomaceous Earth (Medium Grind)

- B. Speedi Dry
- C. Celatom (M-P 78)
- D. Floor Dry Super Fine
- E. Hi Dri
- F. Florco and Florcox
- G. Instant-Dri
- H. Safe-T-Sorb
- I. Oil-Dri (Safe n Dri)
- J. Zonolite Grade No. 2, 3 or 4 (Vermiculite)

Absorbency efficiencies and volumes of absorbent required could vary. In all cases, it is the responsibility of the waste generator and/or packager to determine the efficiency and proper proportions required for the liquids being absorbed.

2



#### Attachment II

#### PROCEDURE A

## PACKAGING ABSORBED LIQUIDS, INCLUDING OILS

- Container must meet DOT Specification 7A requirements as listed in 49 CFR 173.395(a)(1-4).
- Container must be lined with 4 mil plastic liner and sealed at the top when container is packed.
- 3. Container must be filled with enough absorbent material to absorb at least twice the volume of radioactive liquid contents (ratio based on absorbency and not on volume or weight). Liquid should be placed at approximately every 12 inches of absorbent to ensure even dispersion.

#### PROCEDURE B

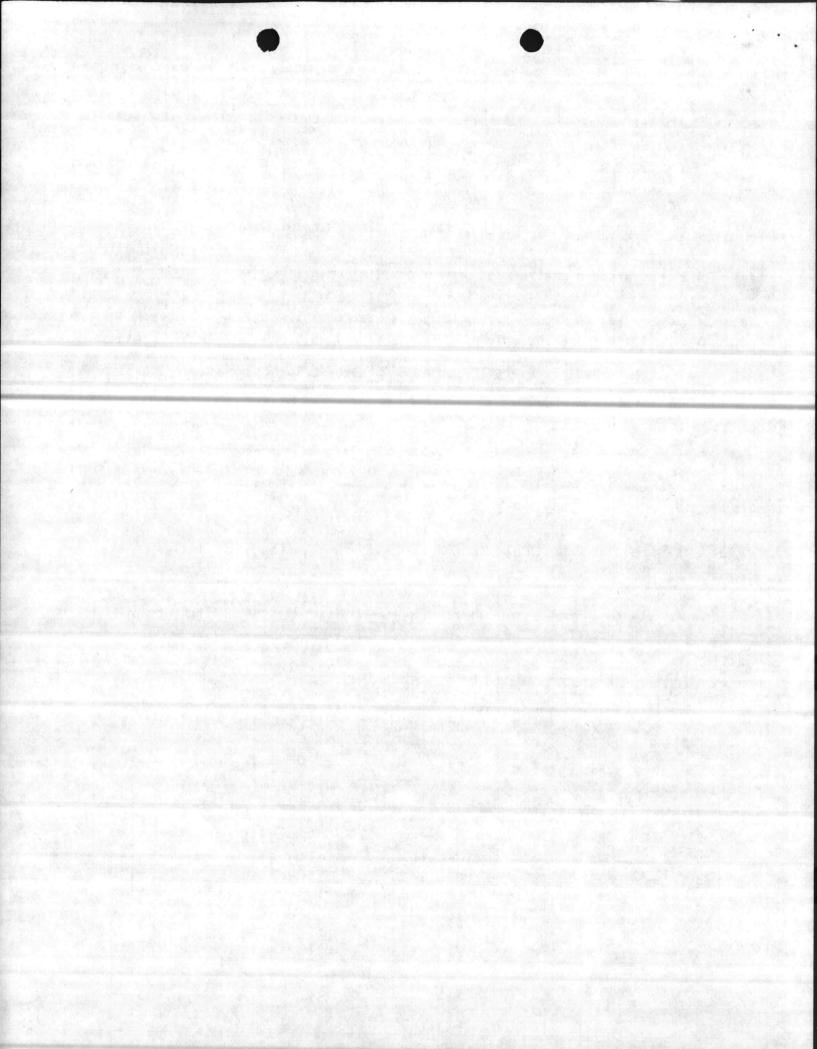
#### PACKAGING OF SCINTILLATION VIALS

- Container must meet DOT Specification 7A requirements as listed in 49 CFR 173.395(a)(1-4).
- Container must be lined with 4 mil plastic liner and sealed at the top when container is packed. It is recommended that a layer of absorbent be placed in the bottom of the drum prior to the installation of the plastic liner.
- 3. Place approximately 3 inches of absorbent at the bottom of the container, inside the plastic liner. Vials and absorbent must be placed in the container in alternate layers not exceeding 6 inches in depth. The top layer of absorbent must be at least 3 inches in depth.
- 4. The vials are NOT to be opened.
- 5. Container must be filled with enough absorbent material to absorb at least twice the volme of radioactive liquid contents (ratio based on absorbency not on volume or weight).

#### PROCEDURE C

## PACKAGING ANIMAL CARCASSES

- 1. All containers must meet DOT performance specification 7A. The final package will be a double-walled metal container with the outer container having a capacity at least 40 percent greater than the inner container (e.g., a 30 gallon drum in a 55-gallon or a 55-gallon drum in an 85-gallon drum).
- 2. Line the inner metal drum with 4 mil plastic liner.







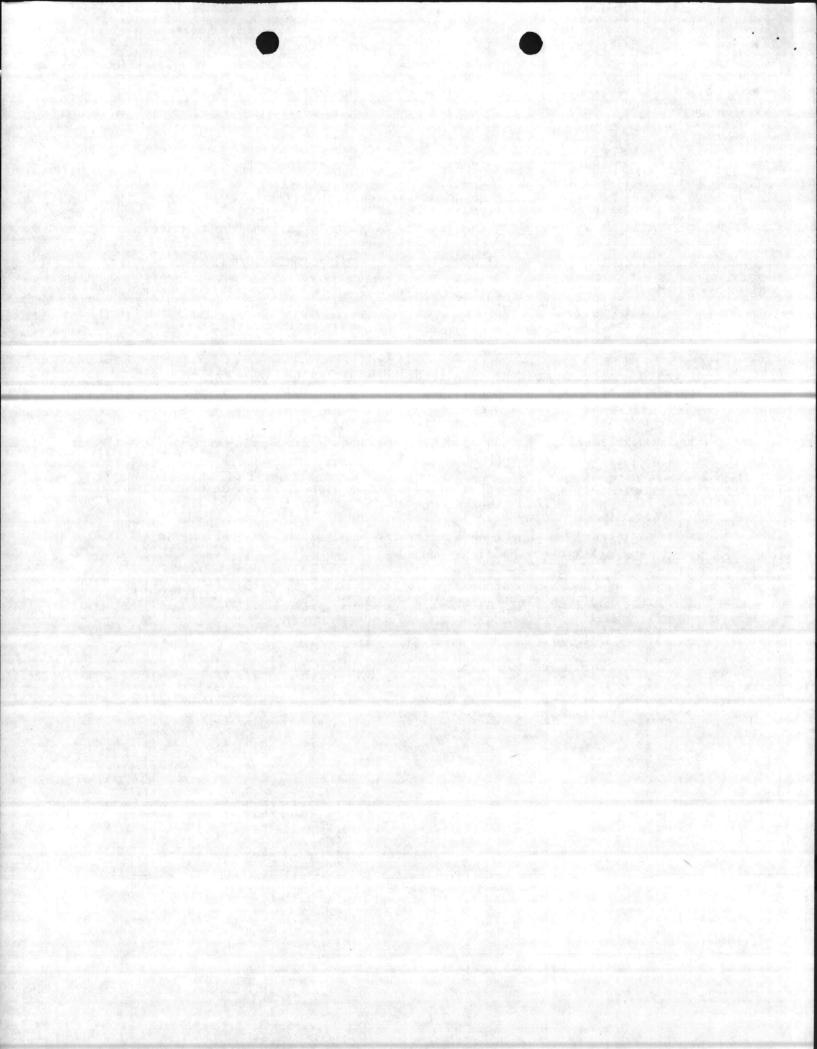
- 3. Place animal carcasses into the inner metal drum with absorbent and lime. Ratio: One part lime to ten parts absorbent.
- 4. Seal plastic liner and inner metal drum.
- 5. Place a minimum of 3 inches of absorbent in bottom of outer drum.
- 6. Place the inner metal drum inside the outer metal drum.
- 7. Place enough absorbent between the inner and outer drum to completely fill the void space.
- 8. Seal the outer drum.

A written request must be submitted and Departmental approval received prior to use of any absorbent not listed in Table 1. This request must contain the following information:

- 1. A statement of the absorbency of the material as determined by the manufacturer and copy of the manufacturer's descriptive information.
- 2. Absorbency for the actual liquid to be disposed must be determined by a bench test (e.g., Westinghouse, Gardner Coleman).
- 3. Additional factors such as vibration tests, gas generation, long term chemical and radiological stability.

Approval of the absorbent or the procedure approval by the Department does not alter any liability or surety arrangements.

-7-



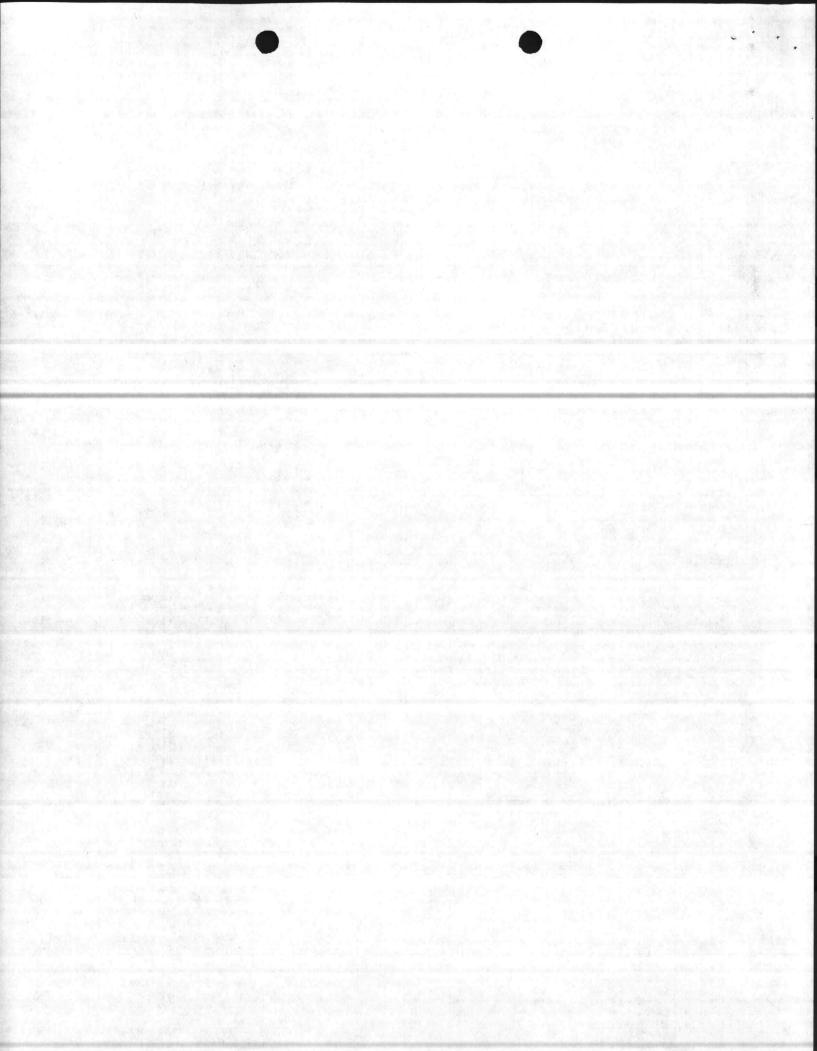
## ATTACHMENT III

Approved Solidification Media

- 1. Asphalt
- 2. Delaware Custom Media
- 3. Dow Media
- 4. Portland Cement
- 5. U.S. Gypsum's Envirostone Cement

3

 Other solidification media and processes as approved by NRC and/or the department.



#### ATTACHMENT IV

Several conditions of the US Ecology, Inc. radioactive materials license deal with authorized waste forms. These license conditions may require generators to change their waste handling procedures. Waste received by U S Ecology, Inc., after the effective date of the license conditions must be in an authorized waste form. The authorized waste forms are:

Effective Date

#### Waste Form

### License Condition No.

26, 27

In Effect

In Effect

Liquids containing more than 1% oil must be either solidified, i.e., have no detectable free-standing liquid (not more than 0.5% or one gallon per container, whichever is less); or, absorbed with twice the absorbency required for the total volume of liquid.

Liquids (not otherwise specified) must be absorbed or solidified; solidified liquids shall have no detectable freestanding liquid (not more than 0.5% or one gallon per container, whichever is less).

Absorbed liquids must be absorbed by enough approved absorbent material to absorb twice the amount of liquid present.

Dewatered ion exchange resins and filter media must have no detectable freestanding liquids (i.e., not more than 0.5% or one gallon per container, whichever is less).

Ion exchange resins and filter media 27(k) containing radioactive material having a concentration of 1 uCi/cc or greater of materials with half life greater than 5 years must be stabilized by solidification.

Until this date liquid scintillation vials 27(b) and 27(c) and liquids and other organics in 50 milliliter or less size vials used in clinical or laboratory testing may also be accepted.

The dates for compliance with the license conditions were established so that industry and government would have adequate lead time to make necessary changes in waste handling equipment and processes.

-9-

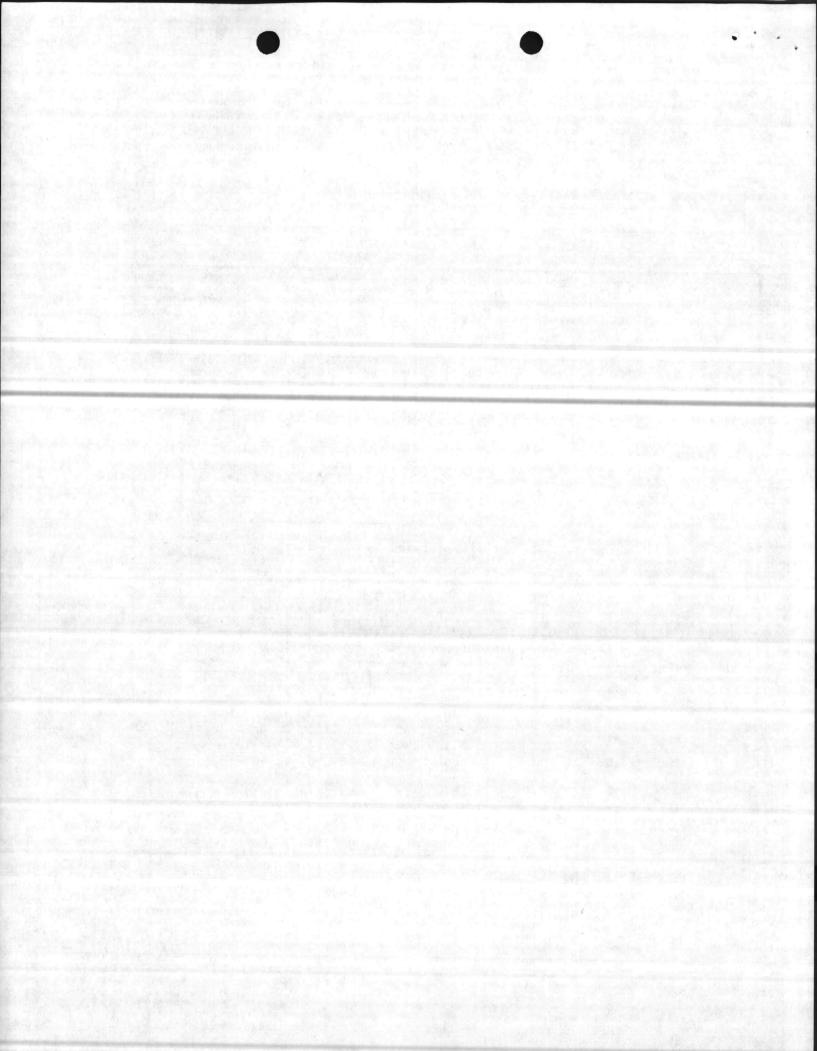
## In Effect

December 31, 1983

27

27

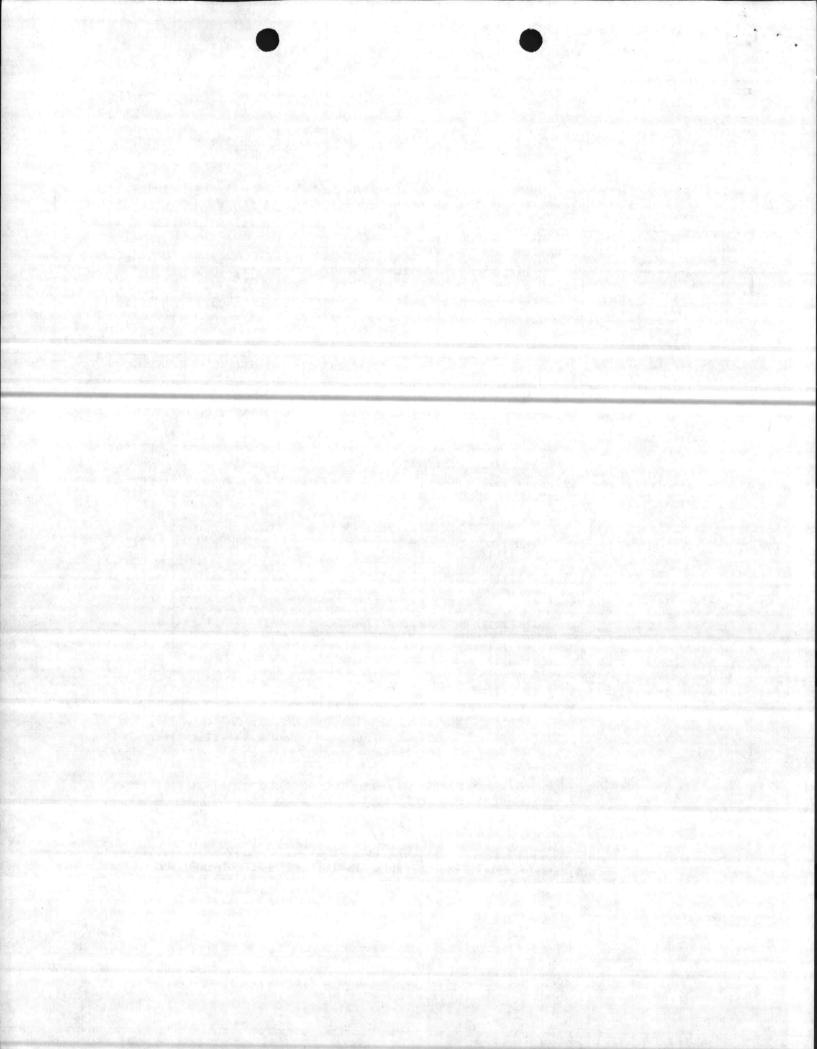
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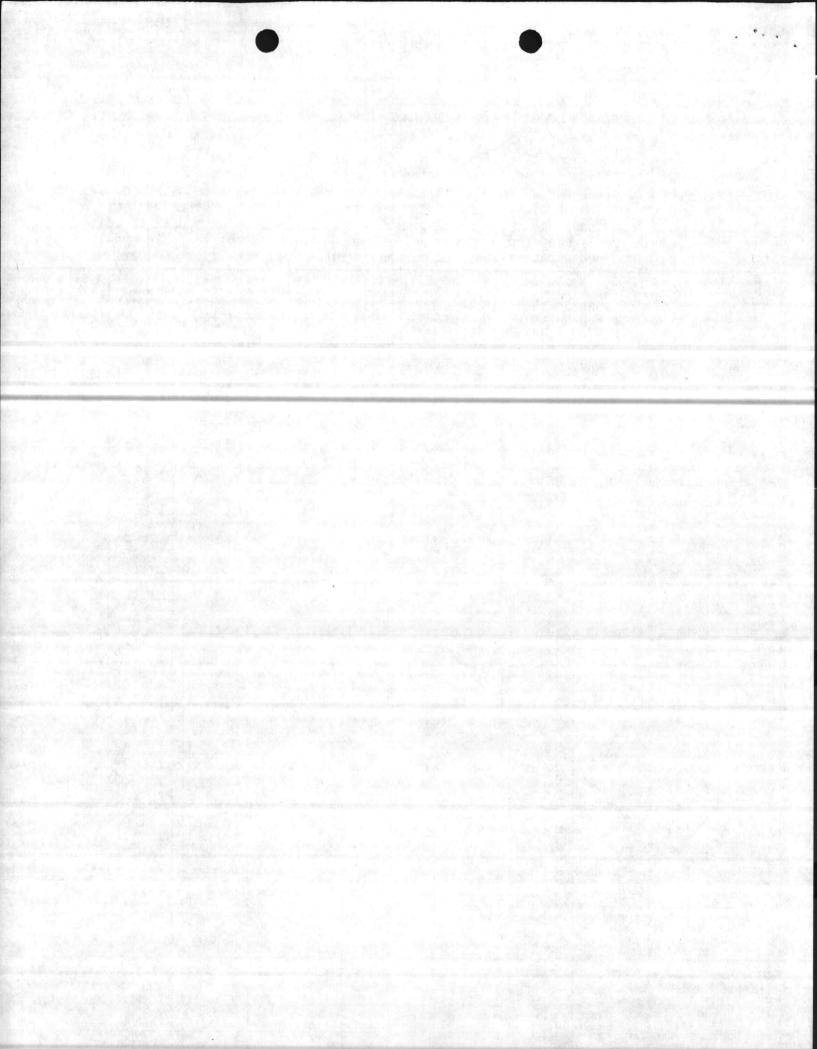
### ATTACHMENT V

Wac 402-19-530 Requirements for users of the Washington commercial low-level waste disposal site.

- (1) Purpose and scope. Each generator/shipper and each broker of low-level waste shall have a site use permit prior to the disposal of such wastes at any commercial low-level radioactive waste burial site located in the State of Washington. The term "broker" as used in these regulations shall mean any person who acts as an agent or intermediary for a generator/ shipper or another person collecting and/or agreeing to arrange for the transport of radioactive waste generated by others, provided it shall not include a carrier whose sole function is to transport low-level radioactive waste.
- (2) Site use permit.
  - (a) Filing application for site use permit.
    - (i) Application for a site use permit shall be filed on departmental form RHF-30 or a clear legible record containing all the information required on that form including but not limited to: U.S. Nuclear Regulatory Commission or agreement state license number, name of company, address, 24-hour telephone number, and contact person.
    - (ii) Each appliation shall be signed by the applicant or a person duly authorized to act for or on the applicant's behalf.
  - (b) A site use permit must be obtained before disposal of low-level radioactive waste at any waste burial site is permitted.
  - (c) Each permit shall be renewed annually.
  - (d) Revocation of permit.
    - (i) The failure of one or more packages in a shipment of waste to be in compliance with the requirements of Title 402 WAC, the U.S. Nuclear Regulatory Commission, or the U.S. Department of Transportation, may cause the revocation of this use permit for the responsible waste generator/shipper or broker. Failure to comply with the requirements in the preceeding sentence may bar the acceptance of any other or subsequent shipment by the same generator/shipper or broker at the site.
    - (ii) The site use permit may be revoked for a specific generator/ shipper or broker if a refusal to accept one or more of the shipments has been made by any other licensed commercial lowlevel waste burial site within the United States.
    - (iii) The site use permit may be reinstated provided the generator/ shipper or broker submits documentation approved by the department describing its quality assurance program to achieve compliance for future shipments.



(3) Waste shipment certification. A low-level radioactive waste shipment certification shall be required to accompany each shipment of radioactive waste to the licensed low-level waste burial site. The certification shall be submitted at the burial site to the Department of Social and Health Services or its designee and must be judged to be properly executed prior to acceptance of the waste by the site operator. The certification shall be on departmental form RHF-31 or a clear legible record containing all the information required in that form, or the certification form provided for in executive order E0-79-09. The information shall include but is not limited to name of company, volume of waste in shipment, shipment number, permit number (when issued), and date.



# LOW-LEVEL RADIOACTIVE WASTE SHIPMENT CERTIFICATION FOR THE FEDERAL GOVERNMENT AS A GENERATOR/PACKAGER, AND ITS BROKERS AND CARRIERS

The following certification, completed as applicable, is made to the State of Washington:

Certification is hereby made to the State of Washington that Radiation Shipment Record No. \_\_\_\_\_\_ of low-level radioactive waste has been inspected in accordance with requirements of the Governor of Washington's Executive Order dated November 19, 1979, prior to its shipment. Further certification is made that the inspection has revealed no items of non-compliance with all applicable laws, rules and regulations.

As determined under the provisions of the Federal Tort Claims Act (28 USC § 2671-2680), the undersigned shall be liable for and hold harmless the State of Washington from any and all claims, suits, losses, damages or expenses on account of injuries to any and all persons whomsoever, and any and all property damage, arising or growing out of or in any manner connected with any activities performed under this order.

Except for any violation of applicable existing state or federal statute or regulation respecting packaging and shipment, inspection and acceptance of any item or container or material covered by this certification by the State of Washington or a duly authorized contractor shall release the party who executed this certificate from any and all requirement of indemnification from injury or loss.

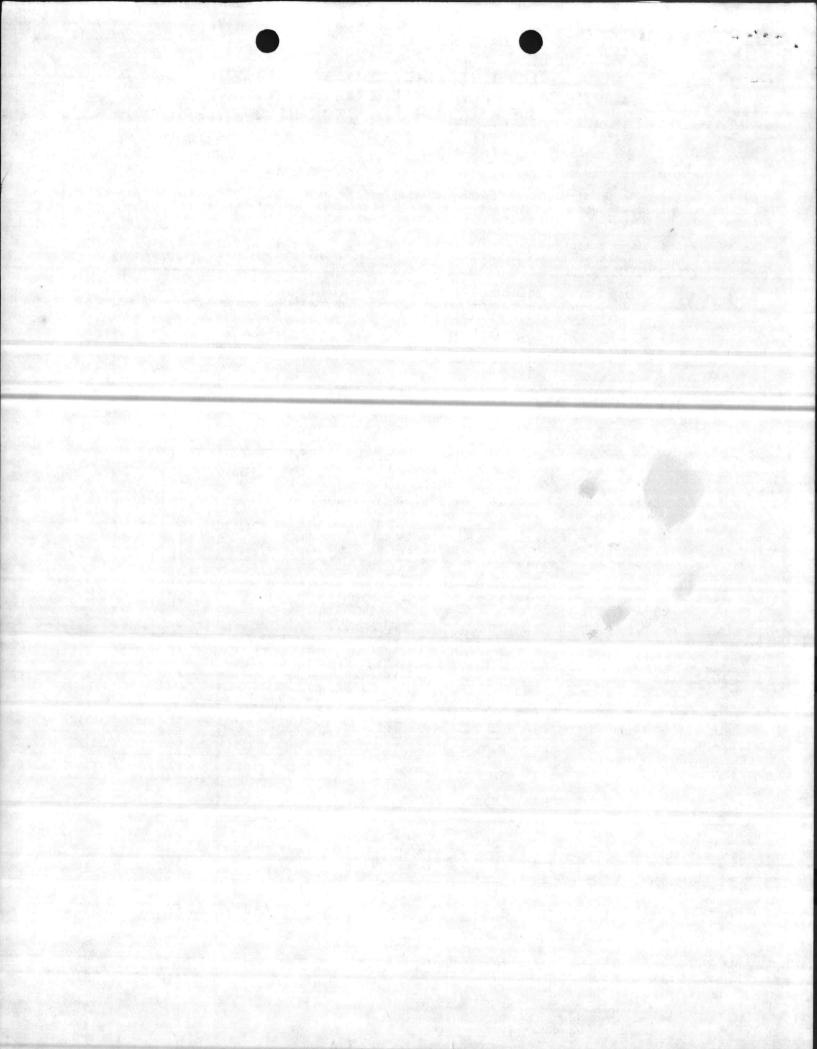
FOR THE GENERATOR/PACKAGER:	and the second	(C						
PERMIT NUMBER:								
VOLUME OF WASTE IN THIS SHIPMENT: _	BY:							
	TITLE:							

Certification is hereby made to the State of Washington that Radiation Shipment Record No. \_\_\_\_\_\_ of low-level radioactive waste has been inspected in accordance with requirements of the Governor of Washington's Executive Order dated November 19, 1979, prior to its shipment. Further certification is made that the inspection have revealed no items of non-compliance with all applicable laws, rules and regulations.

The undersigned shall indemnify and hold harmless the State of Washington, in an amount not to exceed \$1,000,000.00 per individual who may be injured, provided that indemnification shall not exceed \$5,000,000.00 in total, for each occurrence, from any and all claims, suits, losses, damage, injury and expenses to any person whomsoever or to property arising or growing out of or in any manner connected with the activities performed under this order.

Except for any violation of applicable existing state or federal statute or regulation respecting packaging and shipment, inspection and acceptance of any item, or container or material covered by this certification by the State of Washington or a duly authorized contractor shall release the party who executed this certificate from any and all requirement of indemnification from injury or loss.

FOR THE BROKER:		(Company Name)	The second second second
PERMIT NUMBER:			
VOLUME OF WASTE IN THIS SI	HIPMENT:		
DATE:			
	TITLE:		
SECTION C:			
VOLUME OF WASTE IN THIS SHIPM			
DATE:	BY:		
a star an	TITLE:		
			Qa
DSHS RHF-31-C DSHS 13-424B	1		Common of the second and the second



DEPARTMENT OF THE WY Memorandum

MAIN/JIW/spk 6240 DATE: 17 February 1982

FROM Director, Natural Resources and Environmental Affairs Branch

TO Memorandum for the Record

SUBJ Hazardous Waste News Release

Ref

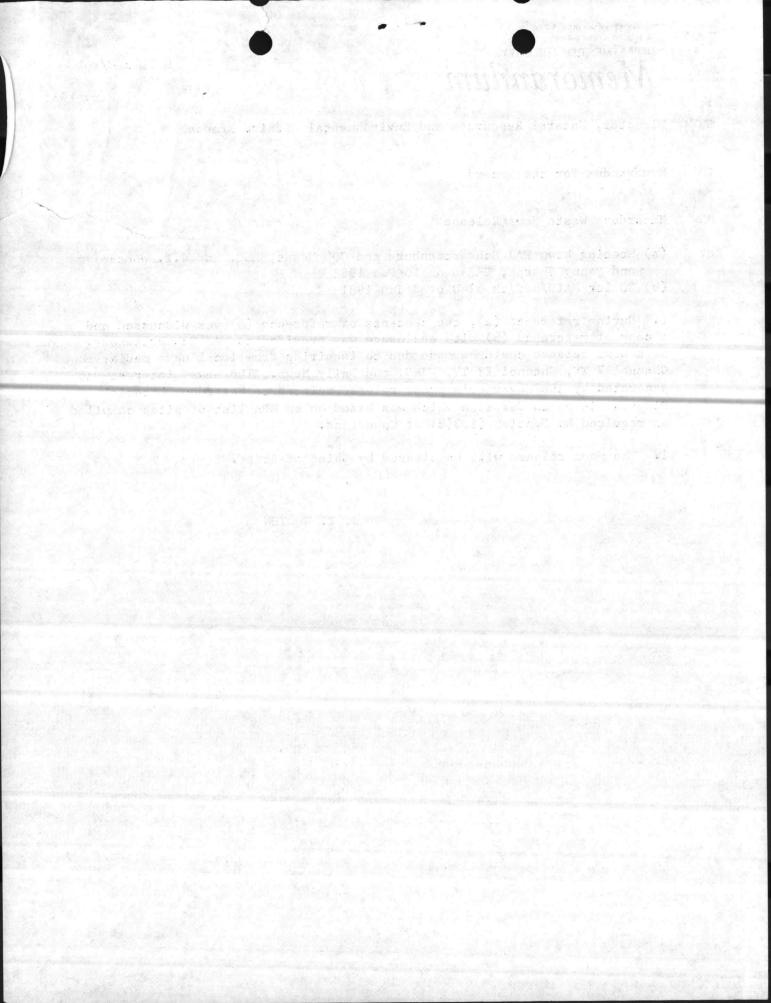
 (a) Meeting btwn MAJ Schwartzenburg and COL Mount, BMO, and J.I. Wooten and Danny Sharpe, NREAB on 16 Feb 1982
 (b) 202 June 202 (2020)

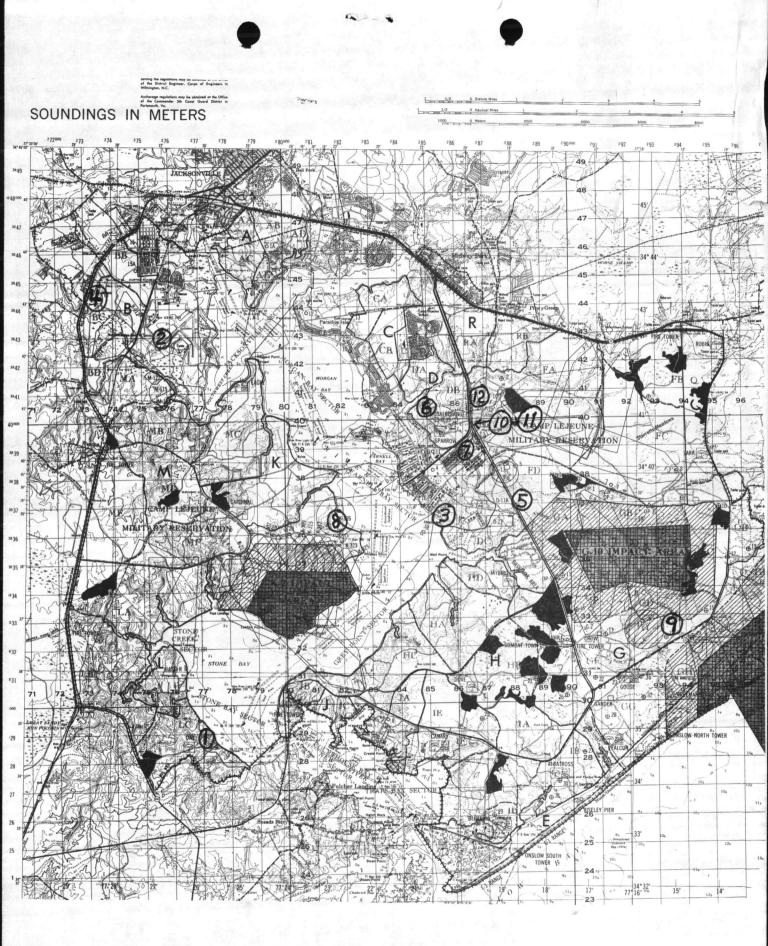
(b) CG ltr MAIN/DDS/th 6240 of 8 Jan 1981

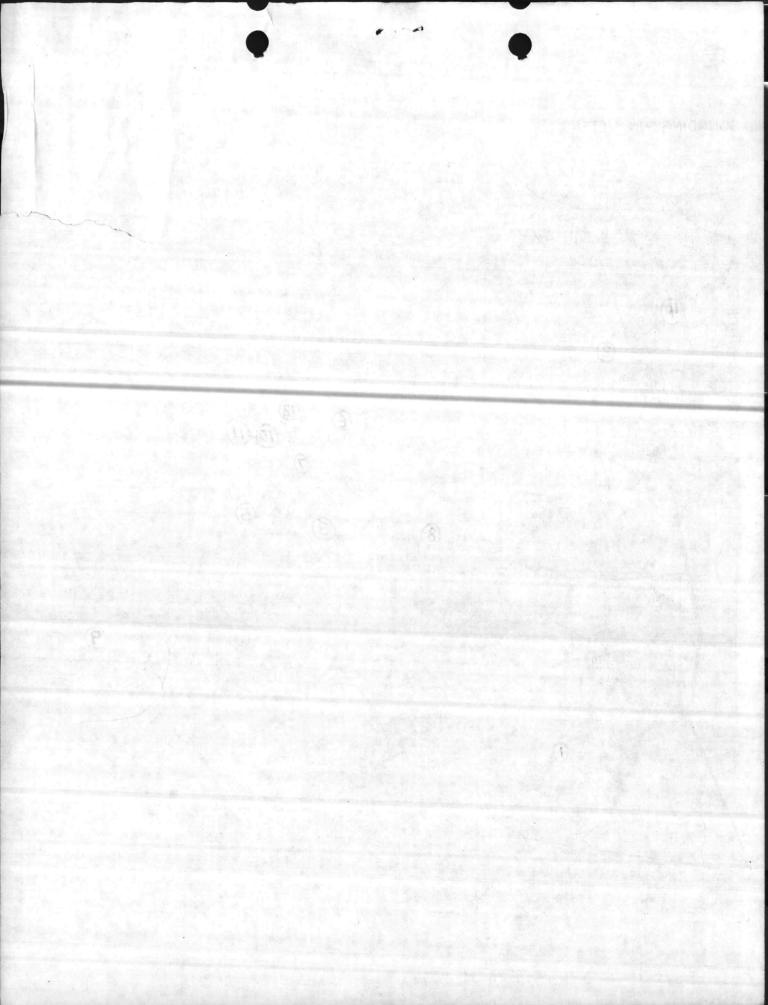
1. During reference (a), the contents of reference (b) was discussed and a copy of reference (b) with enclosure was provided to MAJ Schwartzenburg so a news release could be made due to inquiries from local news media: Channel 7 TV, Channel 12 TV, WJNC, and Daily News. The news interest was generated by the Governor's press release related to Hazardous Material Disposal in North Carolina which was based on an EPA list of sites compiled as required by Section (103(c) of Superfund.

2. The news release will be cleared by Chief of Staff.

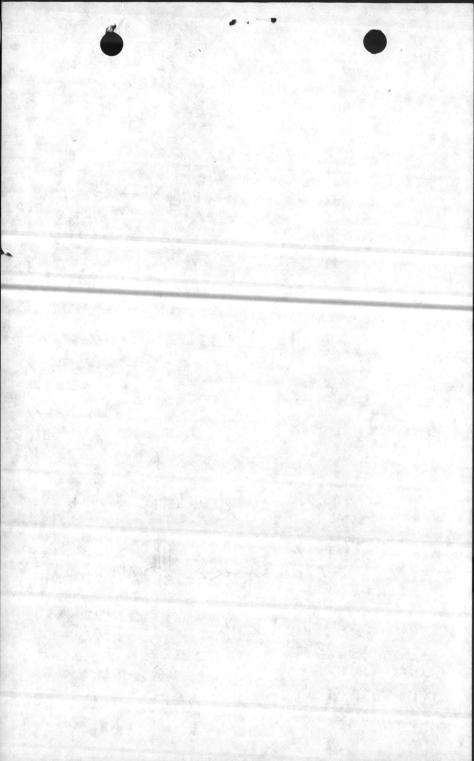
A. U. Woolin







Reputable Quantities 55 gallens or more ID\_\_\_ Site # Chemina Ramilfull 1 MCAS(H) Burn Pit 2 Hadnot Pant Burn Dump 3, CAMP Berger Burn pump 4 Buse Smithing Land fill 5 brouct vector Repearch fob (Radicalhire Buttons) hot 140 (PCB) 6 2 RAnge K-326 Ordnunce dispose S 64A Reneze ordonance 9 TPHS2+HS1 - Flammable 10 Storage (fire incident) Base Fire Degt Burn Pit 11 Lots 201 + 203 (DDT Pass, 6/4) 12



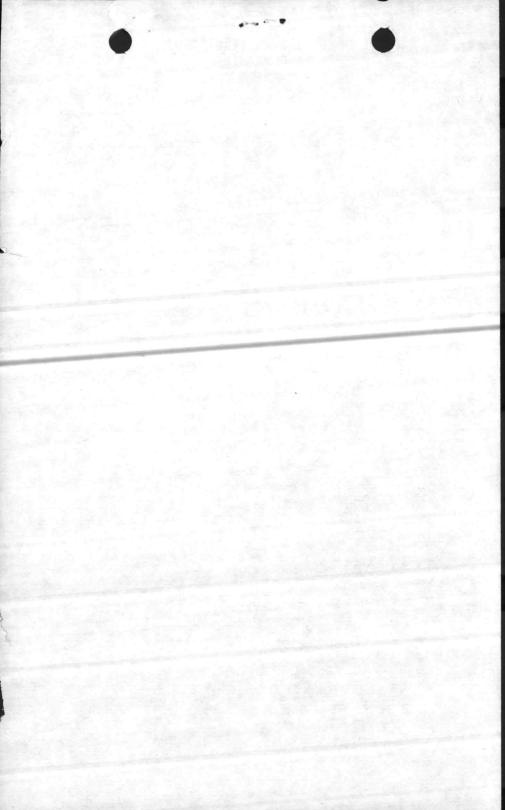
NATURAL RESOURCES AND ENVIRONMENTAL UFAIRS BRANCH BASE MAINTENANCE DIVISION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542

11 Feb 82 Date

From: Director To: BMO

Subj: Beta-Buttons backgyolifo 1.

File Hg Wort



OFFICE OF THE STAFF JUDGE ADVOCATE Marine Corps Base Camp Lejeune, North Carolina 28542

> SJA/LLS/bp 5800/15-82 29 Jan 1982

From: Staff Judge Advocate To: Base Maintenance Officer

Subj: Legal Aspects of Hazardous Waste

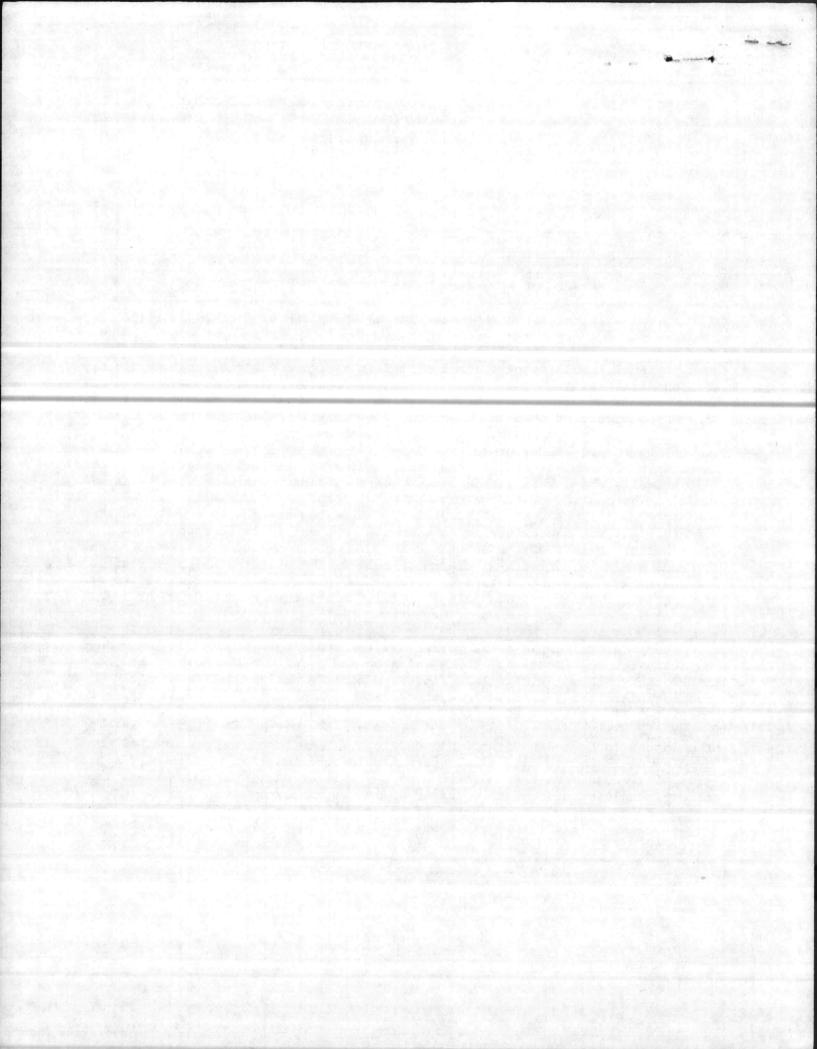
Ref: (a) Base Maintenance Officer 1tr MAIN/JIW/spk 6240 of 14 Jan 1982

1. Pursuant to reference (a) the following opinion is submitted regarding the personal liability of federal officials assigned environmental regulatory responsibilities.

2. As commander of this installation, the Commanding General, Marine Corps Base, is legally responsible for Camp Lejeune's overall compliance with federal and state environmental protection laws. As mere employees, other federal officials who may be assigned responsibilities in the environmental area would not normally share this liability for noncompliance. One exception to this is provided by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-57. This law charges owners or operators of hazardous substance facilities with the responsibility to report any substantial release of the substance into the environment. Examples of such persons would be officers-in-charge of bulk fuel storage or shipping facilities, or the hazardous waste storage facility. Failure to make the required report is a criminal offense punishable by a fine of not more than \$10,000 or imprisonment of not more than one year, or both.

3. Every federal employee is potentially personally liable in his individual capacity for constitutional torts which he may commit in the performance of his duties. This could include federal officials assigned environmental responsibilities. For example, an environmental official who negligently or intentionally performs his duties in such a manner that he causes some personal or property injury to an individual could conceivably be personally liable if the injury is deemed a "constitutional tort." The foregoing problem will be eliminated if Senate Bill 1775, currently in subcommittee, is passed. If passed, this bill would make the United States the sole defendant in cases where the alleged employee misconduct occurred while the employee was acting in the scope of his employment. Senate Bill 1775 would substitute the United States as defendant in civil tort cases only and would therefore have no effect on matters wherein individuals are criminally liable fuel.

B.M. Hur



MAIN/JIW/spk. 6240 JAN 1 4 1982

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From: Base Maintenance Officer To: Staff Judge Advocate (ATTN: Major Scutter)

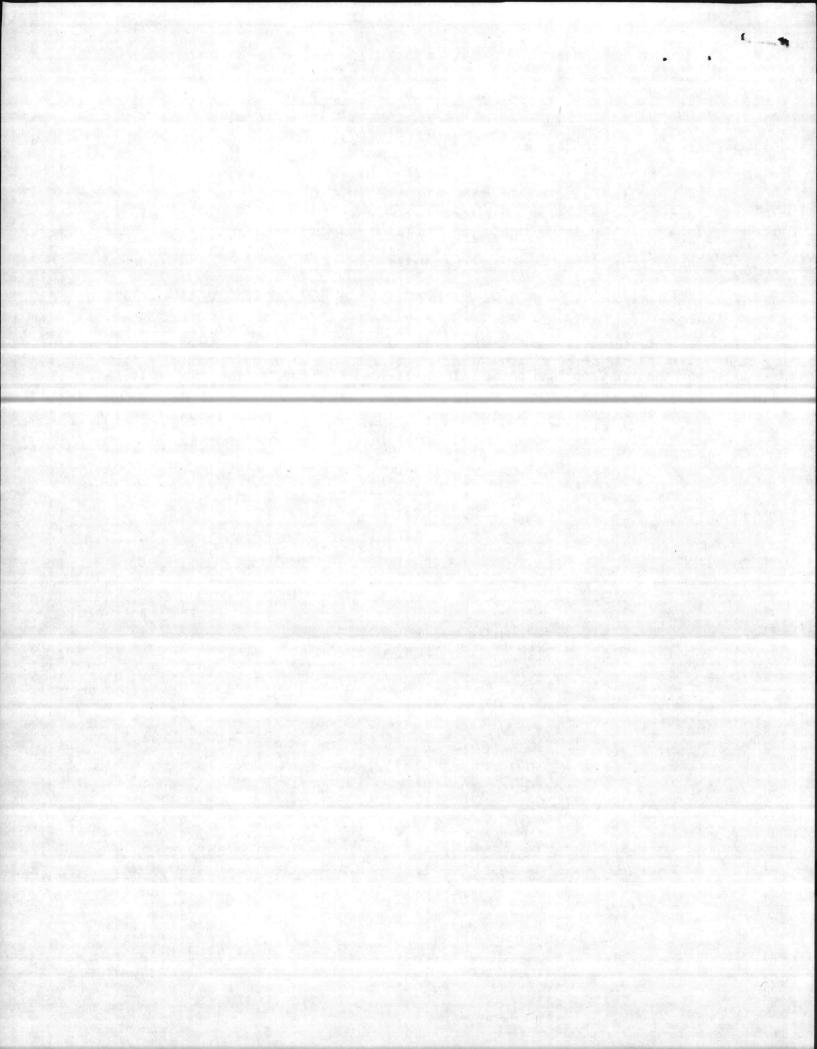
Subj: Legal Aspects of Hazardous Waste

Encl: (1) Legal Aspects of Hazardous Material, 17 Nov 1981 by LtCol. Rufus C. Young, Jr., USMC

1. Enclosure (1) was obtained by Mr. J. I. Wooten during a recent Headquarters Marine Corps sponsored Natural Resources and Environmental Affairs workshop at Camp Pendleton, California, and is submitted for your review/ comments. Of concern is the personal Hability of federal officials assigned Environmental Regulatory responsibilities.

2. LtCol. Young advised he was available to discuss enclosure (1) at telephone number: (714) 725-5943/5916.

F. H. MOUNT



NRO CONFERENCE MCB, Camp Pendleton C /

6240

and showing a first and at the state the

November 17, 1981

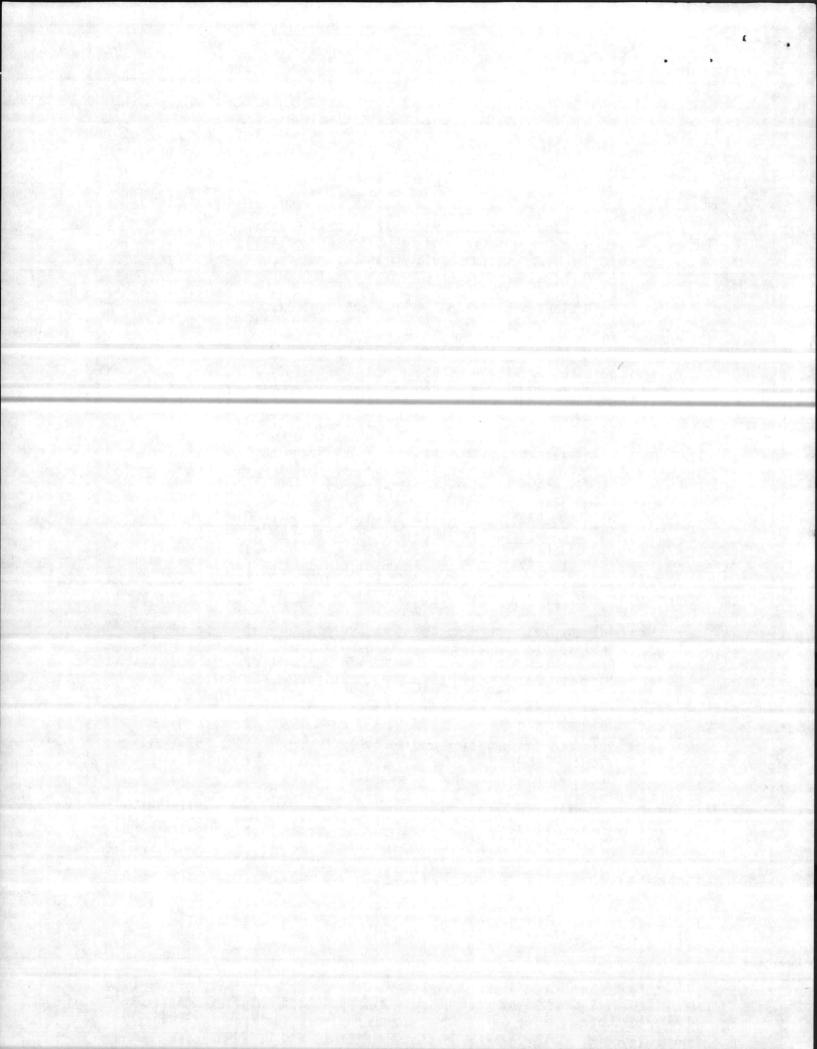
### Legal Aspects of Hazardous Materials: The Comprehensive Environmental Response, Compensation and Liability Act of 1980, and Related Issues by

Lieutenant Colonel Rufus C. Young, Jr., USMC\*

### I. BACKGROUND

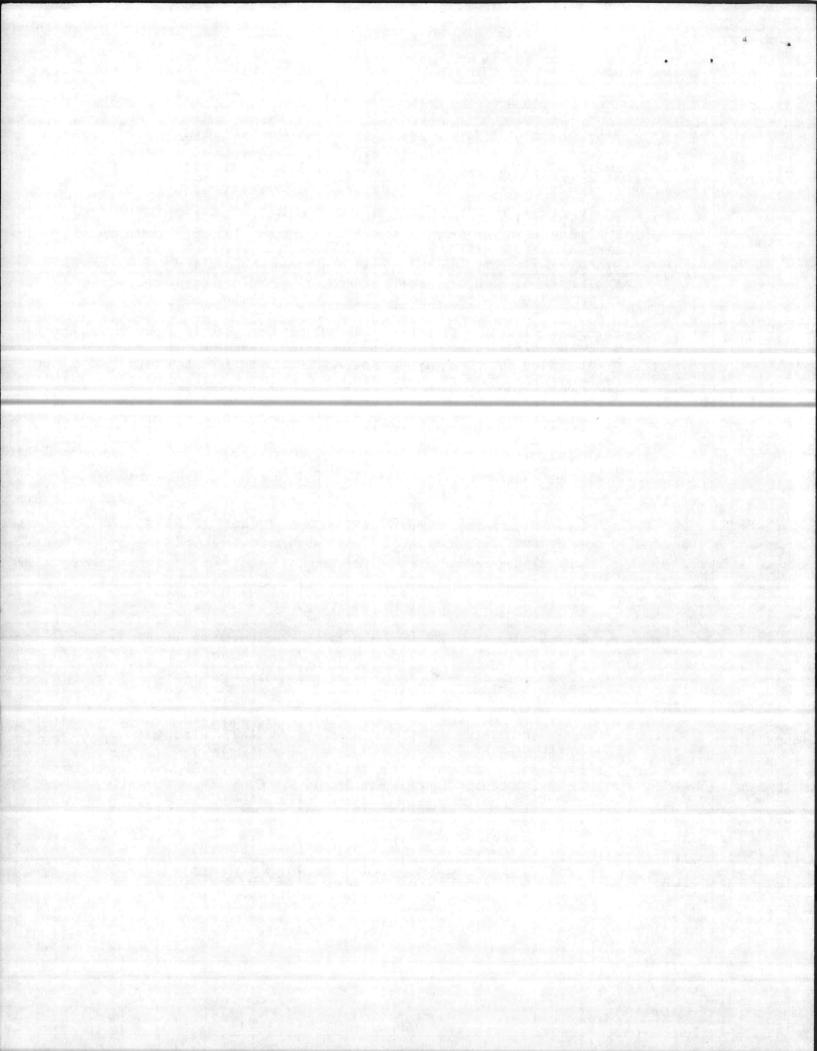
- A. Perspectives on Hazardous Substances
  - 1. National
    - a. Louisville. Moorman, "Criminal Enforcement of the Pollution Control Laws," in ABA Standing Comm. on Environmental Law, Environmental Enforcement, (1978) (for a copy, call (202) 331-2276 (\$1.80)
    - b. Love Canal. See United States v. Hooker Chemicals <u>& Plastics</u>, Civ-79-990C (W.D.N.Y., June 9, 1981)
       11 ELR (motion for protective order denied) ELR Pend. Lit. 65712; Guerci, Disposal of Toxic Wastes is Being Addressed by the Hazardous Waste Section, 17 Land and Nat. Res. Div. J. 2 (1980).
  - California: see Report by the Auditor General of California, "California's Hazardous Waste Management Program Does Not Fully Protect the Public from the Harmful Effects of Hazardous Waste" (October 26, 1981). (For copy, call (916) 455-0371)
- B. Legal Perspectives
  - 1. Resource Conservation and Recovery act, 42 U.S.C. §6901-81.
  - 2. Clean Water Act, §311, U.S.C. §1321.
- II. The Comprehensive Environmental Response, Compensation and Liability Act of 1980, (a.k.a. "Superfund," "CERCL" and "CERCLA"), P.L.96-510, December 11, 1980, 42 U.S.C. §9601 et seq.

\* B.A., 1962, San Diego State University; J.D. 1965, University of San Diego; LL.M. 1978, George Washington University; Assistant Chief of Staff, Staff Judge Advocate, Marine Corps Base, Camp Pendleton, California 92055 (714) 725-5943/5916; Member of the bars of California and Oregon



### A. Introductory concepts and definitions:

- Environment §101(7): means navigable waters, any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States, or under the jurisdiction of the United States.
- 2. Facility §101(9): (A) any building, structure, installation, equipment, pipe or pipeline...well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located...
- 3. Release §101(22): "spilling, leaking, pumping, pouring, emitting emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment..." Excluded from the term "release" are those releases within a work place with respect to which the worker may assert a claim against the employer, motor vehicle and aircraft engine <u>exhausts</u>, certain release of special nuclear material, and the normal application of fertilizer.
- 4. Hazardous substances, §101(14) (1186/899 currently) substances are those designated as follows:
  - a. Clean Water Act, §311(b)(2)(A), 33 U.S.C. §1321(b)(2)(A) Hazardous Substances; (297 designated); see 40 CFR §117.3 (reportable quantities)
  - b. Clean Water Act, §307a, 33 U.S.C. §1317(a), toxic pollutants (65); 40 CFR 401.15, 44 F.Reg. 44502
  - c. RCRA §3001, 42 U.S.C. §6921 hazardous wastes; see 40 CFR parts 261, 262, and 265, 45 F.Reg. 74884, November 12, 1980, recodified at 46 F.Reg. 4614, as corrected, 46 F. Reg. 27473, May 20, 1981
  - d. Clean Air Act §112, 42 U.S.C. §7412, hazardous air pollutants: Asbestos, beryllium, mercury and vinyl chloride; 40 CFR part 61
  - e. Toxic Substances Control Act §7, 15 U.S.C. §2606, imminently hazardous substances: PCB's and fully halogenated chlorofluroalkanes, 40 CFR 761-62
  - f. Other substances designated by EPA (none to date)
  - g. Does not include petroleum, crude oil, LNG, etc. (unless designated above)
  - h. For listings, see enclosure (1) to Appendix A, and sources indicated in Additional Sources C



- B. Section 102. Reportable quantity: one pound, except for §311, Water, Act, substances unclude PX 11 11 in 24 by priced in reportable
- C. Section 103. Notification to National Response Center (NRC), telephone (800) 424-8802
  - 1. By "any person in charge" of
  - 2. A vessel or facility
  - 3. As soon as he has knowledge of any release
- D. Section 104. Federal response
  - If any hazardous substance is released, or there is a substantial threat of release,

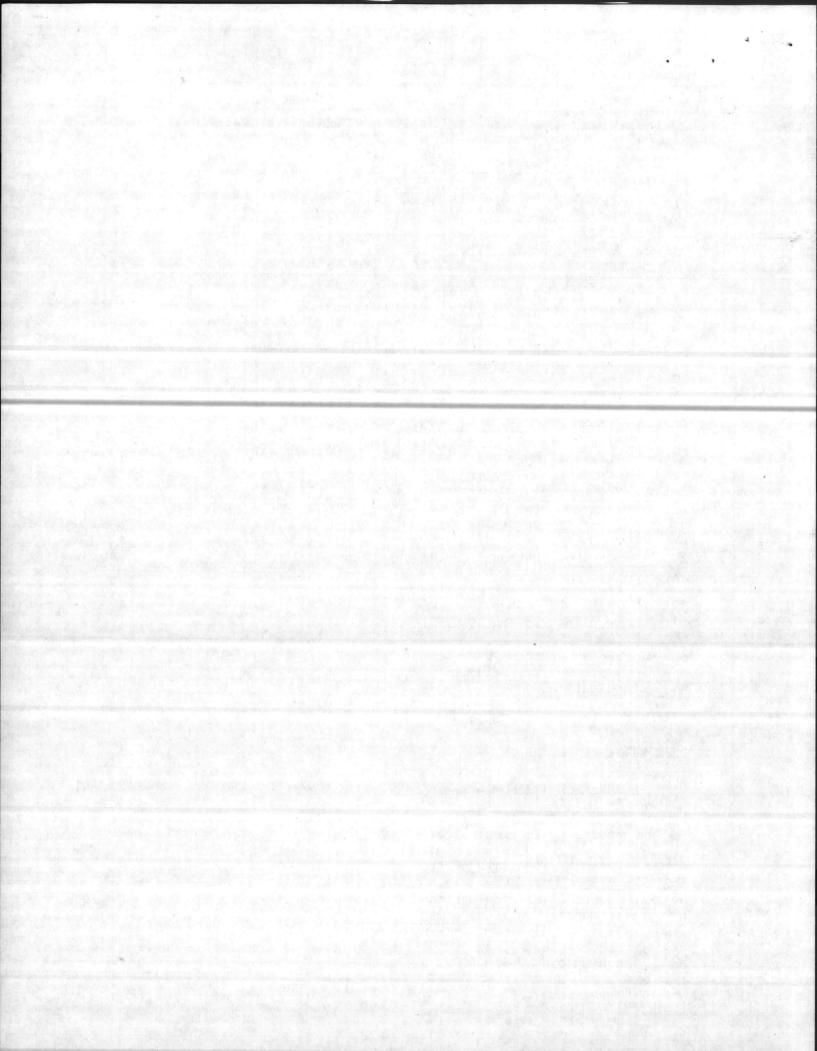
or

There is a release or threat of release of a "pollutant" or "contaminant". See §104(14) (may cause death, cancer, mal-functions, deformations, etc)

- See Executive Order 12316, August 14, 1981, "Responses to Environmental Damage," 46 F.Reg. 42237: DoD activities clean up own "releases"
- ✗ E. Section 105. National Contingency Plan (NCP) revision
  - 1. Broadens the NCP required by §311, Water Act
  - Deadline was June 9, 1981
  - EDF v. Gorsuch, Civ. No. 812083 (D.D.C., complaint filed September 3, 1981) ELR 65712 (suit to require EPA to promulgate NCP)
  - F. CERCLA applies to "person"

### III. LIABILITY: EXPOSURE

- A. Money Damages, See Slap, Generator Liability for Hazardous Wastes, 5 ALI-ABA Course Materials J. 95 (1980).
  - 1. Federal government liability
  - 2. Personal liability of federal officials
- B. Fines, Penalties and Imprisonment. See generally, ABA Standing Comm. on Environmental Law, Environmental Enforcement (1978).
  - CERCLA §103(b), 42 USC 9603(b): Failure to report release is punishable by \$10,000/1 year, or both.



- RCRA: §6961 Federal, State and local law applies to federal facilities, "in the same manner as any person"
  - a. §3008(d), 42 USC §6928(d) TSD without permit, etc.,
     \$25,000 and one year per day of violation
  - b. §3008(e), 42 USC §6928(e): Knowing endangerment, \$250,000 (individual) \$1,000,000 ("organization") and two years
  - c. §3008(g), 42 USC §6928(g): Civil penalty of up to \$25,000 per day of violation
- 3. Clean Water Act §313: Each officer and employee shall be subject to and comply with all Federal, State and local requirements.
- 4. California (cites are to Cal. Health & Safety Code):
  - a. Imprisonment not to exceed one year, \$25,000 per day, for following:

Transporting hazardous wastes to unauthorized site (§25191a)

treats, stores or disposes of hazardous waste at a facility that doesn't have permit or at unauthorized site §25191(b).

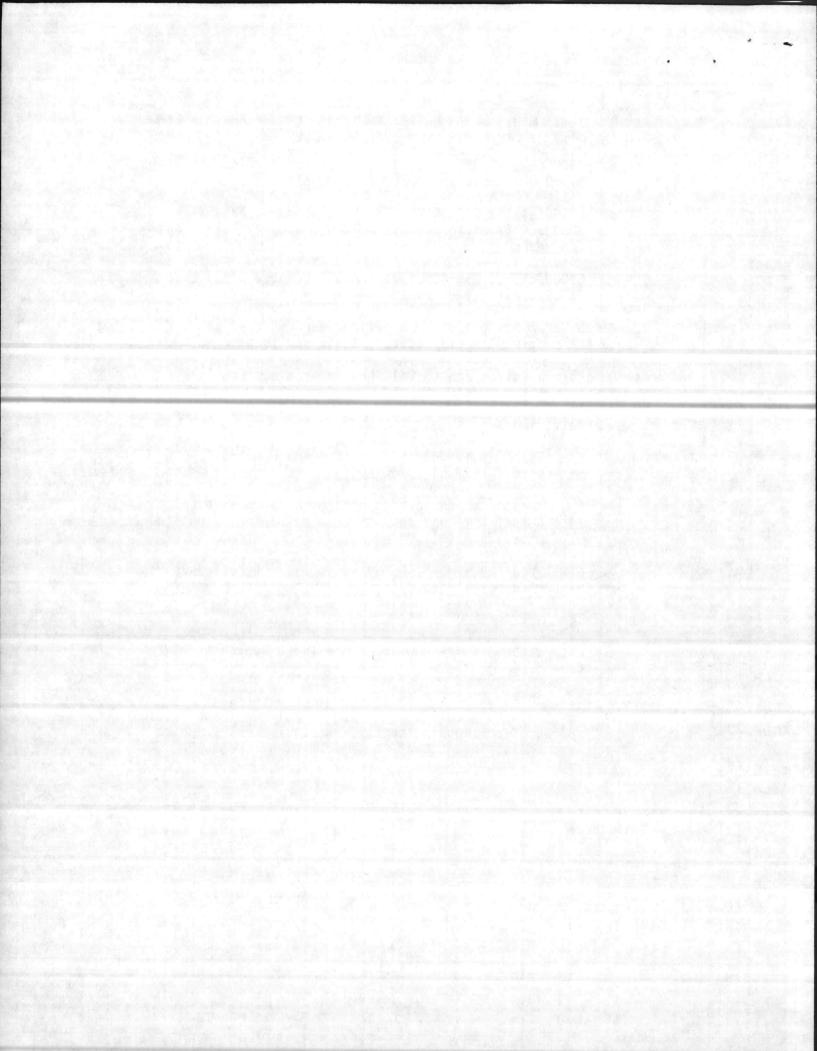
- Civil penalty of \$25,000 for disposing of hazardous waste without a permit §25189(c)
- 4. Local:

÷ŕ,

- a. City attorneys may now prosecute (Cal. Health & Safety Code §25181);
- b. 42 USCA 6929: "...Nothing in this chapter shall be construed to prohibit any state or political subdivision thereof from imposing any [RCRA] requirements...which are more stringent that those imposed by such [EPA] regulations."

#### IV. LIABILITY: PREVENTION

- A. SJA's Role
- B. Commander's Role "NREA"
  - Acquisitions: Inventory existing materials; identify new items as acquired
  - Maintain in approved manner;
  - Educate employees



4. SPCCP, 40 CFR 151

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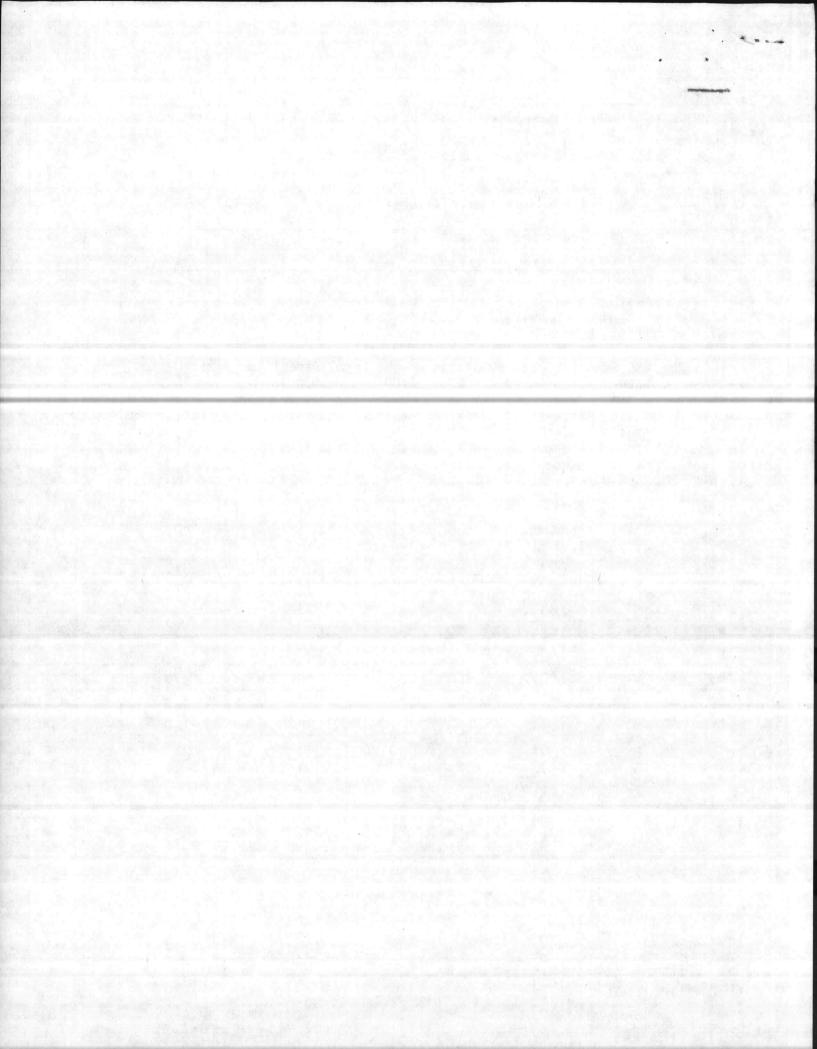
- 5. Follow hazardous wastes disposal regulations
  - a. Know thy transporter: How can the generator be sure the transporter delivers?
  - b. Track the manifest
  - c. Report releases

### V. SUMMARY

- VI. ADDITIONAL SOURCES
  - A. USD School of Law Symposium on the Legal Aspects of Toxic Waste, Saturday, November 21, 1981, 9:00 a.m. - 5:00 p.m. 293-4532.
  - B. Davis, Ritts & Wolf, Toxic Substances and Hazardous Wastes, (1980); Available from Environmental Law Institute, Publications Office 1346 Connecticut Avenue, N.W. Washington, D. C. 20036 (202) 452-9600; \$65.00
  - C. Naval Energy and Environmental Support Activity Information Bulletin, July 1981, P 10

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APPENDIX A: Young, Memorandum of Law, July 28, 1981, (with enclosures)





#### UNITED STATES MARINE CORPS MARINE CORPS BASE CAMP PENDLETON, CALIFORNIA 92055

IN REPLY REFER TO: BI:RCY:mmg

28 JUL 1981

#### MEMORANDUM OF LAW

•

Subj: New requirements imposed by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) for reporting releases (spills) of hazardous substances

Ref:

- (a) The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), P.L. 96-510, 11 December 1980, 42 U.S.C. 9601-57
- (b) MCO P11000.8A
- (c) MCO 5740.2C

c) 1100 3740.20

Encl:

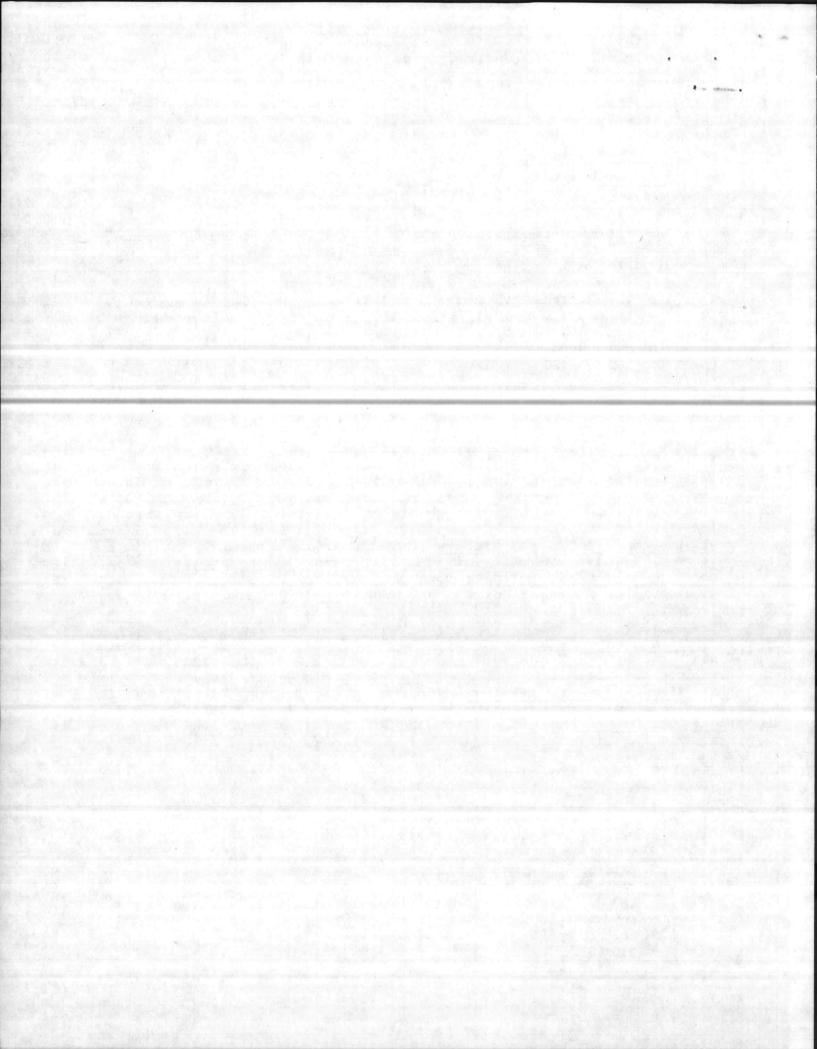
: (1) Hazardous substances subject to release reporting requirements (2) Draft CERCLA release reporting order

1. Introduction. The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), which created an environmental "superfund" and granted the Federal government new authority for cleanup of toxic spills and dumps, also imposes important new reporting requirements for releases (spills) of hazardous materials. A person who is in charge of a "facility" must now notify the National Response Center (NRC) [Telephone: (800) 424-8802] "as soon as he has knowledge" of any "release" of a hazardous substance "into the environment." Failure to notify the NRC is a criminal offense, punishable by a fine of up to \$10,000, or imprisonment for not more than one year, or both. This memorandum offers an analysis of CERCLA's new "release" reporting requirements.

2. <u>CERCLA Analysis</u>. Unlike the reporting requirements imposed by §311 of the Clean Water Act, 33 U.S.C. §1321, which is applicable to discharges of oil or hazardous substances into the navigable waters of United States, <u>adjoining</u> shore lines, or <u>natural resources</u> belonging to the United States, the CERCLA reporting requirements extend to <u>any release</u> of <u>any hazardous substance any-</u> where into "the environment." [Note: The §311 reporting requirement was implemented in the Marine Corps by Appendix P of reference (b)].

a. The following extremely broad definitions, indicative of Congressional intent to give the new law the widest possible application, are used in the CERCLA:

(1) "Facility" is defined as "(A) any building, structure, installation, equipment, pipe or pipeline . . . well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located . . . " (underscoring added) CERCLA, \$101(9).



- (2) "Release" under the Act means any "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment . . . " Excluded from the term "release" are those releases within a work place with respect to which the worker may assert a claim against the employer, motor vehicle and aircraft engine <u>exhausts</u>, certain releases of special nuclear material, and the normal application of fertilizer. CERCLA, §101(22). (Note: It would appear that the "work place worker claim" provision is not applicable to military personnel.)
- (3) "Environment" means navigable waters, any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States, or under the jurisdiction of the United States. CERCLA, §101(7).

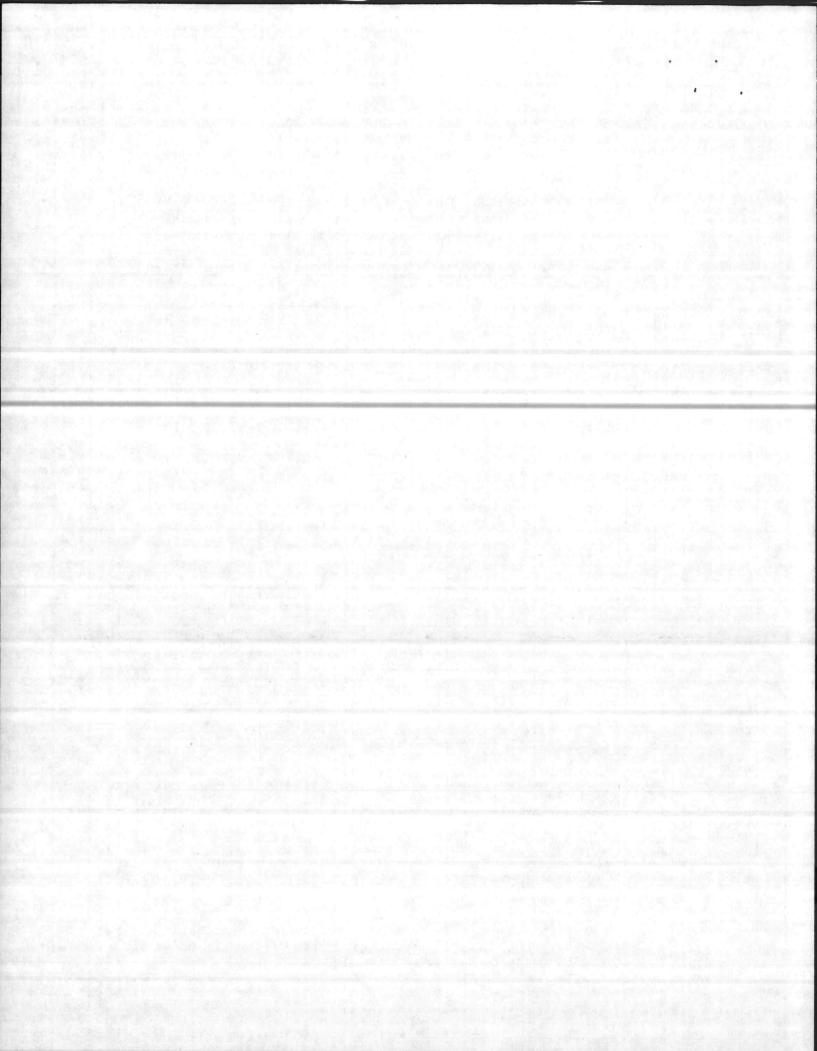
Second)

(4) "Person" under CERCLA means an "individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity" and the United States Government. CERCLA, §101(21).

b. CERCLA classes as "hazardous substances" those substances which have been designated under the following:

- (1) Substances designated pursuant to \$311(b)(2)(A) of the Clean Water Act, 33 U.S.C. \$1321(b)(2)(A). To date, 297 have been designated. The list appears at 40 C.F.R. \$117.3, (reportable quantities). See enclosure (1), Part A.
- (2) Toxic pollutants listed pursuant to \$307(a) of the Clean Water Act, 33 U.S.C. \$1317(a); 65 have been designated. The EPA list is found at 40 C.F.R. 401.15, 44 FR 44502. See enclosure (1), Part B.
- (4) Hazardous air pollutants listed under \$112 of the Clean Air Act,
   42 U.S.C. 7412, i.e., asbestos, beryllium, mercury, and vinyl chloride. 40 C.F.R. Part 61.
- (5) Any imminently hazardous substance or mixture under §7 of the Toxic Substances Control Act (TSCA), 15 U.S.C. §2606, i.e., polychlorinated biphenyls (PCBs) and fully halogenated chlorofluoroalkanes. 40 C.F.R. 761-62.
- (6) Any elements, compounds, mixtures or solutions designated as hazardous substances by the Administrator of the EPA under \$102 of CERCLA (none to date).

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3. The Reportable Quantity Concept Under CERCLA. \$102(b) of CERCLA provides that, except for the reportable quantitites for hazardous substances established . under \$311 of the Clean Water Act, the reportable quantity for a release of any of the other hazardous substances is one (1) pound, unless the Administrator of the EPA establishes a different reportable quantity. [Note: To date, the Administrator of the EPA has not issued any regulations to supersede the onepound reportable quantity requirement imposed by CERCLA. Therefore, a release of one pound, or more, of any hazardous substance, other than those listed under §311 of the Clean Water Act, must be reported to the National Response Center. The reportable quantity for the \$311 Clean Water Act hazardous substances appears in enclosure (1) Part B.] CERCLA did not establish a durational test for the accumulation of the reportable quantity; however, under \$311 of the Clean Water Act, a 24-hour period is used for the reportable quantity determination. It would appear appropriate, in the absence of any contrary directive by the EPA, to use the 24-hour period as the duration test for all hazardous materials.

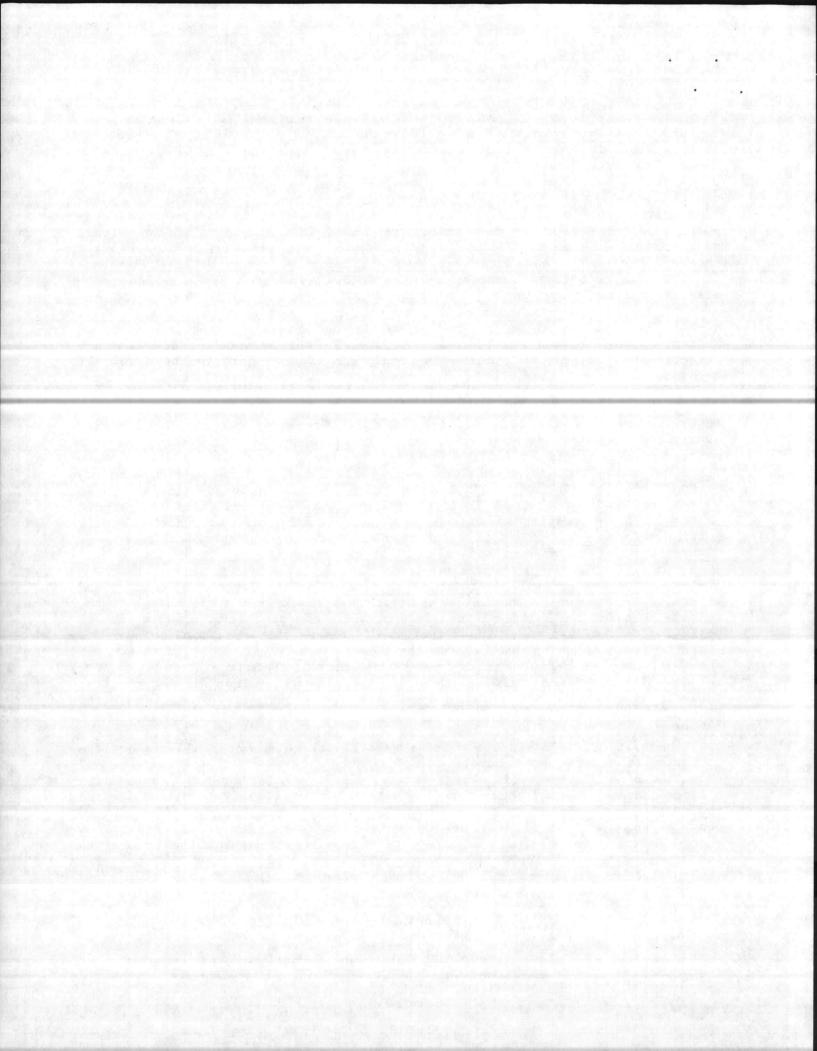
4. Additional Reporting Requirements. In addition to the requirement to report releases to the NRC, §111(g) of CERCLA requires responsible facility owners (or operators) to provide notice of releases to potentially injured parties through publication in local newspapers. 42 U.S.C. §9611(g). Note also that while there is no reference to hazardous materials in reference (c) a reportable release under CERCLA, depending on the circumstances, may also be reportable in a serious incident report, although apparently the report contemplated in paragraphs 2.a and b of Appendix P-1 of reference (c) will suffice. Compare reference (c) at enclosure (1), subparagraphs 1.e, g, and j, with paragraphs 2a and b of Appendix P-1 of reference (b).

5. Exemption for Federally Permitted Releases. Certain "releases" which would otherwise be subject to the CERCLA notification requirements are exempt if the release is permitted under a Federally approved state program or under a Federal pollution control program. These include discharges and "releases" pursuant to a NPDES permit issued under §402 of the Clean Water Act, discharges in accordance with dredge and fill permits issued pursuant to §404 of the Clean Water Act, releases in compliance with the Ocean Dumping Act, with Clean Air Act permits, those in compliance with RCRA, and releases of certain deep well injection fluids.

6. Summary. CERCLA's extremely broad reporting requirements will require the attention of all those who handle hazardous substances, as well as the personal attention of all persons "in charge" (i.e., all commanding generals, commanding officers, and officers in charge). It is therefore critically important for the new reporting requirements to be incorporated into installation spill contingency plans, and that all persons who handle hazardous substances be aware of them. In the interim, these new reporting requirements should be brought to the attention of all appropriate personnel. Enclosure (2) has been prepared to assist in the implementation of a reporting procedure.

Marty Crout RUFUS C. YOUNG, JR

Lieutenant Colonel, U.S. Marine Corps Assistant Chief of Staff, Staff Judge Advocate



§ 117.3 Determination of reportable quantities.

..... The quantity listed with each : substance in Table 117.3 is determined to be the reportable quantity for that substance. substance.

:: .:

2.4

Table 117.3-Reportable Quantities of . Hazardous Substances ..

Note .- The first number under the column headed "RQ" is the reportable quantity in . pounds. The number in parentheses is the metric equivalent in kilograms. For convenience, the table contains a column headed "Category" which lists the code. letters "X", "A", "B", "C" and "D" associated with reportable quantities of 1, 10, 100, 1000 and 5000 pounds respectively.

· · · · · · · · · · · · · · · · · · ·		RQin
Material	Category	- pounds
	•	(idograms)
Acutaidohydo	- c	1,000 (454)
Acess and	- C	. 1,000 (454)
Aceto antychde	_ C	1,000 (454)
Actiona cyanohydran	- A	. 10 (4.54)
Acetyl bromide		. 5,000 (2,270)
Aconyl chionda	- D	. 5,000 (2,270)
Acrolom	- X	1 (0.454)
Acryonade	- B	100 (45.4)
Adac and	- D	5,000 (2,270)
		. 1 (0.454)
Ally alcohol	. 8	100 (45.4)
Ally chionue	- C	1,000 (454)
Alumnum sustate	. D	- 5,000 (2,270)
Ammonia		100 (45.4)
Ammonum acetate	. D.	5,000 (2,270)
Ammonum borzoate		5,000 (2,270)
Ammonum Licarbonale	. D	5,000 (2,270)
Ammorium bichromate	. C	· 1,000 (454)
Ammonum bituondo		.5,000 (2,270)
Ammonium bisutte		5,000 (2,270)
Ammonum carbamate		5,000 (2,270)
Ammonum carbonate	. D.	5,000 (2,270)
Ammonum chionda		5,000 (2,270)
Annonum chromate	. с	. 1.000 (454)
Ammonum otate	. D	5,000 (2,270)
Amnonum Puotorate		5,000 (2,270)
Ammonum fuonite	. D	5,000 (2,270)
Ammonium hydroxide		1,000 (454)
Anmorem oralate		5,000 (2,270)
Ammonum Manhande		1,000 (454)
Ammonum sur amate		5,000 (2,270)
Ammore an survive	D	5,000 (2,270)
Ammonium שולנא	D	5,000 (2,270)
Ammonium Lypate	D	5,000 (2,270)
Annoran Caoganata	D	5,000 (2,270)
Ammoneum travulate	D	5,000 (2,270)
Any antate	c	1,000 (454)
Arino	č	1,000 (454)
Anomony punkachorida		1,000 (454)

Material ~	Category
Antimory potassium tartrate	. c
Antmony tribromide	č
Antimony trichloride	. C ·
Antimony trifluoride	. C
Antimony trioxide	. D
Arsenic disulide	D
Arsenic pentoxide	
Arsenic trioxide	D
Arsenic trisulfide	. D
Barium cyanide	- A' '
Benzene	. C
Benzoic acid	D C
Benzonitrile	č
Benzyl chloride	B
Beryllium chloride	. D
Bery!ium fluoride	. D
Beryllium nitrate	- D
Butyl scelate	B
Butylamine	
Butyric acid	D.
Cadmium acetate	. B .
Cadmium bromide	- B
Cadmium chloride	- R -
Calcium arsenate	C C
Calcium carbide	D
Calcium channels 1	. c
Calcium cyanide	. A. 11
Lacum.	C
dodecy/benzenesulfonate.	
Celeian hydronido anacana	. 8 5
Calcium hypochlorite	- 1
Cectar.	
Carbary!	. B
Carbofuran	. A
Caron disulfide	. D
Carbon tetrachlorid	. D
Chlordane	X
Chlorobenzena	8.
Chloroform	D
Chilorpyrifos	. × .
Chlorosulfonic acid	. C
Chromic acetate	. C .
Chromic acid	C C
Chromous chloride	č
Cobaltous bromide	c
Cobaltous formate	. C
Cobatous sulfamate	. C
Cournaphos	. A
CA COOL INTERNATION OF THE PARTY OF THE PART	. C
Crotonal dehyde	. B
Oupric acetoarsenite	
Cupric chloride	Ā
Cupric nitrate	. ' B
Cupric oxalate	. В
Cupric sultate	. A
Opric sulfate ammoniated	. 8 .
Cupric tartrate Cyanogen chloride	BA
Cyclohexane	ĉ
2,4-D Acid	B
2.4-D Esters	B · ·
DOT	. X
Diazinon	X
Dicamba Dichiobenil	C .
Dictione	X
Dichlorobenzene	B -
Dichloropropane	D
Dichloropropene	D
Dichloropropene-	D
Dichloropropane Mixture.	
2,2-Dichloropropionic acid Dichlorvos	DA
Diełdrin	x
Diethylamine	ĉ
Dimethylamine	CCC
Dinitrobenzone	C
Dinitrophenol	C
Dinitrotoluene	C
Diguat	C.
Disulfoton	X. B
Dodecylbenzenesuitonic acid	C
Endosuilan	x
Endon	Ω.

Material

Catego

FRQ in pounds	
(kilograms)	
1,000 (454) 1,000 (454) 1,000 (454) 5,000 (2,270) 5,000 (2,270) 5,000 (2,270) 5,000 (2,270) 5,000 (2,270) 5,000 (2,270) 10 (4,54) 1,000 (454) 1,000 (4	
5,000 (2,270) 100 (45.4) 5,000 (2,270) 10 (4.54) 5,000 (2,270) 10 (4.54) 5,000 (2,270) 1 (0,454) 10 (4.54) 10 (4.54) 10 (4.54) 10 (4.54) 1,000 (454) 1,000 (454) 100 (	
5,000 (2,270) 10 (4,54) 1 (0,454) 1,000 (454) 1,000 (454) 1,000 (454) 1,000 (454) 1,000 (454) 1,000 (454) 1 (0,454) 1 (0,454) 1 (0,454) 1 (0,454)	

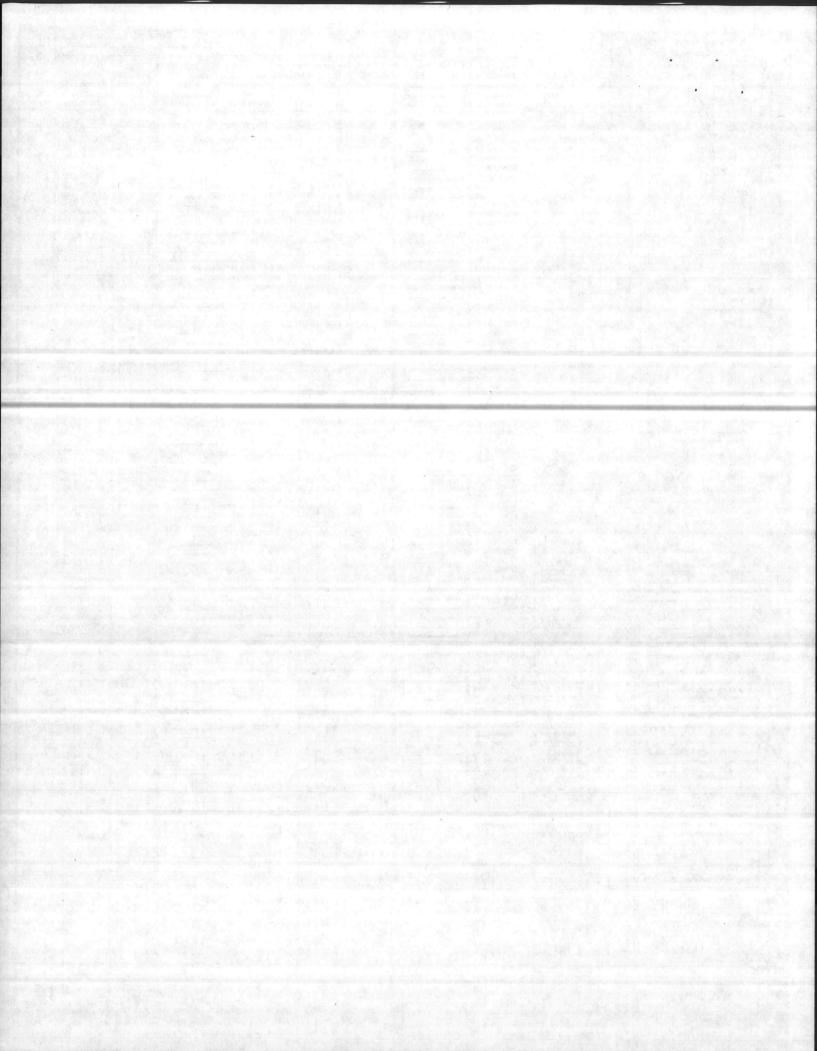
Epichlorohydrin         C         1,000 (454)           Ethyonoclamino         C         1,000 (454)           Ethyonoclamino         C         1,000 (454)           Ethyonoclamino         C         1,000 (454)           Ethyonoclamino         D         5,000 (2270)           EDTA         D         5,000 (2270)           EDTA         D         5,000 (2270)           EDTA         C         1,000 (454)           Ferric entronium cuitate         C         1,000 (454)           Ferric entronium cuitate         C         1,000 (454)           Ferric suitate         C         1,000 (454)           Ferric entronium cuitate         C         1,000 (454)           Ferric atriate         D         5,000 (2270)           Fundationory/dopentadione         X         1 (0,454)           Forta atriate <t< th=""><th>Ethion</th><th>- Å</th><th></th></t<>	Ethion	- Å	
Efron         A         10 (4.54)           Ethylenne ditromide         C         1,000 (454)           Ethylenne ditromide         D         5,000 (2270)           EDTA         C         1,000 (454)           Ferric entronium cuitate         C         1,000 (454)           Ferric entronium cuitate         C         1,000 (454)           Ferric suitate         C         1,000 (454)           Ferric acid         D         5,000 (2270)           Furnaric acid         D         5,000 (2270)           Hydropon cyanide         A         100 (454)           Boprane         C         1,000 (454)	Ethion	- C	
Ethylene dichorada         C         1,000 (454)           Ethylene dichorada         D         5,000 (2270)           Fernic ammonium citrata         C         1,000 (454)           Fernic ammonium citrata         C         1,000 (454)           Fernic choride         B         100 (454)           Fernic filoride         B         100 (454)           Fernic filoride         B         100 (454)           Fernic sultata         C         1,000 (454)           Fernic sultata         D         5,000 (2270)           Furnaric scid         D         5,000 (2270)           Furnaric scid         D         5,000 (2270)           Hydropon cyanide         A         10 (454)           Isopropanolamine         C         1,000 (454)           Isopropanolamine         C         1,000 (454)           Isopropanolamine	Ethylenediamine		
Ethyane divorsida         C         1,000 (454)           Ethyane divorsida         C         1,000 (454)           Ferric ammonium catala         C         1,000 (454)           Ferric ammonium catala         C         1,000 (454)           Ferric ammonium catala         C         1,000 (454)           Ferric nitrata         C         1,000 (454)           Ferric antrata         C         1,000 (454)           Ferric surfata         C         1,000 (454)           Ferric surfata         C         1,000 (454)           Forma suffate         C         1,000 (454)           Forma add         D         5,000 (2270)           Furfaral         C         1,000 (454)           Forma add         D         5,000 (2270)           Furfaral         C         1,000 (454)           Boptachlor         X         10 (454)           Hydrochoric acid         D         5,000 (2270)           Hydrochoric acid         D         5,000 (2270)           Hydrogen sulfde         E         1,000 (454)           Bopropanotamine         C         1,000 (454)           Sopropanotamine         C         1,000 (454)           Boptopanotamine <td< td=""><td>Ethylene dibromide</td><td></td><td></td></td<>	Ethylene dibromide		
Ethyane dichloride         D         5,000 (2,270)           EDTA         D         5,000 (2,370)           Ferric emmonium citrate         C         1,000 (454)           Ferric entronium citrate         C         1,000 (454)           Ferric fuoride         B         100 (454)           Ferric entrate         C         1,000 (454)           Ferric entrate         C         1,000 (454)           Ferric suffate         C         1,000 (454)           Formus chloride         B         100 (454)           Formus chloride         C         1,000 (454)           Formal denyclepontademe         X         10,0454           Formal denyclepontademe         X         10,0454           Formal denyclepontademe         X         10,0454           Hottochoric acid         D         5,000 (2,270)           Hydroohucric acid         D         5,000 (2,270)           Hydroopen sulfde         B         100 (454)           Isoprene         C         5,000 (2,270)           Hydroopen sulfde         B         100 (454)           Isoprene         C         5,000 (2,270)           Lead kasata         D         5,000 (2,270)           Lead kasata </td <td></td> <td></td> <td></td>			
EDTA         D         5,000 (2,270)           Ferric enmonium oxalate         C         1,000 (454)           Ferric choride         B         100 (454)           Ferric surfate         C         1,000 (454)           Ferrous shifate         C         1,000 (454)           Formals of the formal suffate         C         1,000 (454)           Formal seid         D         5,000 (2,270)           Furnaria seid         D         5,000 (2,270)           Furnaria seid         D         5,000 (2,270)           Hydrochonic seid         D         5,000 (2,270)           Lead acetate         D         5,000 (2,270)           Lead acetate         D         5,000 (2,270)           Lead acet			
Ferric ammonium cutata         C         1,000 (454)           Ferric chloride         C         1,000 (454)           Ferric chloride         B         100 (454)           Ferric chloride         B         100 (454)           Ferric strate         C         1,000 (454)           Ferric strate         C         1,000 (454)           Ferrous chloride         B         100 (454)           Ferrous chloride         C         1,000 (454)           Ferrous chloride         C         1,000 (454)           Ferrice surfate         C         1,000 (454)           Formaldehyde         C         1,000 (454)           Formaldehyde         C         1,000 (454)           Guthion         X         10 (454)           Hydrochoric acid         D         5,000 (2270)           Hydrochoric acid         D         5,000 (2270)           Hydrogen sufide         B         5,000 (2270)           Hydrogen sufide         D         5,000 (2270)           Lead acetate         D         5,000 (2270)           Lead forborate         D         5,000 (2270)           Lead forborate         D         5,000 (2270)           Lead forborate         D <td></td> <td></td> <td></td>			
Ferric Choride         C         1,000 (45.4)           Ferric nurate         C         1,000 (45.4)           Ferric surfata         C         1,000 (45.4)           Ferrous athoride         B         100 (45.4)           Ferrous athoride         C         1,000 (45.4)           Ferrous atilate         C         1,000 (45.4)           Formaidehyde         C         1,000 (45.4)           Formaidehyde         C         1,000 (45.4)           Formaidehyde         C         1,000 (45.4)           Formic acid         D         5,000 (2270)           Furnaria         C         1,000 (45.4)           Hydrochoric acid         D         5,000 (2270)           Hydrochoric acid         D         5,000 (2270)           Hydrogon cyanide         A         100 (45.4)           Isoprepanolamine         G         1,000 (45.4)           Isoprepanolamine         G         1,000 (45.4)           Isoprepanolamine         D         5,000 (2270)           Lead solata         D         5,000 (2270)           Lead solata         D         5,000 (2270)           Lead thoride         D         5,000 (2270)           Lead solastala         D<		C	1,000 (454)
Ferric fluoride         B         100 (45.4)           Ferric suffate         C         1,000 (454)           Ferrous suffate         C         1,000 (454)           Ferrous suffate         C         1,000 (454)           Ferrous suffate         C         1,000 (454)           Formaidelynde         C         1,000 (454)           Formaidelynde         D         5,000 (2270)           Furfaral         C         1,000 (454)           Guthion         X         1 (0.454)           Heptachlor         X         1 (0.454)           Hydrochloric acid         D         5,000 (2270)           Lead calate         D         5,000 (2270)           Lead calate         D         5,000 (2270)           Lead fluoride         C         1,000 (454)           Lead calate         D         5,000 (2270)           Lead fluoride         D         5,000 (2270)           Lead fluoride         D         5,000 (2270)           Lead suffate         D         5,00			1,000 (454)
Ferric surfate         C         1,000 (454)           Ferrous anmonium suffate         C         1,000 (454)           Ferrous suffate         C         1,000 (454)           Formaidehyde         C         1,000 (454)           Formaidehyde         C         1,000 (454)           Formaidehyde         C         1,000 (454)           Formaide acid         D         5,000 (2,270)           Furfural         C         1,004 (454)           Hydrochloric acid         D         5,000 (2,270)           Hydrogen suffde         B         -100 (454)           Isopropanolamine         C         5,000 (2,270)           Hydrogen suffde         B         -100 (454)           Isoprene         Z         1,000 (454)           Isopropanolamine         C         5,000 (2,270)           Lead Roborata         D         5,000 (2,270)           Lead Roborata         D         5,000 (2,270)           Lead Roborata         D         5,000 (2,270)           Lead Roborata			
Ferrous annonium suffale         C         1,000 (454)           Ferrous suffale         C         1,000 (454)           Ferrous suffale         C         1,000 (454)           Formaidedyde         C         1,000 (454)           Formaidedyde         C         1,000 (454)           Formaidedyde         C         1,000 (454)           Formaidexide         D         5,000 (2,270)           Furhal         C         1,000 (454)           Heptachbr         X         1 (0,454)           Heptachbr         X         1 (0,454)           Hydrodynois acid         D         5,000 (2,270)           Hydrogon sufide         B         1 (00 (454)           Isoprene         X         1,000 (454)           Isoprene         X         1,000 (454)           Isoprene         X         1,000 (454)           Lead acetala         D         5,000 (2,270)           Lead sociala         D         5,000 (2,270)			
Ferrous anmonium suffate         G         1,000 (c54)           Ferrous suffate         C         1,000 (c54)           Formaldehyde         C         1,000 (c54)           Formaldehyde         C         1,000 (c54)           Formaldehyde         C         1,000 (c54)           Furnaria acid         D         5,000 (2,270)           Furnaria acid         D         5,000 (2,270)           Hydrochloris acid         D         5,000 (2,270)           Hydrochloris acid         D         5,000 (2,270)           Hydrogon cyaride         A         10 (454)           Hydrogon suffide         B         100 (454)           Isoprene         C         1,000 (454)           Lead restate         D         5,000 (2,270)           Lead acetate         D         5,000 (2,270)           Lead acetate         D         5,000 (2,270)           Lead restate         D         5,000 (2,270)           Lead striate         D         5,000 (2			1000 (454)
Ferrous at Nondo         B         100 (45.4)           Formaldehyde         C         1,000 (454)           Formaldehyde         C         1,000 (454)           Formaldehyde         C         1,000 (454)           Furnaric acid         D         5,000 (2,270)           Furnaric acid         D         5,000 (2,270)           Furnaric acid         D         5,000 (2,270)           Hydrophuoric acid         D         5,000 (2,270)           Hydrogon sulfde         B         10 (454)           Isoprene         C         1,000 (454)           Isoprene         C         1,000 (454)           Isoprene         C         1,000 (454)           Isoprene         Z         1,000 (454)           Isoprene         X         1,000 (454)           Isoprene         X         1,000 (454)           Lead choride         D         5,000 (2,270)           Lead flooride         D         5,000 (2,270)           Lead indepee         D         5,000 (2,270)			1
Perrods suriale         C         1,000 (154)           Formaidelyde         C         1,000 (154)           Formaidelyde         C         1,000 (154)           Furtural         C         1,000 (154)           Furtural         C         1,000 (154)           Furtural         C         1,000 (154)           Heptachlor         X         1 (0.454)           Heptachlor         X         1 (0.454)           Hydrogon cyanide         A         10 (454)           Hydrogon suitide         B         1 (0.454)           Isopreane suitide         B         1 (0.454)           Hydrogon suitide         B         1 (0.454)           Hydrogon suitide         B         1 (0.454)           Isopreane suitide         B         5,000 (2270)           Lead sociala         D         5,000 (2270)           Lead functide         C         1,000 (454)           Lead rinde         D         5,000 (2270)           Lead sociala         D         5,000 (2270)           Lead sociala         D         5,000 (2270)           Lead suifala         D         5,000 (2270)           Lead suifala         D         5,000 (2270)			100 (45.4)
Formaric acid         D         5,000 (2.270)           Furhal         C         1,000 (454)           Guthion         X         1 (0.454)           Heptachlor         X         1 (0.454)           Heptachlor is acid         D         5,000 (2.270)           Hydrochions         D         5,000 (2.270)           Lead sociala         D         5,000 (2.270)           Lead sociala         D         5,000 (2.270)           Lead sociala         D         5,000 (2.270)           Lead fuoride         C         1,000 (454)           Lead rivide         D         5,000 (2.270)           Lead starate         D	Ferrous sulfate	C	
Furnaric acid         D         5.000 (2.270)           Furtural         C         1,000 (454)           Guthion         X         1 (0.454)           Heptachlor cacid         D         5.000 (2.270)           Hydrophuorie acid         D         5.000 (2.270)           Hydrogen sulfide         B         100 (454)           Isopropanolamine         C         1.000 (454)           Isopropanolamine         C         1.000 (454)           Isopropanolamine         D         5.000 (2.270)           Keithano         D         5.000 (2.270)           Lead actale         D         5.000 (2.270)           Lead aritate         D         5			1,000 (454)
Futual         C         10.454)           Guthion         X         1 (0.454)           Heytactilor cyckopentadiene         X         1 (0.454)           Heytactilor cyckopentadiene         X         1 (0.454)           Hydrochioric acid         D         5,000 (2270)           Hydrogon cyanide         A         1 10 (454)           Isoprene         C         1,000 (454)           Isoprene         C         1,000 (454)           Isoprene         Z         1,000 (454)           Isoprene         Z         1,000 (454)           Lead acetala         D         5,000 (2270)           Lead acetala         D         5,000 (2270)           Lead flooborata         D         5,000 (2270)           Lead suffate         D         5,000 (			
Heptachlor         X         1 (0.454)           Hexactionocyclopentadiene         X         1 (0.454)           Hydrochoric acid         D         5,000 (2.270)           Hydrogen cyanide         A         10 (4.54)           Hydrogen sulide         B         100 (45.4)           Isoprene sulide         C         1,000 (45.4)           Isoprene sulide         D         5,000 (2.270)           Ketinane         D         5,000 (2.270)           Lead acetale         D         5,000 (2.270)           Lead acetale         D         5,000 (2.270)           Lead acetale         D         5,000 (2.270)           Lead flooborate         D         5,000 (2.270)           Lead flooborate         D         5,000 (2.270)           Lead flooborate         D         5,000 (2.270)           Lead biofide         D         5,000 (2.270)           Lead stearate         D         5,000 (2.270)           Lead thiocynanate <td></td> <td></td> <td>** 1 000 (454)</td>			** 1 000 (454)
Hexactiorocyclopentadiene         X         1 (0.454)           Hydrochkoric acid         D         5,000 (2270)           Hydrogen swifide         A         10 (454)           Hydrogen swifide         B         100 (454)           Isoprene         C         1,000 (454)           Isopropanolamine         C         1,000 (454)           dodocyborzanesulfonalia.         D         5,000 (2270)           Keithano         D         5,000 (2270)           Lead caetale         D         5,000 (2270)           Lead choride         D         5,000 (2270)           Lead fuoride         D         5,000 (2270)           Lead fuoride         D         5,000 (2270)           Lead fuoride         D         5,000 (2270)           Lead sufide         D         5,000 (2270)           Malathion         A         10			1 (0.454)
Hydrochloric acid         D         5,000 (2270)           Hydrogen sulide         B         100 (45.4)           Hydrogen sulide         B         100 (45.4)           Isopropanolamine         C         1,000 (45.4)           Keithane         D         5,000 (2270)           Keone         X         1,000 (45.4)           Keithane         D         5,000 (2270)           Lead acetale         D         5,000 (2270)           Lead acetale         D         5,000 (2270)           Lead fuoride         C         1,000 (454)           Lead iocode         D         5,000 (2270)           Lead fuoride         D         5,000 (2270)           Lead fuoride         D         5,000 (2270)           Lead iotide         D         5,000 (2270)           Lead sufide         D         5,000 (2270)			1 (0.454)
Hydrofuoric acid         D         5,000 (2270)           Hydrogen sulide         B         100 (45.4)           Isoprene         C         1,000 (45.4)           Isoprene         C         1,000 (45.4)           Isoprene         X         1,000 (45.4)           Isoprene         X         1,000 (45.4)           Isoprene         X         1,000 (45.4)           Lead acetale         D         5,000 (2270)           Lead acetale         D         5,000 (2270)           Lead fuoborate         D         5,000 (2270)           Lead fuoborate         D         5,000 (2270)           Lead fuoborate         D         5,000 (2270)           Lead sufide         D         5,000 (2270)           Lead suffide         D         5,000 (2270)           Lead suffide         D         5,000 (2270)           Lead suffide         D         5,000 (2270)		•X	1 (0.454)
PryCogon sulfde         R         PryCogon sulfde         R         PryCogon sulfde         F <thf< th="">         F         FF</thf<>			5,000 (2,270)
PryCogon sulfde         R         PryCogon sulfde         R         PryCogon sulfde         F <thf< th="">         F         FF</thf<>			5,000 (2,270)
dodocy/borzenesulfonate.         D         5,000 (2.270)           Kepone         X         1,000 (454)           Lead acetate         D         5,000 (2.270)           Lead flooride         D         5,000 (2.270)           Lead flooride         D         5,000 (2.270)           Lead flooride         D         5,000 (2.270)           Lead intrate         D         5,000 (2.270)           Lead intrate         D         5,000 (2.270)           Lead intrate         D         5,000 (2.270)           Lead stearate         D         5,000 (2.270)           Lead stafide         D         5,000 (2.270)           Mateic acid         D         5,000 (2.270)           Mateic anhydride         D         5,000 (2.270)           Mateic acid         D         5,000 (2.270)           Mateic acid         D         5,000 (2.270)           Mateic acid         A <td>nyorogon cyanoa</td> <td> A .</td> <td>10 (4.54)</td>	nyorogon cyanoa	A .	10 (4.54)
dodocy/borzenesulfonate.         D         5,000 (2.270)           Kepone         X         1,000 (454)           Lead acetate         D         5,000 (2.270)           Lead flooride         D         5,000 (2.270)           Lead flooride         D         5,000 (2.270)           Lead flooride         D         5,000 (2.270)           Lead intrate         D         5,000 (2.270)           Lead intrate         D         5,000 (2.270)           Lead intrate         D         5,000 (2.270)           Lead stearate         D         5,000 (2.270)           Lead stafide         D         5,000 (2.270)           Mateic acid         D         5,000 (2.270)           Mateic anhydride         D         5,000 (2.270)           Mateic acid         D         5,000 (2.270)           Mateic acid         D         5,000 (2.270)           Mateic acid         A <td></td> <td></td> <td>1000 (45.4)</td>			1000 (45.4)
Coordination         D         5,000 (2.270)           Kepone         X         1,000 (454)           Lead asonata         D         5,000 (2.270)           Lead Choride         D         5,000 (2.270)           Lead Roonata         D         5,000 (2.270)           Lead stearata         D         5,000 (2.270)           Lead stride         D         5,000 (2.270)           Lead stride         D         5,000 (2.270)           Lead stride         D         5,000 (2.270)           Malation         A         10 (4.54)           Malatinon         A         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric suffata         A         10 (4.54) </td <td></td> <td></td> <td>. 1.000 (454)</td>			. 1.000 (454)
Keithane         D         £,000 (2270)           Lead acetata         D         5,000 (2270)           Lead Acetata         D         5,000 (2270)           Lead Ruoride         D         5,000 (2270)           Lead Ruoride         D         5,000 (2270)           Lead Ruoride         D         5,000 (2270)           Lead intrata         D         5,000 (2270)           Lead intrata         D         5,000 (2270)           Lead stearate         D         5,000 (2270)           Lead staffde         D         5,000 (2270)           Mateic acid         D         5,000 (2270)           Mercuric suffata         A         10 (4.54)           Mercuric suffata         A         10 (4.54)	dodocyloonzenesulfonat	0.	
Kepone         X         1,000 (454)           Lead acetate         D         5,000 (2,270)           Lead Achorda         D         5,000 (2,270)           Lead Ruonda         D         5,000 (2,270)           Lead stearate         D         5,000 (2,270)           Lead thiocyanate         D         5,000 (2,270)           Lead thiocyanate         A         10 (4,54)           Maleic anhydride         B         100 (45.4)           Mercuric suffata         A         10 (4,54)           Mercuric suffata         A         10 (4,54)           Mercuric suffata         A         10 (4,54)           Methy mercuric nitrate         A         10 (4,54)           Methy parathion         B			5,000 (2,270)
Lead acetals         D         5,000 (2,270)           Lead Aconsta         D         5,000 (2,270)           Lead Ruoborata         D         5,000 (2,270)           Lead Ruoborata         D         5,000 (2,270)           Lead nitrata         D         5,000 (2,270)           Lead anitrata         D         5,000 (2,270)           Lead stafide         D         5,000 (2,270)           Malathion         A         100 (45.4)           Malathion         A         100 (45.4)           Mercurcic charate         A         10 (4.54)           Mercurcic stafata         A         10 (4.54)           Mercurcic stafata         A         10 (4.54)           Mercurcic stafata         B         100 (45.4)           Methyl mercaptan         B			1,000 (454)
Lead Chloride         D         5,000 (2,270)           Lead Ruoborate         D         5,000 (454)           Lead iodide         D         5,000 (2,270)           Lead nitrate         D         5,000 (2,270)           Lead suffate         D         5,000 (2,270)           Malatinion         A         10 (4,54)           Malatinion         A         10 (4,54)           Mercuric opravide         X         11 (0,454)           Mercuric thicognante         A         10 (4,54)           Mercuric suffate         A         10 (4,54)           Mercuric thicognante         A         10 (4,54)           Mercuric thicognante         A         10 (4,54)           Mercuric suffate         B         100 (45,4)           Metrup merceptan         B         100 (45,4)           Methyl mercaptate         C <td></td> <td></td> <td>5,000 (2,270)</td>			5,000 (2,270)
Leed Roorida         C         1,000 (454)           Lead Roorida         D         5,000 (2270)           Lead nitrata         D         5,000 (2270)           Lead stanta         D         5,000 (2270)           Lindane         X         1 (0.454)           Malatinion         A         10 (4.54)           Malatinion         B         100 (45.4)           Mercuric cyaride         X         1 (0.454)           Mercuric synate         A         10 (4.54)           Mercuric thicognate         A         10 (4.54)           Mercuric synate         A         10 (4.54)           Mercuric thicognate         X         1 (0.454)           Mercuric thicognate         X         1 (0.454)           Mercuric thicognate         C         1 (0.454)           Mercuric thicognate         C         1 (0.454)           Mercuric thicognate         C         1 (0.454)<			5,000 (2,270)
Lead infrato         D         5,000 (2.270)           Lead nitrato         D         5,000 (2.270)           Lead suffate         D         5,000 (2.270)           Lindane         A         100 (45.4)           Malatinon         A         10 (4.54)           Mercuric chirate         A         10 (4.54)           Mercuric chirate         A         10 (4.54)           Mercuric chirate         A         10 (4.54)           Mercuric suffate         D         5,000 (2.270)           Methy mercaptan         B         100 (45.4)           Methy mercaptan         B         10			5 000 (2 270)
Lead iodide         D         5,000 (2,270)           Lead nitrate         D         5,000 (2,270)           Lead stearate         D         5,000 (2,270)           Lead stearate         D         5,000 (2,270)           Lead stafide         D         5,000 (2,270)           Lead stafide         D         5,000 (2,270)           Lead stafide         D         5,000 (2,270)           Lindane         X         1 (0,454)           Malatihion         A         1 (0,454)           Malatino         B         5,000 (2,270)           Malatino         A         1 (0,454)           Mercuric cyaride         X         1 (0,454)           Mercuric synate         A         1 (0 (4,54)           Mercuric synate         A         1 (0 (4,54)           Mercuric synate         A         1 (0 (4,54)           Metryl mercuptan         B         100 (45,4)           Metryl mercuptan         C         1,000 (4			1.000 (454)
Lead suffate         D         5,000 (2,270)           Lindano         X         1 (0,454)           Lithium chromate         C         1,000 (454)           Malacic acid         D         5,000 (2,270)           Marcaric contrate         A         100 (454)           Mercuric cyanide         S         100 (454)           Mercuric cyanide         A         10 (4,54)           Mercuric cyanide         A         10 (4,54)           Mercuric suffate         A         10 (4,54)           Methyl mercaptan         B         100 (45,4)           Methyl mercaptate         C         1,000 (45,4)           Methyl mercaptate         C <td>Lead iocide</td> <td></td> <td>.5,000 (2,270)</td>	Lead iocide		.5,000 (2,270)
Lead suffate         D         5,000 (2,270)           Lindano         X         1 (0,454)           Lithium chromate         C         1,000 (454)           Malacic acid         D         5,000 (2,270)           Marcaric contrate         A         100 (454)           Mercuric cyanide         S         100 (454)           Mercuric cyanide         A         10 (4,54)           Mercuric cyanide         A         10 (4,54)           Mercuric suffate         A         10 (4,54)           Methyl mercaptan         B         100 (45,4)           Methyl mercaptate         C         1,000 (45,4)           Methyl mercaptate         C <td></td> <td></td> <td>5,000 (2,270)</td>			5,000 (2,270)
Lead suffice         D         5,000 (2,270)           Lead thiocyanate         D         5,000 (2,270)           Librane         X         1 (0,454)           Lithum chromate         C         1,000 (454)           Malatic exid         D         5,000 (2,270)           Malacic exid         D         5,000 (2,270)           Malacic exid         D         5,000 (2,270)           Mercuric cyanide         B         100 (454)           Mercuric cyanide         A         10 (4,54)           Mercuric suffate         A         10 (4,54)           Mercuric suffate         A         10 (4,54)           Mercuric suffate         B         100 (45,4)           Methyl methacrylate         B         100 (45,4)           Methyl methacrylate         B         100 (45,4)           Methyl methacrylate         C         1,000 (454)           Monoothylamine         C         1,000 (454)           Monoothylamine         C         1,000 (454)           Monoothylamine         C         1,000 (454)           Naled         D         5,000 (2,270)           Nickel antronum suffate         D         5,000 (2,270)           Nickel antrate         <			5,000 (2,270)
Lead thiooyanate         D         5,000 (2.270)           Lindane         X         1 (0.454)           Malatinon         A         100 (454)           Malaisc acid         D         5,000 (2.270)           Malacia antydride         D         5,000 (2.270)           Marcuric cyraride         X         100 (45.4)           Mercuric rintate         A         100 (45.4)           Mercuric nitrate         A         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric biocyanate         A         10 (4.54)           Mercuric biocyanate         A         10 (4.54)           Methyl mercaptan         B         100 (45.4)           Methyl mercaptan         B         100 (45.4)           Methyl mercaptal         C         1,000 (454)           Mexocrobate         C         1,000 (454)           Mexocrobate         C         1,000 (454)           Nabel         D         5,000 (2270)           Nickel meroban sulfate         D			
Lindane         X         1 (0.454)           Lithium chromate         C         1,000 (454)           Malathion         A         10 (4.54)           Malatic acid         D         5,000 (2.270)           Malacis anhydride         B         100 (45.4)           Mercaptochmethur         B         100 (45.4)           Mercaptochmethur         B         100 (45.4)           Mercuric cyanide         X         11 (0.454)           Mercuric sufata         A         10 (4.54)           Mercurous nitrate         A         10 (4.54)           Metroy cyanate         A         10 (4.54)           Metroy cyanate         A         10 (4.54)           Methyd mercaptan         B         100 (45.4)           Methyd mercaptan         B         100 (45.4)           Methyd martheon         C         1,000 (45.4)           Methyd mercaptan         B         100 (45.4)           Methyd mercaptane         C         1,000 (45.4)           Monoethydamine         C         1,000 (45.4)           Monoethydamine         C         1,000 (45.4)           Nabithalene         D         5,000 (2270)           Naphthenic acid         B			
Lithum chromats         C         1,000 (454)           Malatic acid         D         5,000 (2,270)           MarcaptoGmethur         B         100 (454)           Mercuric cyanide         D         5,000 (2,270)           Mercuric cyanide         D         100 (45.4)           Mercuric cyanide         A         100 (45.4)           Mercuric cyanide         A         10 (45.4)           Mercuric cyanide         A         10 (45.4)           Mercuric thiosynale         A         10 (45.4)           Mercurus nitrate         A         10 (45.4)           Methyl merceptan         B         100 (45.4)           Monoethylamine         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Naled         A         10 (1.54)           Naphthenic acid         B         100 (45.4)           Nickel entrate         D <td></td> <td></td> <td></td>			
Malatics acid         D         10 (4.54)           Maleic anhydride         D         5,000 (2.270)           Mercaptodimethur         B         100 (45.4)           Mercuric sufata         A         100 (45.4)           Mercuric sufata         A         10 (4.54)           Metry mercaptan         B         100 (45.4)           Methyl parathon         B         100 (45.4)           Methyl parathon         B         100 (45.4)           Mercuric sufata         C         1,000 (45.4)           Mercuric sufata         C         1,000 (45.4)           Mercuric sufata         D         5,000 (2.270)           Methyl parathon         B         10 (45.4)           Naled         D         5,000 (2.270)           Nickel mmonum suffata         D <td></td> <td></td> <td>: 1,000 (454)</td>			: 1,000 (454)
Maleic anhydride         D         5,000 (2270)           Mercuric chirate         A         100 (45.4)           Mercuric chirate         A         10 (45.4)           Mercuric chirate         A         10 (45.4)           Mercuric chirate         A         10 (45.4)           Mercuric thiosynale         A         10 (45.4)           Mercuric thiosynale         A         10 (45.4)           Methyl merceptan         B         100 (45.4)           Mercurous nitrate         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Naphthalwne         D         5,000 (2.270)           Naphthalwne         D         5,000 (2.270)           Naphthalwne         D         5,000 (2.270)           Nickel entrate         D         5,000 (2.270)           Nickel antrate         D         5,000 (2.270)           Nickel antrate		A	10 (4.54)
Mercapiodmetrur         B         100 (45.4)           Mercuric sufata         A         10 (4.54)           Methyl mercaptan         B         100 (45.4)           Methyl mercaptan         B         100 (45.4)           Methyl mercaptan         B         100 (45.4)           Methyl parathon         B         100 (45.4)           Mewinphos         X         1 (0.454)           Menomethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naphthalene         D         5,000 (2.270)           Nickel ammonum sulfata         D         5,000 (2.270)           Nickel nytrate         D			5,000 (2,270)
Mercuric cyaride         X         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric bioxynate         A         10 (4.54)           Mercuric suffata         A         10 (4.54)           Mercuric bioxynate         B         100 (45.4)           Methyl merceptan         B         100 (45.4)           Methyl merceptan         B         100 (45.4)           Mexacarbate         C         1,000 (45.4)           Monoothylamine         C         1,000 (454)           Monoothylamine         C         1,000 (454)           Monoothylamine         C         1,000 (454)           Naled         A         10 (154)           Naled         A         10 (154)           Nabhtbenic acid         B         1000 (454)           Nickel choride         D         5,000 (2270)           Nickel hitrate         D         5,000 (			100 (45 4)
Mercuric nitrate         A         10 (4.54)           Mercuric thicoganate         A         10 (4.54)           Mercuric thicoganate         A         10 (4.54)           Mercuric thicoganate         A         10 (4.54)           Methogethor         X         10 (4.54)           Methogethor         X         10 (4.54)           Methogethor         X         10 (4.54)           Methogethor         B         100 (45.4)           Methyl methacrylate         D         5,000 (2.270)           Methyl methacrylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naphthalone         D         5,000 (2.270)           Naphthalone         D         5,000 (2.270)           Naphthalone         D         5,000 (2.270)           Nickel entrate         D         5,000 (2.270)           Nickel ritrate         <			
Mercuric suffate         A         10 (4.54)           Mercuric thoognante         A         10 (4.54)           Methyl mercaptan         B         100 (45.4)           Methyl parathion         B         100 (45.4)           Mewinphos         X         1 (0.454)           Mexocarbate         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naphthakene         D         5,000 (2270)           Nickel ammonum sutfata         D         5,000 (2270)           Nickel rivrate         D         5,000 (2270)           Nickel rivrate         D         5,000 (2270)           Nickel sutfate         D         5,000 (2270)           Nickel rivrate         D         5,000 (2270)           Nickel sutfate         D         5,000 (2270)           Nickel sutfate         D         5,000 (2270)           Nickel sutfate <td< td=""><td>Mercuric nitrate</td><td>- A</td><td>• • • 10 (4.54)</td></td<>	Mercuric nitrate	- A	• • • 10 (4.54)
Metrourous norate         X         10 (4.54)           Methoxychlor         X         1 (0.454)           Methyl methacytate         D         5,000 (2270)           Methyl mathacytate         D         100 (45.4)           Methyl methacytate         D         5,000 (45.4)           Methyl mathacytate         D         1,000 (45.4)           Methyl mathacytation         B         100 (45.4)           Mexinghanine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naphthalane         D         5,000 (2270)           Naphthalane         D         5,000 (2270)           Nickel antronium sutfate         D         5,000 (2270)           Nickel intrate         D         5,000 (2270)           Nickel antrate         D         5,000 (2270)           Nickel intrate         D         5,000 (2270)           Nitrogen Goxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol			
Methosychor         X         1 (0.454)           Methyl mercaptan         B         100 (45.4)           Methyl methacrylate         D         5,000 (2,270)           Methyl methacrylate         D         5,000 (2,270)           Methyl methacrylate         D         5,000 (45.4)           Mexacarbate         C         1,000 (45.4)           Mexacarbate         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naled         A         10 ((54)           Naled         A         10 (454)           Naled         A         10 (454)           Naled         A         10 (454)           Naphthalene         D         5,000 (2,270)           Nickel chorde         D         5,000 (2,270)           Nickel hytroxide         C         1,000 (454)           Nickel hytroxide         C         1,000 (454)           Nitrobenzeno         D         5,000 (2,270) <t< td=""><td></td><td></td><td>10 (4.54)</td></t<>			10 (4.54)
Methyl merceptan         B         100 (45.4)           Methyl parathion         B         100 (45.4)           Methyl parathion         B         100 (45.4)           Mexinphos         X         1 (0.454)           Mexacarbate         C         1,000 (454)           Mexacarbate         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naled         A         10 (4.54)           Naphthenic acid         B         100 (45.4)           Naphthenic acid         B         100 (454)           Nickel ammonium sulfate         D         5,000 (2270)           Nickel rivate         C         1,000 (454)           Nitrobanzeno         C         1,000 (454)           Paratormaldehyde         C         1,000			1 (0.54)
Methyl methacylate         D         5,000 (2,270)           Methyl marathon         B         100 (45.4)           Mexinphos         X         1 (0.45.4)           Mexacarbate         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Monoethylamine         C         1,000 (45.4)           Naphthenic acid         B         100 (45.4)           Naphthenic acid         B         100 (45.4)           Nickel ammonum sutfate         D         5,000 (2,270)           Nickel entroxida         D         5,000 (2,270)           Nickel intrate         D         5,000 (2,270)           Nickel ritrate         D         5,000 (2,270)           Nickel ritrate         D         5,000 (2,270)           Nickel strate         D         5,000 (2,270)           Nitrobenzeno         C         1,000 (45.4)           Nitrophenol         C         1,000 (45.4)           Nitrophenol         C         1,000 (45.4)           Nitrophenol         C         1,000 (45.4)           Nitrophenol         C         1,000 (45.4)           Paraformaklehyde			100 (45.4)
Mevinphos         X         1 (0.454)           Moxacarbate         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naled         A         10 (154)           Naphthainne         D         5,000 (2270)           Naphthainne         D         5,000 (2270)           Nickel entroide         D         5,000 (2270)           Nickel ritrate         D         5,000 (2270)           Nickel striate         D         5,000 (2270)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paraformakehyde         C         1,000 (454)           Phonol         C         1,000 (454)           Phonol         D         5,000 (2270)		D	
Mexacarbate         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Monoethylamine         C         1,000 (454)           Naled         A         10 (454)           Naphthalene         D         5,000 (42270)           Naphthalenic acid         B         100 (454)           Naphthalenic acid         D         5,000 (2270)           Nickel choride         D         5,000 (2270)           Nickel nydroxida         C         1,000 (454)           Nickel rivate         D         5,000 (2270)           Nickel nydroxida         C         1,000 (454)           Nickel sutfata         D         5,000 (2270)           Nickel sutfata         D         5,000 (2270)           Nickel sutfata         D         5,000 (454)           Nitrobenzeno         C         1,000 (454)           Nitrobencol         C         1,000 (454)           Nitrobencol         C         1,000 (454)           Paraformatschyde         X         1 (0,454)           Phonol         C         1,000 (454)           Phosphorus         X         1 (0,454)           Phosphorus brichoinde         D         5,000 (2270			100 (45.4)
Monoethylamine         C         1,000 (454)           Monomethylamine         C         1,000 (454)           Naled         A         10 (454)           Naphthakine         D         5,000 (2270)           Naphthakine         D         5,000 (2270)           Naphthakine         D         5,000 (2270)           Nickel enmonium suffate         D         5,000 (2270)           Nickel choride         D         5,000 (2270)           Nickel hydroxide         C         4,000 (454)           Nickel suffate         D         5,000 (2270)           Nickel suffate         D         5,000 (2270)           Nickel suffate         D         5,000 (2270)           Nitro concere         C         1,000 (454)           Nitropen dioxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paratomakdehyde         C         1,000 (454)           Paratomakdehyde         C         1,000 (454)           Phosphoric edid         D         5,000 (2270)           Phosphoric sold         D         5,000 (2270)           Phosphoric sold         D         5,000 (2270)           Phosphoric sold         D <td></td> <td></td> <td>1 (0.454)</td>			1 (0.454)
Monomethylamine         C         1,000 (454)           Naled         A         10 (1.54)           Naphthalane         D         5,000 (2.270)           Naphthalane         D         5,000 (2.270)           Nickel chloride         D         5,000 (2.270)           Nickel chloride         D         5,000 (2.270)           Nickel hydroxide         C         1,000 (454)           Nickel hydroxide         C         1,000 (454)           Nickel suffate         D         5,000 (2.270)           Nickel suffate         D         5,000 (2.270)           Nitrogen dioxide         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrotohuene         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paratornaldehyde         C         1,000 (454)           Phonol         C         1,000 (454)           Phonol         C         1,000 (454)           Phosphorus oxychoride         D         5,000 (2.270)           Phosphorus pontasulfde         B         100 (454)           Phosphorus pontasulifde <t< td=""><td></td><td></td><td></td></t<>			
Najed         A         10 (4.54)           Naphthalone         D         5,000 (2.270)           Naphthenic acid         B         100 (45.4)           Nickel emmonium sulfate         D         5,000 (2.270)           Nickel entronium sulfate         D         5,000 (2.270)           Nickel entronium sulfate         D         5,000 (2.270)           Nickel ritrate         D         5,000 (2.270)           Nickel ritrate         D         5,000 (2.270)           Nickel strate         D         5,000 (2.270)           Nickel strate         D         5,000 (2.270)           Nickel strate         D         5,000 (2.270)           Nitroson coded         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paraformatishyde         C         1,000 (454)           Phonol         C         1,000 (454)           Phosphonus         D         5,000 (2.270)           Phosphonus         D         5,000 (2.270)           Phosphonus lackhorde         D         5,000 (2.270)           Phosphonus lacholonde <td></td> <td></td> <td></td>			
Naphthaisene         D         5,000 (2.270)           Naphthenic acid         B         100 (45.4)           Nickel amonium sulfate         D         5,000 (2.270)           Nickel chloride         D         5,000 (2.270)           Nickel chloride         D         5,000 (2.270)           Nickel hydroxide         C         = 1,000 (454)           Nickel sulfate         D         5,000 (2.270)           Nickel hydroxide         C         = 1,000 (454)           Nitrobanzeno         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paratormaldehyde         C         1,000 (454)           Phosphoric         A         10 (4.54)           Phosphoris oxychioride         D         5,000 (2.270)           Phosphorus pontasulfde         B         100 (454)           Potassium arsenate         C         1,000 (454)	·Naled		
Naphthenic acid         B         100 (45.4)           Nickel ammonium sulfale         D         5,000 (2,270)           Nickel choride         D         5,000 (2,270)           Nickel hydroxide         C         + 1,000 (454)           Nickel hydroxide         C         + 1,000 (454)           Nickel sulfale         D         5,000 (2,270)           Nickel hydroxide         C         1,000 (454)           Nitrogen doxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrototuene         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paratornaldehyde         C         1,000 (454)           Phonol         C         1,000 (454)           Phonol         C         1,000 (454)           Phosphorus oxychioride         D         5,000 (2,270)           Phosphorus oxychioride         D         5,000 (2,270)     <			
Nickel chloride         D         5,000 (2.270)           Nickel hydroxida         C         = 1,000 (454)           Nickel rivitate         D         5,000 (2.270)           Nickel suffate         D         5,000 (2.270)           Nickel suffate         D         5,000 (2.270)           Nickel suffate         D         5,000 (2.270)           Nitrobanzeno         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paratormaldehyde         C         1,000 (454)           Pentschlorophenol         A         10 (4.54)           Phosphoric acid         D         5,000 (2.270)           Phosphoric acid         D         5,000 (2.270)           Phosphoric acid         D         5,000 (2.270)           Phosphorus pontasulifde         B         100 (454)           Phosphorus inchloride         D         5,000 (2.270)		B .	
Nickel hydroxide         C         ±         1,000 (454)           Nickel nitrate         D         5,000 (2,270)           Nitrite acid         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Phonol         C         1,000 (454)           Phonol         C         1,000 (454)           Phosphorus         D         5,000 (2270)           Phosphorus oxychioride         D         5,000 (2270)           Phosphorus pontasulfide         B         100 (454)           Phosphorus pontasulfide         D         5,000 (2270)           Phosphorus pontasulfide         D         5,000 (2270)           Phosphorus pontasulfide         D         5,000 (2270)           Phosphorus prohories lacichioride         D         5,000 (2270)			
Nickel nitrate         D         5,000 (2,270)           Nickel suffate         D         5,000 (2,270)           Nitre edita         C         1,000 (454)           Nitrogen dixide         C         1,000 (454)           Nitrototuene         C         1,000 (454)           Parathion         X         1 (0,454)           Phosphonic add         A         10 (4,54)           Phosphonic add         D         5,000 (2,270)           Phosphonic add         D         5,000 (2,270)           Phosphonic solution         D         5,000 (2,270)           Phosphonic solutified         D         5,000 (2,270)           Phosphonis oxychloride         D         5,000 (2,270)           Phosphonis bontaulified         B         100 (45.4)           Potassium ersenate         C         1,000 (45.4)			
Nickel suffate         D         5,000 (2,270)           Nitrice acid         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Pertachlorophenol         A         10 (454)           Pentschlorophenol         A         10 (4,54)           Phosphoric acid         D         5,000 (2,270)           Phosphoric acid         D         5,000 (2,270)           Phosphorus pontasulfide         B         100 (454)           Phosphorus pontasulfide         B         100 (454)           Potassium arsenate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassium chromate         C         1,000 (454)			
Nitric acid         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Nitrototuene         C         1,000 (454)           Nitrototuene         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Paraformaldehyde         C         1,000 (454)           Pentachkorophenol         X         1 (0,454)           Pentachkorophenol         A         10 (4,54)           Phonol         C         1,000 (454)           Phosphonis         D         5,000 (2,270)           Phosphorus oxychioride         D         5,000 (2,270)           Phosphorus inchloride         D         5,000 (2,270)           Polychlorinated biphoryls         A         10 (4,54)           Potassium arsenta         C         1,000 (454)           Potassium ersenta         C         1,000 (454)			
Nitrobenzeno         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrogen dioxide         C         1,000 (454)           Nitrotoluene         C         1,000 (454)           Parational         C         1,000 (454)           Parational         C         1,000 (454)           Parational         C         1,000 (454)           Parational         C         1,000 (454)           Pentachlorophenol         A         10 (4,54)           Phosphoric acid         D         5,000 (2,270)           Phosphoric acid         D         5,000 (2,270)           Phosphoric oxychloride         D         5,000 (2,270)           Phosphorus oxychloride         D         5,000 (2,270)           Phosphorus pontasulfde         B         100 (45,4)           Phosphorus pontasulfde         B         100 (45,4)           Potassium arsenata         C         1,000 (45,4)           Potassium ersenita         C         1,000 (45,4)           Potassium ersenita         C         1,000 (45,4)           Potassium ersenita         C         1,000 (45,4)           Potassium chromata         C         1,000 (45,4)			
Nitrogen diaxide         C         1,000 (454)           Nitrophenol         C         1,000 (454)           Parathon         C         1,000 (454)           Parathon         C         1,000 (454)           Parathon         X         1 (0,454)           Pentschlorophenol         A         10 (4,54)           Phosphoric acid         D         5,000 (2,270)           Phosphoric oxychloride         D         5,000 (2,270)           Phosphorus oxychloride         D         5,000 (2,270)           Potassium arsenata         C         1,000 (45,4)           Potassium ersenite         C         1,000 (45,4)           Potassium chromate         C         1,000 (45,4)           Potassum hydroxide         A         10 (4, 5,4) <td></td> <td></td> <td></td>			
Nitrotouene         C         1,000 (454)           Paratormatishinde         C         1,000 (454)           Paratornatishinde         X         1 (0.454)           Phonol         A         10 (4.54)           Phonol         C         1,000 (454)           Phonol         C         1,000 (454)           Phosphoric add         D         5,000 (2.270)           Phosphorus         X         1 (0.454)           Phosphorus pontasulfide         D         5,000 (2.270)           Phosphorus Inchloride         D         5,000 (2.270)           Phosphorus Inchloride         D         5,000 (2.270)           Polychlorinated biphoryts         A         100 (4.54)           Potassium arsenate         C         1,000 (454)           Potassium ersente         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum hydroxide         A         10(4.54)	Nitrogen dioxide		1,000 (454)
Paraformaldehyde         C         1,000 (454)           Paration         X         1 (0,454)           Pentschlorophenol         A         10 (4,54)           Phonol         C         1,000 (454)           Phosphoric ecid         D         5,000 (2,270)           Phosphoric ecid         D         5,000 (2,270)           Phosphoric ecid         D         5,000 (2,270)           Phosphorus oxychloride         D         5,000 (2,270)           Phosphorus pontasulfde         B         100 (454)           Phosphorus pontasulfde         B         100 (454)           Potassium arsenate         C         1,000 (454)           Potassium ersenate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum hydroxide         A         100 (454)	Nitrophenol		
Partation			
Pentachlorophenol         A         10 (4.54)           Phonol         C         1,000 (454)           Phosphonic acid         D         5,000 (2.270)           Phosphonus oxychloride         D         5,000 (2.270)           Phosphonus pontasulfide         B         100 (45.4)           Phosphonus pontasulfide         D         5,000 (2.270)           Potychlorinated biphenyls         A         10 (4.54)           Potassium arsenate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum hydroxide         A         10 (4.54)			
Phonol         C         1,000 (454)           Phosphoric acid         D         5,000 (2270)           Phosphoric acid         D         5,000 (2270)           Phosphoric acid         D         5,000 (2270)           Phosphoric solutions oxychloride         D         5,000 (2270)           Phosphorus bontasul/6e         D         5,000 (2270)           Phosphorus bontasul/6e         D         5,000 (2270)           Potphorus Inchloride         D         5,000 (2270)           Potassium ersenate         C         1,000 (454)           Potassium ersenate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum hydroxide         A         10 (4, 54)           Potassum hydroxide         C         1000(454)			
Phosphoric         D         5,000 (2,270)           Phosphorus         D         5,000 (2,270)           Phosphorus         X         1 (0,454)           Phosphorus bontasulifde         D         5,000 (2,270)           Phosphorus pontasulifde         B         100 (45,4)           Phosphorus inchloride         D         5,000 (2,270)           Phosphorus inchloride         D         5,000 (2,270)           Potophorus inchloride         D         5,000 (2,270)           Potassium arsenate         C         1,000 (454)           Potassium ersenite         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum hydroxide         A         10 (4, 54)	Phonol		
Phosphoric edid         D         5,000 (2,270)           Phosphorus         X         1 (0,454)           Phosphorus oxychloride         D         5,000 (2,270)           Phosphorus oxychloride         D         5,000 (2,270)           Phosphorus pontasulfide         B         100 (45.4)           Phosphorus inchloride         D         5,000 (2,270)           Potychlorinated biphenyls         A         10 (4.54)           Potassium arsenate         C         1,000 (454)           Potassium ersenite         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum cyanide         A         10 (4.54)           Potassum tydroxide         C         1,000 (454)	Phosgane		5,000 (2,270)
Phosphonus oxychloride     D     5,000 (2.270).       Phosphonus pontasul/ide     B     100 (45.4)       Phosphonus Inchloride     D     5,000 (2.270).       Polychlorinated biphonyls     A     10 (4.54)       Potassium arsenate     C     1,000 (454)       Potassium bichromate     C     1,000 (454)       Potassium chromate     C     1,000 (454)       Potassium chromate     A     10 (4.54)       Potassium bichromate     C     1,000 (454)       Potassum hydroxide     A     10 (4.54)			5,000 (2,270)
Phosphorus pontasulfide         B         100 (45.4)           Phosphorus inchloride         D         5,000 (2,270)           Polychlorinated biphonyls         A         10 (4.54)           Potassium arsenate         C         1,000 (45.4)           Potassium arsenate         C         1,000 (45.4)           Potassium ersenite         C         1,000 (454)           Potassium bichromate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum rysnide         C         1,000 (454)           Potassum hytroxode         C         1,000 (454)			
Phosphorus Inchloride     D     5,000 (2,270)       Potychlorinated bipheryts     A     10 (4,54)       Potassium arsenate     C     1,000 (454)       Potassium chromate     C     1,000 (454)       Potassium chromate     C     1,000 (454)       Potassum cyanide     A     10 (4, 54)       Potassum trytroxide     C     1,000 (454)			
Potychlorinated biphenyts     A     10 (4.54)       Potassium arsenate     C     1,000 (454)       Potassium bichromate     C     1,000 (454)       Potassium chromate     C     1,000 (454)       Potassium hydroxide     A     10 (4.54)	Phosohorus pontaguifirta		
Potassium arsenate         C         1,000 (454)           Potassium arsenate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassium cyanide         A         10 (4.54)           Potassium cyanide         C         1,000 (454)			along tering
Potassium ersenite         C         1,000 (454)           Potassium bichromate         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassium cyanide         C         1,000 (454)           Potassium cyanide         A         10 (4.54)           Potassium hydroxide         C         1000(454)	Phosphorus Inchloride		10 (4,54)
Potassium bichromata         C         1,000 (454)           Potassium chromate         C         1,000 (454)           Potassum chromate         C         100 (454)           Potassum chromate         C         100 (454)           Potassum hydroxide         C         1000(454)	Phosphorus Inchloride Polychlorinated biphenyls	- ĉ	
Potassum cyanide         A         10 (4.54)           Potassum hydroxide         C         1000(454)	Phosphorus Inchioride Polychlorinated biphenyls Potassium arsenate Potassium ersenite	- C C	1,000 (454)
Potassaum hydroxide C 1000(454)	Phosphorus Inchloride Polychlorinated biphenyts Potassium arsenate Potassium preenite Potassium bichromate	- C C C	1,000 (454) 1,000 (454) 1,000 (454)
	Phosphorus Inchloride Polychlorinated biphonyts Polassium arsenate Polassium bichromate Polassium chromate	- C C C C C	1,000 (454) 1,000 (454) 1,000 (454) 1,000 (454)
Potassum permanganate	Phosphorus Inchloride Polychlorinated bipheryts Potassium arsenate Potassium ersenite Potassium bichromate Potassium chromate	*****	1 1,000 (454) 1,000 (454) 1,000 (454) 1,000 (454) 1,000 (454) 10 (4.54)

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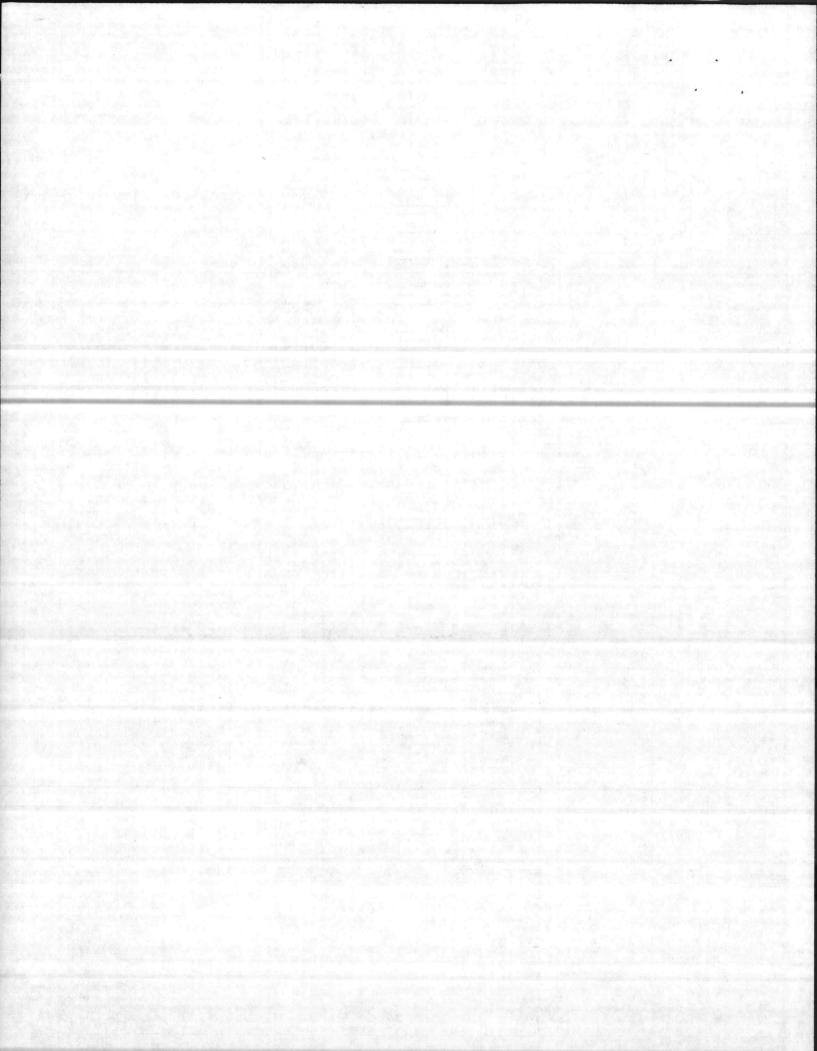
Encl (1) Part A

2



Propionic acid Propionic anhydride		pounds (kilograms)
Propionic acid Propionic anhydride Procylene oxide	A	10 (4.54)
Propionic anhydride	D	5,000 (2,270)
Procylene oxida	D	. 5,000 (2,270)
topland on on animalian	-, D	5,000 (2,270)
Propylene oxida	C	1,000 (454)
Ouinolina	- C	1,000 (454)
Resorcinal.	C	1,000 (454)
Selenium oxide	_ C	, 1,000 (454)
Saver ndrate	_ X	1 (0.454)
Sodium	- C	1,000 (454)
Sodium arsonate	- C	1,000 (454)
Sodium arsante	C	- 1,000 (454)
Sodium bichromate	- C	1,000 (454)
Sod-um bifluoride	- D .	5,000 (2,270).
Sodium bisulfite	. 0	5 000 /2 2701
Socium chromate	_ C	1,000 (454)
Sodium cyanide		10 (4.54)
Sodium	~ ~	1,000 (454)
daylog dhagagagay Hanala	1	1,000 (454)
dodecylbenzenesulfonate.		
Social internet	- D	5,000 (2,270)
Socium hydrosulfide		- 5,000 (2,270)
Sodium hydroxide		1,000 (454)
Sodium hypochicrite	. B	100 (45.4)
Sodium methylate	- C -	1,000 (454)
Sodium nitrite		100 (45.4)
Sodium phosphate, dibasic	D ·	···· 5,000 (2,270)
Socium phosphate, tribasic	- D ·	5,000 (2,270)
Sodium sclenite	- C	- 1,000 (454)
Strontium chromate	_ C	1,000 (454)
Stychnine		10 (4.54)
Styrene	_ C	1,000 (454)
Sulfuric acid	č	1,000 (454)
Suttur monochloride	- č	
	8	1,000 (454)
2,4,5-T acid		100 (45.4)
2,4,5-T esters		100 (45.4)
		100 (45.4)
2,4,5-T saits	- B	* 100 (45.4)
4,5-TP acid	- B -	100 (45.4)
.4.5-TP acid esters	- B	100 (45.4)
DE	- X	1 (0.454)
etraethyl lead	. B	100 (45.4)
etraethyl pyrophosphale		100 (45.4)
hallum sultate	- C	1,000 (454)
oluene	- C	1,000 (454)
ovaphene	. X .	1 (0.454)
richlorlon	C C	1,000 (454)
richloroethylene	. C	1,000 (454)
nichlorophenol		10 (4.54)
nethanolamine	ĉ	-1,000 (454)
dodecy/benzenesulfonate.	•	- 1,000 (434)
nethylamine	. D	F 000 (0 070)
imethylamion		5,000 (2,270)
nmethylamine	. c	1,000 (454)
hanyl acetate	. 0	5,000 (2,270)
Iranyl nitrate	. D	5,000 (2,270)
anadium pentoxide	000	1,000 (454)
anadyl sullate	. C	1,000 (454)
inyl acotate inylidene chloride	. C	1,000 (454)
inytidene chloride	. D	5,000 (2,270)
ylene	C	1,000 (454)
ylenol	C	1,000 (454)
inc acetate	č	1,000 (454)
nc ammonium chloride	D	
nc borate	č	5,000 (2,270)
inc bromide		1,000 (454)
	D .	5,000 (2,270)
nc carbonate	C	1,000 (454)
	D	6,000 (2,270)
ne chlorida	A	10 (4.54)
nc cyanide	C	1,000 (454)
nc cyanide		1,000 (454)
nc cyanide nc fluoride nc formate	C	
nc cyanida nc fluoride nc formate nc hydrosulfite	c	1,000 (454)
nc cyanide nc fluoride nc formate		1,000 (454) 5,000 (2,270)
nc cyanide nc fluoride nc formate nc hydrosulfite nc rutvate	C	5,000 (2,270)
nc cyanide	CDD	5,000 (2,270) 5,000 (2,270)
nc cyanida	CDDC	5,000 (2,270) 5,000 (2,270) 1,000 (454)
nc cyanida	00000	5,000 (2,270) 5,000 (2,270) 1,000 (454) 5,000 (2,270)
nc cyanide	CDDCDC	5,000 (2,270) 5,000 (2,270) 1,000 (454) 5,000 (2,270) 1,000 (454)
nc cyanide	CDDCDCD	\$,000 (2,270) 5,000 (2,270) 1,000 (454) 5,000 (2,270) 1,000 (454) 5,000 (2,270)
nc cyanide	CDDCDC	5,000 (2,270) 5,000 (2,270) 1,000 (454) 5,000 (2,270) 1,000 (454)

Encl (1) Part A



#### § 401.15 Toxic Jutants.

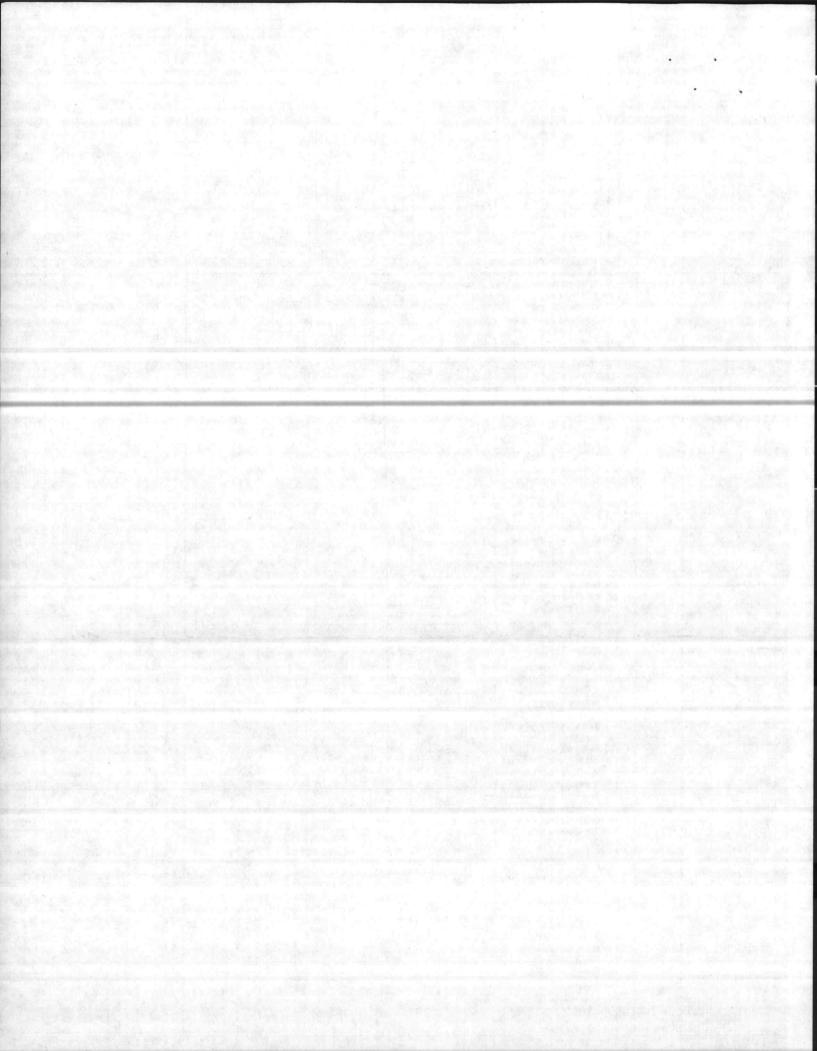
The following comprise the list of toxic pollutants designated pursuant to section 307(a)(1) of the Act:

and dates was to go I. Accnaphthene 2. Acrolein Water ta data acro anti- Acrolein
 Acrylonitrile
 Addrin/Dieldrin\*
 Antiniony and compounds '
 Arsenic and compounds '
 Benzene
 Benzene
 Benzidine\*
 Benzidine\*
 Carbon tetrachloride
 Chlordane (technical mixture and
 St. Polychlorinated biphenyls (PCBs)\*
 St. Selenation and compounds
 St. Selenium and compounds 13. Chlordane (technical mixture and metabolites)-14. Chlorinated benzenes (o'her than dichlorobenzenes) 15. Chlorinated ethanes (including 1.2dichloroethane, 1.1,1-trichloroethanc. and hexachloroethane) 16. Chloroalkyl ethers (chloromothyl T chloroethyl, and mixed ethers) 17. Chlorinated naphthalene 18. Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols) 19. Chloroform 20. 2-chlorophenol 21. Chromium and compounds 22. Copper and compounds 23. Cyanides 23. Cyanides 24. DDT and metabolites\* 23. Cyanides 25. Dichlorobenzencs (1,2-, 1,3-, and 1.4-• dichlorobenzenes) • 26. Dichlorobenzidine 27. Dichloroethylenes (1,1-, and 1,2-· dichloroethylene) 28. 2.4-dichlorophenol 29. Dichloropropane and dichloropropene 30. 2.4-dimethylphenol 31. Dinitrotoluene 32. Diphenylhydrazine 33. Endosulfan and metabolites 34. Endrin and metabolites\* 35. Ethylbenzene 36. Fluoranthene 37. Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ethers, bromophenylphenyl ether. bis(dichloroisopropyl) ether, bis-(chlorocthoxy) methane and polychlorinated diphenyl ethers) .6.0 38. Halomethanes (other than those listed elsewhere; includes methylene chloride. methylchloride, methylbromide, bromoform, dichlorebromomethane. trichlorofluoromothene. dichloredifluormethane) 2 39. Heptachlor and metabolites 40. Hexachlorobutadiene 41. Hexachlorocyclohexane. 42. Hexachlorocyclopentadiene 43. Isophorone 44. Lead and compounds 45. Mercury and compounds 46. Naphthalenc 47. Nickel and compounds 48. Nitrobenzene 49. Nitrophenols (including 2.4-dinitrophenol. dinitrocresol 50. Nitrosamines 51. Pentachlorophenol 52. Phenol

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53. Phthalate esters THE WEITERS 54. Polychlorinated biphenyls (PCBs)\* 56. Selenium and compounds 57. Silver and compounds 58. 2.3.7.8-tetrachlorodibenzo-p-dioxin (TCDD) 59. Tetrachloroethylene 60. Thallium and compounds 61. Toluene
62. Toxaphene<sup>\*</sup>
63. Trichloroethylene
64. Vinyl chloride
65. Zinc and compounds

5. Zinc and compounds fille and



§ 261.31 Hazardous waste from nonspecife ources.

<ul> <li>Industry and EPA . ,hazardous waste No.</li> </ul>	Hazardous waste
enc:	
F001	The following spont halogenated solvents used in degreasing: tetrachloroethytene, trichloroethytene, methylene chloride, 1,1,1-trichloroeth (1)
F002	ane, carbon tetrachloride, and chlorinated fluorocarbons; and studges from the recovery of these solvents in degreasing operations. The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1_trichloroethane, chlorobenzene, (1)
	1,1,2-trichloro-1,2,2-tritluoroethane, ortho-dichlorobenzene, and trichlorolluoromethane; and the still bottoms from the recovery of these solvents.
F003	- The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl (I) alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.
F004	The following spent non-halogenated solvents: crosols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these (T) solvents.
F005	The following spont non-halogenated solvents: toluene, methyl ethyl ketong, carbon disulfide, isobutanol, and pyriding; and the still bottoms (1, 1)
	from the recovery of these solvents.
F006	- Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum: (1)
and the second second	(2) bn plating on carbon steet; (3) zinc plating (segregated basis) on carbon steet; (4) atuminum or zinc-aluminum plating on carbon steet;
F019	(5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steet, and (6) chemical etching and milling of aluminum.
F007	Spent syands plating bath solutions from electroplating operations (except for precises metals electroplating spent syands plating bath (R, T)
	solutions).
F008	- Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process (except for (R, T)
	procious metals electroplating plating bath sludges).
F009	Spont stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for process (R, T)
F010	- metals electroplating spent stripping and cleaning bath solutions). - Ouenching bath sludge from oil baths from metal h at treating operations where cyanides are used in the process (except for precious (R, T)
	metals heal-treating quenching bath sludges).
F011	Spent cyanido solutions from sait bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent (R, T)
and the second and	Evande solutions from salt bath not cleaning in the state of the state
F012	- Ovenching wastewator treatment studges from metal heat treating operations where cyanides are used in the process (except for precisus ) ()
	Dotals near realing cuenching wastewater realment studges)
F014	Oracidation unable stor kealment laining-point opdiment from minorial motals recovery operations
	- Spont cyanida ben'h selutions from minorel motals roceway sporations

Industry and EPA Hazardous waste Hazardous waste Hazardous waste Hazardous waste No.

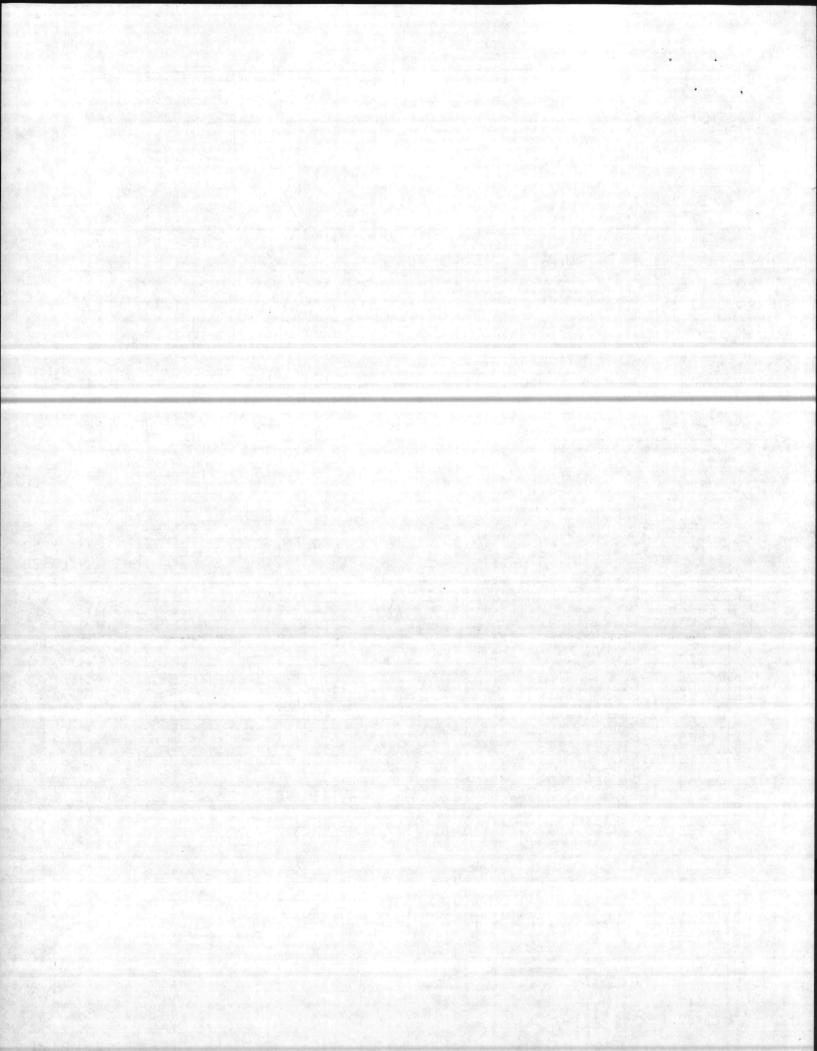
Nood Preservations	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosole and/or pentachlorophenol	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosole and/or pentachlorophend	(I)
norganic Pigments:	and a second	1.1.1.9.9.21. 1.1-2.1
K002	"Wastewater treatment sludge from the production of chrome yellow and orange pigments	m
K003	Wastewater treatment sludge from the production of molybdate orange pigments	m
· K004	Wastewater treatment sludge from the production of zinc yellow pigments	() ····································
K005	Wastewater treatment sludge from the production of chrome green pigments	m the second
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)	(D) 2 (at
K.007	Wastewater treatment sludge from the production of iron blue pigments	m
K000	Oven residue from the production of chrome oxide green plaments.	m
Drganic Chemicals:	Wastewater treatment sludge from the production of chrome green pigments         Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)         Wastewater treatment sludge from the production of iron blue pigments         Oven residue from the production of chrome oxide green pigments         Distillation bottoms from the production of acetaldehyde from ethylene         Distillation side cuts from the production of acetaldehyde from ethylene         Bottom stream from the acetavitie column in the production of acrointine	in all the second sections
K009	Distillation bottoms from the production of acetaldehyde from ethylene	m
K010	Distillation side cuts from the production of acetaldebyde from ethylane	m 5.123.2
K011	Bottom stream from the wastewater stringer in the production of acodonitria	IB D SALAS
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile	IR TI
K014	Bottoms from the acetogratical outification column in the production of acedonicitia	m Luczie L
K015	Still bolloons from the distribution of boond chloride	m Hattanter
K016	Heave ends or fittilizing residues from the production of or then betachloring	m
K017	Heavy ends or distillation residues from the production of racion tetrachloride	in showp the state
· KO18	Honey crus (sub bottoms) from the publication could in the production of epichloronycrin	(1)
A- K010	Heavy ends (still bottems) from the purification column in the production of epichlorohydrin     Heavy ends from the fractionation column in ethyl chloride production.     Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	0
· K019	treat erus nom une disusation of ethylene dichloride in ethylene dichloride production	m
F.020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production     Aquoous spent antimony catalyst waste from fluoromethanes production	m strange the
K021	Aqueous spent antimony catalyst waste from fluoromethanes production	(I)
K022	Distilation bottom tars from the production of phenol/acetone from cumene	m - i i i i i i i i i i i i i i i i i i
KC23	Distillation light ends from the production of phthalic anhydride from naphthalene	() - Horitora
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene	m
K033	Disultation licht ends from the production of chinatic anhydride from ortho-sylene	m
KC04	Distillation bottoms from the production of phthalic anhydride from ortho-sylene	m
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	m
K026	Stripping sull tails from the production of methy ethyl pyridines	m
K027	Centriluge and distillation residues from toluene discogranato production	(R.D : 3.5.45
K028	Soont catalyst from the hydrochlorinator reactor in the production of 1.1.1-trichloroethane	m
K629	Contriluge and distillation residues from toluene disocyanate production	() icraiter
KC35	Detiliation bottoms from the production of 1 1 1 triphlarosthaps	m . winn, fit.
KC96	. Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	
KC30	Column bottoms or heavy ands from the combined production of trichloroethylene and perchloroethylene	0
KCR3	Column bottoms or heavy onds from the combined production of trichloroethylene and perchloroethylene	()
KIC3	Disultation bottoms from aniline production	(1)
KIOA	Process residues from animale extraction from the production of anima.	
VIES	Combined wastewater streams generated from nitrobenzenu/aniline production	m internet
F.G.C.J	Distribution or fractionation Column Polloms from the production of chlorobenzenas	
RIUJ	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	(T)
organic Chemicals:		
K072	Brine publication muds from the mercury cell process in chloring production, where separately propuritied bring is not used	(T)
F.J/J	Chloringtod hydrocarbon waste from the purfication step of the diaphraom cell process using graphic aparter is ablastic and using	
11109	Wastewater treatment sludge from the mercury cell process in chlorine production	m
esticides:		
F.OJI	By product salts generated in the production of MSMA and cacodylic acid	m
K032	Wastewater treatment studge from the production of chlordane	m
K033	Wastewater and scrub water from the chlorination of evelopentations in the production of chloridana	m
K.G37	Vacuum stripper discharge from the chlordane enformator in the production of enfordane	m
K035	Wastuwater treatment studges generated in the production of chlordane	
K036	Still bottoms from toluces reclamation distillation in the production of disulfation	
K037	Sin bolions from todene recramazion ostination in the production of disbitoton	(1)
K038	lesses are a camera storges non the productor of oster stor	
K033	the washing and shipping of photate production	(1)
	Wastewater treatment sludge from the production of phorate	m

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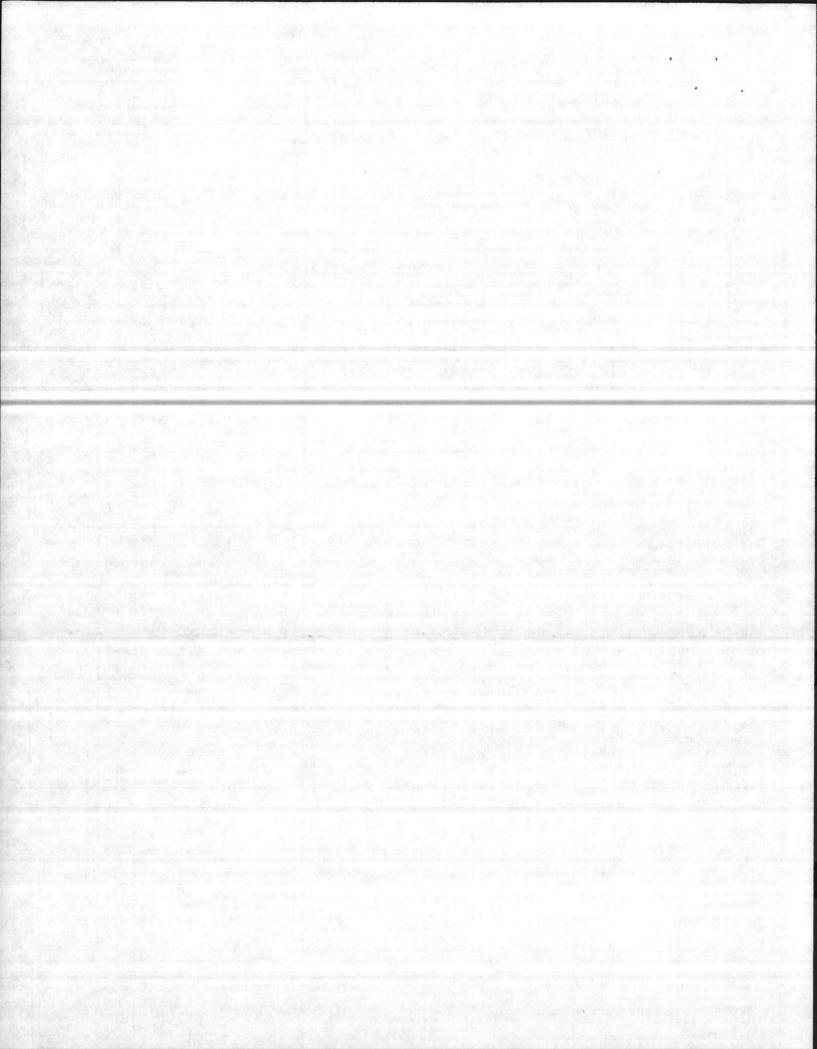
Industry and EPA Hazardous waste Hazard code hazardous waste No. K04 Wastewater treatm e from the production of toraph m Untreated process wastewater from the production of toxaph KOOR m Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T K042 E KCAT 2.6-Dichlorophenol waste from the production of 2.4-D. K033 Untreated wastewater from the production of 2.4-D. S Wat of the the strength K044 Wastewater treatment sludges from the manufacturing and processing of explosive (R) KOUS Spent carbon from the treatment of wastewator containing explosives (R) (T) KOJS Wastewater treatment studges from the manufacturing, formulation and loading of lead-based initiating compounds K047 Pink/red water from TNT operations RU . 2. .... Petroloum Relining 1212 K048 Dissolved air flotation (DAF) float from the petroleum refining industry 'n 1: 24 K0.10 Slop oil emulsion solids from the petroleum refining industry. BB Heat exchanger bundle cleaning sludge from the petroleum refining industry API separator sludge from the petroleum refining industry K050 :1-KOS m 100 K052 Tank bottoms (leaded) from the petroleum refining industry m n and Steet · . · Territor Di manaionati K061 Emission control dust/studge from the primary production of steel in electric fumaces m . 3.3 K062 Spent pickle liquor from steel finishing operation C.D \$3 ary Copper. 2 Mr. Min Changer H064 3 nary Lead: LINCOLD TO THE BASE KANS T mary Zinca · ..... ٠.. m Kest maclehide BB Z oduction Secondary Lead: ······ in the barden of the stand of the stand of the stand K069 Emission control dust/sludge from secondary lead smelting m K100 Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smolting m terinary Pharmacoulicals: Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compour KON m K101 Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or m 1. 2. 42 ... orcano-arsenic compounds. " shin a A.15 :- 4organo-arsenic compounds. estimate the second K102 -Use of activated carbon for decolonization in the production of reserving productions and activated activa . .: compounds. Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the KOSS m formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. A THE WERE THE 1 mmonia still lime sludge from coking operations. K060 G .... K087 Decanter tank tar sluge from coking operations Can I m\_ 1 11-21-12 t se ander einsten settenskapet i Songe Versenskapet og konstruktion · i'm to the state .... 1.4 2.4 Sec. 2. ..... Ser V. § 261.33 Discarded Commercial Chemical intermediate having the generic name listed in paragraphs (e) or (f) of this Continued Products, Off-Specification Species, 100 100 100 - The Containers, and Spill Residues Thereof. Section. [Comment: The phrase "commercial Substance waste No. The following materials or items are chemical product or manufacturing hazardous wastes if and when they are discarded or intended to be discarded: Algimycin see P092 --- Allyl alcohol (a) Any commercial chemical product, ...: Aluminum phosphide (R) or manufacturing chemical intermediate chemical substance which is - 123 A ALVIT see P037 73.44 Aminoethylene see P054 5-{Aminomethyl}-3-isoxazolo having the generic name listed in manufactured or formulated for commercial or manufacturing use. It paragraphs (e) or (f) of this section. .... 4-Aminopyridine (b) Any off-specification commercial e P119 1.2 chemical product or manufacturing 1.5 manufacturing process waste, that contains any of the substances listed in paragraphs (e) or (f) Where a see P092 chemical intermediate which, if it niet paragraphs (e) or (f). Where a provide the point of the p specifications, would have the generic .... ARETIT see P020 manufacturing process waste is deemed name listed in paragraphs (e) or (f) of 127:00 Arsenic pentoxide this section. to be a hazardous waste because it \_\_\_\_\_Poi2\_\_\_ contains a substance listed in Arsenic trioxide Ser. T (c) Any container or inner liner 7.42 Athrombin see P001 removed from a container that has been AVITROL see PO08 paragraphs (e) or (f), such waste will be Aziridene see P054 Sec. 19 used to hold any commercial chemical listed in either §§ 261.31 or 261.32 or will AZOFOS see POSt · · · · · · product or manufacturing chemical Azophos see P061 1.4. 4 be identified as a hazardous waste by BANTU see P072 intermediate having the generic name · ..... P013. Barium cyanide the characteristics set forth in Subpart C listed in paragraph (e) of this section, BASENITE see PO20 and the state of the second second state of the second second second second second second second second second of this Part.] BCME see P016 unless: (e) The commercial chemical products P014 Benzenethiol (1) The container or inner liner has Benzoepin see P050 or manufacturing chemical P015 been triple rinsed using a solvent Beryllium dust intermediates, referred to in paragraphs P016. Bis(chloromethyl) ether capable of removing the commercial 1.20 BLADAN-M see PO71 (a) through (d) of this section, are chemical product or manufacturing P017 Bromoacetone identified as acute hazardous wastes P018 Brucine chemical intermediate: P019 2-Butanone poroxide (H) and are subject to the small quantity (2) The container or inner liner has BUFEN san P092 exclusion defined in § 261.5(c). These Butaphene see P020 been cleaned by another method that wastes and their corresponding EPA P020 2-soc-Butyl-4,6-dinitree has been shown in the scientific -P021 Calcium cyanide Hazardous Waste Numbers are: CALDON see PO20 literature, or by tests conducted by the Carbon disultide P022 generator, to achieve equivalent CERESAN see PO92 CERESAN UNIVERSAL see P092 removal: or Hazardous Substance CHEMOX GENERAL see P020 waste No. (3) In the case of a container, the inner CHEMOX PE see PO20 liner that prevented contact of the CHEM-TOL see P090 1080 see P058 Chloroacetaldehyde P023 commercial chemical product or 1081 sce P057 P024 p-Chloroaniline (Acotato)phenylmercury see P092 manufacturing chemical intermediate P025 -(p-Chlorobenzoyl)-Acetone cyanohydrin seo P069 with the container, has been removed. acetic acid P001 3-(alpha-Acetonylbenzyl)-4-hydroxycoumann and -(o-Chlorophenyl)Ih P026 (d) Any residue or contaminated soil. salts P027 3-Chloropropionitnle P002 1-Acetyl-2-thioures alpha-Chlorotoluene water or other debris resulting from the P028 P003 Acrolain Copper cyanide P029 cleanup of a spill, into or on any land or Agarın see P007 CRETOX see P108 Acrosan GN 5 sea P092 water, of any commercial chemical Cournadin see P001 Coumaten see POO1 ÷ •

Cyanidas

P070

product or manufacturing chemical

Aldicarb see P069 Alditen see P048



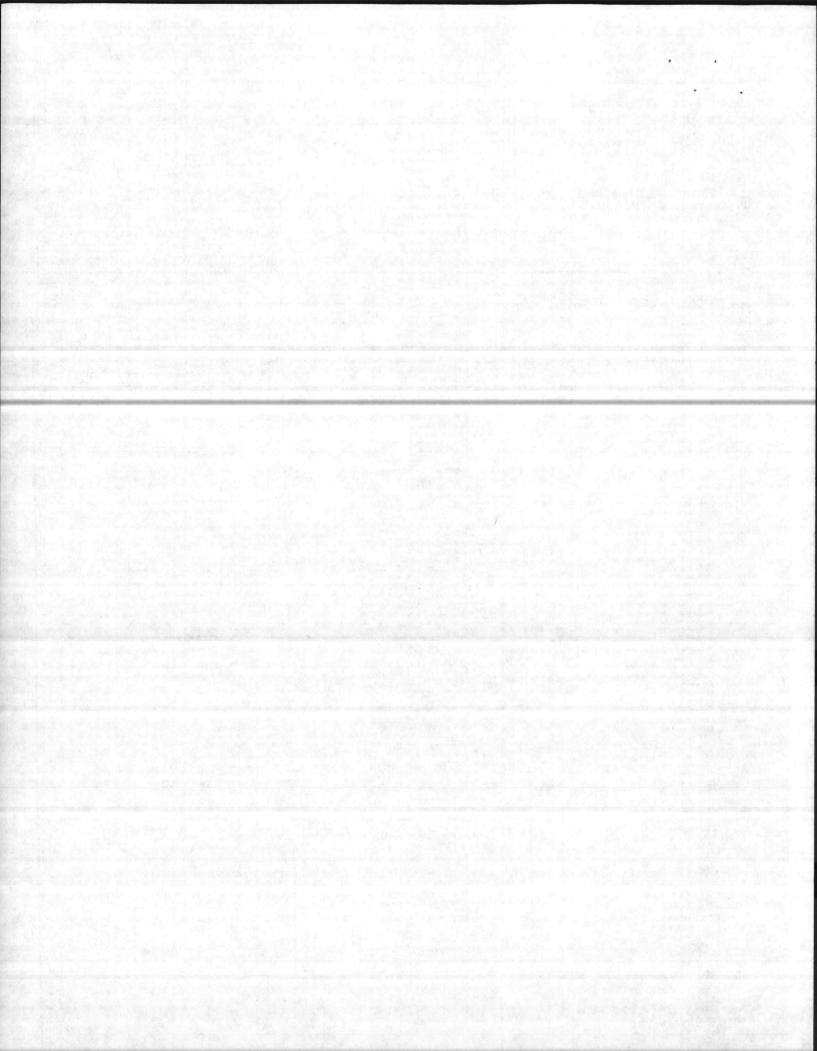
(f) The commercial chemical products or manufacturing chemical intermediates, referred to in paragraphs (a). (b) and (d) of this section, are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion defined in § 261.5 (a) and (b). These wastes and their corresponding EPA Hazardous Waste Numbers are: 1 A.M. Substance<sup>1</sup> Hazardous in des Waste No. cont in a AAF see U005 . ... U001 Acetaldehyde U002 Acctone (I) Acetone (I,T) Acetophenone 2-Acolylamioflourene UCO3 U004 U005. Acetyl chioride (C.T) UCOE 11007 Acetylene tietrachloride see U209 Acetylene tirchloride see U228 Acrylic acid (I) Acrylonitrite .... LOCA 1000 AEROTHENE TT see U226 3-Amno-5-(p-acetamidophenyi)-1H-1,2,4-triazole, hydrate see U011 6-Amno-1,1a,2,8.8a,8b-hexahydro-8-U010 (hydrorymethylia-methoxy-5-methylcarbamate ٠, azzino(2,3'.3,4) pyrrolo(1,2-a) indole-4, 7-dione ..... (oster) LOII Amtrela U012 Anino (I) U013 Astestos U014 Auramine U015 Azasenne UOIS Benzielacridina 1017 Benzal chlonde Benzene Benzene UOIS 1019 Benzeno Benzenesullonyl chlonde (C.R) 020 1021 Benzidina 1,2-Benzisothiazolin-3-ono. 1,1-dioxide see U202 . Benzola Janthracene see U018 Benzola Joyrone Benzotrichlorida (C.R.T) U022 U023 U024 Brs(2-chloroethoxy)methane Brs(2-chloroethyl) other Brs(2-chloroethyl) 2-naphthylamine U025 11026 U027 Bis(2-chloroisopropyl) ether Bis(2-einy/heryl) phihalate U025 U029 Bromomelhane ----1 U030 4 Bromophenyl phenyl einer L:031 n-But, 1 a'cohol (I) U032 Calcrum chromato ..... Carboic acid see U189 Carton letrachionde see U211 U033 Carbonyl l'uoride :. U034. Chloral . 0035 Chiorambuci U036. Chierdane U037 Chierobenzene . . . .: 0038 Chiorobenzilate ..... U039 22.00 1 p-Chioro-m-cresol ·..... 1040 Chlored bromemethane 15 .. 1-Ch'oro-2,3-ccoxprepane CHLCRGETHENE NU see U226 U041. ..... U042 Chloroethyl wnyl ether ..... . ..... U043 Chiorocinene 0244 Chioro'orm (I.T) U045 Chioromethane (I,T) UC46 Chioromethyl methyl ether L'047. 2 Chierenaphthalene UD48 2-Chiorachanal 0.349 4 Chioro-o-tolucine hydrochloride UDED Civisone C1. 232:0 see U073 LOSI Cresola U052 Cicsols UOSO Crotona'dehyde LICS Crestic acd U055 Currene Crancett and see UCC3 UCAS Cycichara (1) U057 Cyclonesanona (1) Cycicchosphamide UDSD ..... Cunom UCCO. CCO

Hazardous -Substance Waste No. - . . . . . U061 factory water DDT UC62 Diallate U063 Dibenz[a,h]anthracene Dibenzo[a,h]anthracene see U063 U064 Dibenzo[a,i]pyrene U065 Dibromochloromethane 1,2-Dibromo-3-chloropropane U066 1,2-Dibromoethane U067. ...... U068 Dibromomethane U069. Di-n-butyl phthalate 1,2-Dichlorobenzene 1. 2. 2 U070 A12.4 -Harting ( 1,3-Dichlorobenzene U071. 101751 720175 U072 1.4-Dichlorobenzena 3,3'-Dichlorobenzidine 1073 14200-112-12 U074 1.4-Dichloro-2-butene 8,3 - Dichloro-4,4 - diaminobiphenyl see U073 Dichlorodifluoromethane 1,1-Dichloroethane U075 U076 U077. 1,2-Dichloroethane U078 1.1-Dichloroethylene 1.2-trans-dichloroethyle.e U079 A STATE U080. Dichloromethane Dichloromethylbenzens see U017 U081. 2,4-Dichlorophenol U082 2.6-Dichlorophenol 1,2-Dichloropropane 1,3-Dichloropropene 17.47.47.47 19.47.96 19.47.96 (0.1 1083 U084 UC85 Diepoxybutane (I,T) 1. 201.9:20 2 mil U086 1,2-Diethylhydrazine 0.0-Diethyl-S-methyl ester of phosphorodithioic acid Diethyl phthalate U087. U088. LIORO Diethylstilbestrol U090 Dihydrosatrole Dihydrosatrole 3,3'-Dimethoxybenzidine Dimethylamine (I) U091 U092 Dimethylamine (I) U093 p-Dimethylaminoazobenzene 7,12-Dimethylbenz[a]anthracene 11094 U095 3,3'-Dimethylbenzidine alpha,alpha-Dimethylbenzylhydroperoxide (R) U096 Dimethylcarbamoyl chloride 1,2-Dimethylhydrazine Dimethylnydrazine LI097 U098 1,2-Dimethylhydrazme Dimethylnitrosoamine 2,4-Dimethylphenol 1009 U100 U101 U102 Dimethyl sulfate U103. All Control of States 1110.4 2.4-Dinitrophenol U105. 2,4-Dinitrotoluene U106 2,6-Dinitrotoluene U107 Di-n-octyl phthalate U108 1,4-Dioxane 10 11109 1.2-Diphenylhydrazine U110. Dipropylamine (I) Di-n-propylnitrosamine U111 18:41.42 27.48 LANDER EBDC see U114 1.4-Epoxybutane see U213 1 U112 Ethyl acetate (I) U113 Ethyl acrylate (I) Ethylenebisdithiocarbamate U114. Ethylene oxide (I,T) Ethylene thiourea 11115 21 11 Ethylene bxice (I,1) Ethylene thiourea Ethyl ether (I,1) Ethyl methacrylate Ethyl methanesulfonate Ethylnirile see Uco3 U116. U117 U113 U119. 41 Ethylnitrile see U003 Firemaster T23P see U235 1 ... . . U120 Fluoranthene 10.78 M U121 Fluorotrichioromethane 10 Formaldehyde U122. U123 Formic acid (C,T) ..... U124 Furan (I) ..... U125. Furfural (I) ·· . . U126. Glycidylaldehyde U127. Hexachlorobenzene U128 Hexachlorobutadiane Hexachlorocyclohexane U129 e. . U130. Hexachlorocyclopentadiene U131 Hexachloroethane U Hexachiorophene U132. U133 Hydrazine (R,T) U 11134 Hydrofluoric acid (C,T) U135. Hydrogen sulfide U Hydroxybenzene sea U188 U. U U135 Hydroxydimethyl arsine oxide 4.4'-(Imidocarbonyl)bis(N,N-dimethyl)aniline U U U014 U Indeno(1,2,3-cd)pyrene U137 U138. lodomethane U U139 Iron Dextran U U140 Isobutyl alcohol

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	in internet	*
	Hazardous Substance	10
•	Waste No.	
	Hard Annual Marine and Artic	
	U141 Isosaírole U142 Kepone	
• •	U142	
	U144 Lead acetate	12
5	U145 Lead phosphate	
	U146 Lead subacetate	
	U147 Maleic anhydride	
	U148 Maleic hydrazide	12
	Malononintile MEK Peroxide see U160 U150	
1	MEK Peroxide see U160	-
1	U151 Merphaian	
	U152 Methacodonitrile	-
1	U153 Methanethiol	-
	U154 Methanol	1
	U155 Methapyrilene	
1	Methyl alcohol see U154 U156 Methyl chlorocarbonate Methyl chloroform see U226	
	U156 Methyl chlorocarbonate	12
	Methyl chloroform see U226	
:	U15/ 3-Methylcholanthrene	-
1	U158 - A A Methylana bia 12 ablance bia 13	1
1	Methyl chloroform see U226 Methyl chloroformate see U156 U158 4.4 Methylene-bis-(2-chloroaniline) U159 Methyl ethyl ketone (MEX) (1,T) Methyl ethyl ketone (MEX) (1,T)	
1		6. 5
1		1
1	U161 Methyl isobutyl ketore	2.5
1	U162 Methyl methacrylate (R,T)	
1	UI03 N-Methyl-N-nitro-N-nitrosoguanidine	
1	U Ioa Metnyithiouracil	- 3
I	U165 Naphthalana	
1	U166	1.13
1	U167 1-Naphthylamine	
1	U168 2-Naphthylamine	1
1	Methyl iodide see U138 Methyl iodide see U138 U161	- 1
Ι.	Nitrobenzol see U169	N.
	U170 4-Nitrophenol U171 2-Nitrophenol	-
	2-Nitropropane (I)	
	U172 N-Nitrosodi-n-butylamine	. 2.4
i	U174 N-Nitrosodiathdamina	1
1	U175 N-Nitrosodi-n-propylamma	1
1	U176 N-Nitroso-n-ethylurea	1
l	J177	-
1	173N-Nitrosodi-n-butyanmine 175N-Nitrosodiethanolamine 175N-Nitrosodi-n-propylamine 176N-Nitroso-n-methylurea 1777N-Nitroso-n-methylurea	: 3
5	J179	1
-	J180 N-N:trosopyrrolidine	3
ì	1182 Davaldabida	-
	PCNB con UIDS - STATIST	1
U	1183	3
•	rentachioroethane	1
	185 Pentachloronitrobenzeno	. 3
U		. 4
	Perc see U210	-
		1
ŭ	199 Dharat State State State	1.5
	190 Dhanahanna is is in the second state in the second state is th	-1
		1
U	191 2-Picoline	1
υ	192 Pronamide	2
υ	193 1.3-Propane sullone	: 3
		N
		1
ŭ	200 Reservine	N
U		1
1 1-		3
U2	203 Salrole	1.4
U2	204 Selenious acid	-31
12	section senon senos [1,1] -	3
12	Silvex see U233	
	24,5-T see U232	
J2	07 1,2,4,5-Tetrachlorobenzene	17
12	08 1,1,1,2-Tetrachloroethana	
12	09 1122 Totrachlaranthana	131
12	10 Tetrachloroethene	
		1
12	11 Tetrachicromethane	
12	12 2,3,4,6-Tetrachiorophenol	1
12	13 Tetrahydroluran (I) 14 Thallium (I) acetate	11
12	15 Thallium (I) carbonata	- 11
12	Thallium (i) carbonate 16	:
15	17 Thallium (I) nitrate	:1
2	18 Thioacotamide	ł
2	19 Thiourea	.~!
22	20	1
22	21 Toluenediamine 22 o Toluidine hydrochloride	
		1
	and a second	-

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asis No.         With           PC31         Cyanogen bromde Cyclodan see PO30         Cyanogen chlonde Cyclodan see PO31           PC33         Cyclober(4.6-dinitrophenol D-CON see PO31         PO3           PC35         Cyclober(4.6-dinitrophenol D-CON see PO31         Po3           PC35         Dictrophenylarsine D-Cyanogen see PO31         Po3           PC35         Dictrophenylarsine D-Cyanogen see PO31         Po3           PC36         Dictrophenylarsine D-Cyanogen see PO31         Po3           PC37         Dictrophenylarsine D-Cyanogen see PO31         Po3           PC4         Dictrophenylarsine D-Concentry-6/22/yrazinfjphosphorethiloate         Po3           PC4         Directoate         Po3           Directoate         Softa         Po3           Directoate         Softa         Po3           Directoate         Softa         Po3           Directoate         Po3			1
P034       2 Cyclohevid 4 6-dinitrophenol         DCON see P001       DETHNCR see P001         DETNEL see P001       DETNEL see P001         DP35       2 A-Dchlorophenoyyaceic acid (2,4-0)         P037       Dethatophenoyyaceic acid (2,4-0)         P038       Dethytashe         P037       Dethytashe         P038       Dethytashe         P039       O,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P040       0,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P041       0,0-Dethyt-G(2,pyrazinyflphosphorothioate         P042       3,4-Dhydroxy-alphat(methytainino)-methyt benzyf         P043       D-Booropyfloxophosphate         P044       1,45,5-Dreethanonaphthalene, 1,2,3,4,10,10         Nattorychorophosphate       P04         Dimethoate       P04         Dimethoate       P04         Dimethoate       P04         Dimothoate       P03         DimOSEB see P020       P00         DiMOSEB see P020       P01         DiMOSEB see P020       P02         DOW GENERAL see P108       P03         DNMSEB see P020       P03         DOW GENERAL see P020       P04         DNMSEB see P020       P03 <th>waste No.</th> <th></th> <th>Haz</th>	waste No.		Haz
P034       2 Cyclohevid 4 6-dinitrophenol         DCON see P001       DETHNCR see P001         DETNEL see P001       DETNEL see P001         DP35       2 A-Dchlorophenoyyaceic acid (2,4-0)         P037       Dethatophenoyyaceic acid (2,4-0)         P038       Dethytashe         P037       Dethytashe         P038       Dethytashe         P039       O,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P040       0,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P041       0,0-Dethyt-G(2,pyrazinyflphosphorothioate         P042       3,4-Dhydroxy-alphat(methytainino)-methyt benzyf         P043       D-Booropyfloxophosphate         P044       1,45,5-Dreethanonaphthalene, 1,2,3,4,10,10         Nattorychorophosphate       P04         Dimethoate       P04         Dimethoate       P04         Dimethoate       P04         Dimothoate       P03         DimOSEB see P020       P00         DiMOSEB see P020       P01         DiMOSEB see P020       P02         DOW GENERAL see P108       P03         DNMSEB see P020       P03         DOW GENERAL see P020       P04         DNMSEB see P020       P03 <td></td> <td>Oursease</td> <td></td>		Oursease	
P034       2 Cyclohevid 4 6-dinitrophenol         DCON see P001       DETHNCR see P001         DETNEL see P001       DETNEL see P001         DP35       2 A-Dchlorophenoyyaceic acid (2,4-0)         P037       Dethatophenoyyaceic acid (2,4-0)         P038       Dethytashe         P037       Dethytashe         P038       Dethytashe         P039       O,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P040       0,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P041       0,0-Dethyt-G(2,pyrazinyflphosphorothioate         P042       3,4-Dhydroxy-alphat(methytainino)-methyt benzyf         P043       D-Booropyfloxophosphate         P044       1,45,5-Dreethanonaphthalene, 1,2,3,4,10,10         Nattorychorophosphate       P04         Dimethoate       P04         Dimethoate       P04         Dimethoate       P04         Dimothoate       P03         DimOSEB see P020       P00         DiMOSEB see P020       P01         DiMOSEB see P020       P02         DOW GENERAL see P108       P03         DNMSEB see P020       P03         DOW GENERAL see P020       P04         DNMSEB see P020       P03 <td>PC31</td> <td>Cyanogen bromida</td> <td></td>	PC31	Cyanogen bromida	
P034       2 Cyclohevid 4 6-dinitrophenol         DCON see P001       DETHNCR see P001         DETNEL see P001       DETNEL see P001         DP35       2 A-Dchlorophenoyyaceic acid (2,4-0)         P037       Dethatophenoyyaceic acid (2,4-0)         P038       Dethytashe         P037       Dethytashe         P038       Dethytashe         P039       O,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P040       0,0-Dethyt-S(2(athythkojethyflester of phos- phorothoc acid         P041       0,0-Dethyt-G(2,pyrazinyflphosphorothioate         P042       3,4-Dhydroxy-alphat(methytainino)-methyt benzyf         P043       D-Booropyfloxophosphate         P044       1,45,5-Dreethanonaphthalene, 1,2,3,4,10,10         Nattorychorophosphate       P04         Dimethoate       P04         Dimethoate       P04         Dimethoate       P04         Dimothoate       P03         DimOSEB see P020       P00         DiMOSEB see P020       P01         DiMOSEB see P020       P02         DOW GENERAL see P108       P03         DNMSEB see P020       P03         DOW GENERAL see P020       P04         DNMSEB see P020       P03 <td>PJJ2</td> <td>Cyanogen chlonde</td> <td></td>	PJJ2	Cyanogen chlonde	
DEP see P043 PU35		Cyclodan see P050	1
DEP see P043 PU35	P034	2-Cycloheryl-4.6-dinitrophenol	1.1
DEP see P043 PU35		D-CON see P001	
DEP see P043 PU35	0.	DETHMCR see POOT	P06
P015       2.4.Dichlorophenorysacetic add (2.4.0)         P018       Dickaropensiarsine         P017       Dicklorophenylarsine         P018       Dicklorophenylarsine         P019       Dicklorophenylarsine         P019       Dicklorophenylarsine         P010       Dicbethylarsine         P011       Ol-Dichtylarsine         P012       Dicbethylarsine         P013       Ol-Dichtylarsine         P014       Ol-Dichtylarsine         P014       Dicbethylarsine         P014       Dicbethylarsine         P014       Dicbethylarsine         P015       Dicbethylarsine         P014       Dicbethylarsine         P015       Dicbethylarsine         P016       Dicbethylarsine         P017       Alsohandonethylarsine         P018       Dicbethylarsine         P019       Duttocyclohenylarsine see P020         P019       Duttocyclohenylarsine see P021         P019       Duttocyclohenylarsine see P021         P010       Duttocyclohenylarsine see P021         P0110       Dicbethylarsine         P0110       Dicbethylarsine         P01100       Dicbethylarsine         P01100		DETRINEL SEG FOOT	1
P03       Deckanops see P031         P03       Deckanops see P031         P03       DetUBLDRX see P037         P03       DetUBLDRX see P037         P03       Debuharsne         P040       Ob-DeutyAckS(2(sthythio)ethyljester of phos- phorothoc acid         P041       Ob-DeutyAc(2) synamylphosphorothioate         P042       3, -Dhydroxy-alpha_(methylamino)-methyl benzyl         P043       Deboordynay-alpha_(methylamino)-methyl benzyl         P044       1,4:5,8-Domethanonaphthalene,         P045       3,2-Dimethyl-1 (methylthio)-2-bulanone-O         I(methylamino)carboph osid       P04         Dertocycloherylghend see P030       P04         P045       3,2-Dimethyl-1 (methylthio)-2-bulanone-O         Dimethoals       P04         P045       3,2-Dimethylthiose P030         P046       abha.alpha-Dimethylphenethylamine         P047       4,5-Dimthoo-cresol and salls         P048       2,4-Dimthobard         DinNOSEB see P020       P03         DinNOSEB see P020       P03         DinNOSEB see P020       P04         DinNOSEB see P020       P05         DOW GENERAL see P020       P05         DOW GENERAL see P020       P05         DOW G	PU15		1. :
P037     DetOrs     DetOrs       P038     DetDytasse     P00       P039     Q.O.Dettryl-S-(2-(dtrythiolectrylester of phos- phorothioc acid     phorothical       P040     Q.O.Dettryl-O(2-yrazim/ghosphorothicate     P00       P041     D.O.Dettryl-O(2-yrazim/ghosphorothicate     P01       P042     3.4.Dhydroxy-alpha-(methylamino)-methyl benzyl     p01       alcohol     Discoprop/fluorophosphate     P01       P043     Discoprop/fluorophosphate     P01       P044     Discoprop/fluorophosphate     P01       P045     3.2.Dimethyl-1 (methylthio)-2-butanone-O     I(methylamino)(carbonyl) oxime       P046     alpha alpha-homethylphenethylamine     P01       P047     4.5.Distro-cercsol and salls     P02       P048     2.4.Dustrophenol     P01       DunOSEEE see P020     P03     DunOSEEE see P020       DuNOSEEE see P020     P03     DuNOSEEE see P020       DUNOSEEE see P020     P04     DuNOSEEE see P020       DUNOSEEE see P020     P03     Salter P03       DuNOSEEE see P020     P04     DuNOSEEE see P020       DOW GENERAL WEED KILLER see P021     P05       DOW GENERAL WEED KILLER see P021     P05       DOW GENERAL WEED KILLER see P021     P05       P051     Endonin       P052		Dichloroobenviarsine	
P039       0.0-Detryk-2(2-pyraxinyfiphosphorathicate       P040         P041       0.0-Detryk-2(2-pyraxinyfiphosphorathicate       P017         P042       3.4-Dirydraxy-alpha (methyfamino)-methyf benzyl       P017         abcohol       1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10         hats.B-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P016         1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         1.4-5.8-Domethyfilocy2-builanone-O       ((methyfamino)carbonyf) oxime       P017       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         P044       Dirkotopicahomyt (methyfamino)carbonyf) oxime       P017       P017       P017       P017       P017       P018       P018       P019		Dicyanogen see P031	1.1
P039       0.0-Detryk-2(2-pyraxinyfiphosphorathicate       P040         P041       0.0-Detryk-2(2-pyraxinyfiphosphorathicate       P017         P042       3.4-Dirydraxy-alpha (methyfamino)-methyf benzyl       P017         abcohol       1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10         hats.B-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P016         1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         1.4-5.8-Domethyfilocy2-builanone-O       ((methyfamino)carbonyf) oxime       P017       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         P044       Dirkotopicahomyt (methyfamino)carbonyf) oxime       P017       P017       P017       P017       P017       P018       P018       P019	P037	Dieldnn	1
P039       0.0-Detryk-2(2-pyraxinyfiphosphorathicate       P040         P041       0.0-Detryk-2(2-pyraxinyfiphosphorathicate       P017         P042       3.4-Dirydraxy-alpha (methyfamino)-methyf benzyl       P017         abcohol       1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10         hats.B-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P016         1.4-5.8-Domethanonaphthalane,       1.2.3.4.10.10       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         1.4-5.8-Domethyfilocy2-builanone-O       ((methyfamino)carbonyf) oxime       P017       Nazachkorol, 4.4.3.5.8.a-hexahydro       P017         P044       Dirkotopicahomyt (methyfamino)carbonyf) oxime       P017       P017       P017       P017       P017       P018       P018       P019	6078	DieLUMEX See PU3/	
photothica add         photothica is information in the information in the information is information information in the information is information in the information information in the information information in the information is information in the information informatina information informati	P039	0.0-Dethyl-S-(2-(ethylthio)ethylester of phos-	PUD
P040     0.0-Dettry4-0(2-prazing/0phosphorethileate     P041       9041     0.0-Dettry4-0(2-prazing/0phosphorethileate     P042       3.4-Dirydroxy-alphat_(methyfaming)-methyf benzyf     P043       9043     Di-soorop/fluorophosphate     P043       9043     Di-soorop/fluorophosphate     P043       9043     Di-soorop/fluorophosphate     P044       9044     Dimethyfamicoloarbonyl oxime     P045       9045     SJ-Dimethyfamicoloarbonyl oxime     P047       9046     Dimethyfamicoloarbonyl oxime     P047       9047     4.5-Dintro-ocresol and salls     P03       9048     Subhalphato-methyfamine     P037       9049     2.4-Dintrophond     P03       9049     2.4-Dintrophond     P03       9049     2.4-Dintophond     P03       90400     2.4-Dintophond     P03       9041000     DUOSE DEREAL see P030     P03       9051     Enderin     P049       9052     Enderin     P049       9053     Enderin     P049		phorothoic acid	· P06
P042       3.4-Dirydraxy-alpha-(methylamino)-methyl benzyl       P01         P043       Di-Scopropylflowophosphale       P01         1.45.8-Dimethanonaphthalene       1.23.4,10,10-hessachoro-1,44.8,5,8,8-hessahydro       endo see P060         P044       Dimethaate       P01         0.3-Dimethyl-1 (methylamino)-2-bulanone-O       ((methylamino)carbonyl) oxime       P01         P045       alpha.alpha-Dimethylamine       P01         Dintrocyclohenylphenol see P034       P01       4,5-Dintro-create and salls       P01         P047       4,5-Dintro-create and salls       P01       P01       P01         DINOSEE see P020       Dow GENERAL see P020       P01       P01         DINOSEE see P020       DOW GENERAL see P020       P02       P02         DOW GENERAL see P020       P02       DOW GENERAL see P020       P03         DYAMACIDE see P020       P04       Diverse P02       P05         DYAMACIDE see P020       P04       P04       P04       P04         DYAMACIDE see P020       P05       P04			
Bioscopylloxophosphale         PD43           DHEOROPYLOXOPHOSphale         DIMETATE see PO44           14:5.8-Dumethanonaphthalene,         12,3,4,10,10-           hearachorol, 14,43,5,8-ahexalydor,         endo,           endo see PO60         Statustorol, 14,45,8-bexalydor,           P045         3,3-Dumethyl-1 (methythio)-2-builanone-O.           I(methytaminojcabowyl) oxime         P045           A,5-Daithoro-cresol and salls         P00           P046         alpha,alpha-Dumethylphenethylamine           Duntocyclohengiphenol see P034         P00           DiNOSEB see P020         P00           Dowlotoo see P039         P045           Dawlotoo see P030         P00           Dowlotoo see P030         P00           Dowlotoo see P030         P00           Dowlotoo see P032         P01           Dowlotoo see P032         P02           Dowlotoo see P032         P03           Dowlotoo See P032         P049           DAVACIDE see P032         P03           DOWCOE Soe P030         P04           P051         Edoylandia           P052         Edoylandia           P053         Edoylandia           P054         Ethylenomino           P05			P06
1.4.5.8-Domethanonaphthalene,       1.2.3.4.10.10- hescachoro-1.4.4.a.5.8.8-heschydro endo, endo see P060         P044       Dimothaats       P045         2.3-Dimothyl-1-(mothythio)-2-bultanone-O- ((mothytamino)carbonyl) oxime       P045         P045       Stab.a.tipha-Omethythenethytamine       P047         2.4-Dintrocyteol and salls       P07         P045       Stab.a.tipha-Omethythenethytamine       P07         2.4-Dintrocyteol and salls       P07         P049       2.4-Dintrocyteol       P07         DINOSEE see P020       P07         DOLCO MOUSE CEREAL see P108       P07         DCCO MOUSE CEREAL see P108       P07         DCW GENERAL weED KILLER see P020       P08         DOW GENERAL weED KILLER see P020       P08         DOW GENERAL weED KILLER see P021       P08         EASTERN STATES DUOCIDE see P001       P08         ELOSUITA       See P021         P051       Endositan         P052       Ethytenotamine         P053       Ethytenomine         P054       FLOCOL see P021         P055       Ferric cyanide         P055       FLOCOL M see P021         FUCOCOL M see P021       P05         FUSSOF see P053       FOR         <	P042	elobol	PON
1.4.5.8-Domethanonaphthalene,       1.2.3.4.10.10- hescachoro-1.4.4.a.5.8.8-heschydro endo, endo see P060         P044       Dimothaats       P045         2.3-Dimothyl-1-(mothythio)-2-bultanone-O- ((mothytamino)carbonyl) oxime       P045         P045       Stab.a.tipha-Omethythenethytamine       P047         2.4-Dintrocyteol and salls       P07         P045       Stab.a.tipha-Omethythenethytamine       P07         2.4-Dintrocyteol and salls       P07         P049       2.4-Dintrocyteol       P07         DINOSEE see P020       P07         DOLCO MOUSE CEREAL see P108       P07         DCCO MOUSE CEREAL see P108       P07         DCW GENERAL weED KILLER see P020       P08         DOW GENERAL weED KILLER see P020       P08         DOW GENERAL weED KILLER see P021       P08         EASTERN STATES DUOCIDE see P001       P08         ELOSUITA       See P021         P051       Endositan         P052       Ethytenotamine         P053       Ethytenomine         P054       FLOCOL see P021         P055       Ferric cyanide         P055       FLOCOL M see P021         FUCOCOL M see P021       P05         FUSSOF see P053       FOR         <	. P043	Di-isopropylfluorophosphate	
Person bero POGO         endo see POGO           P045         3.3-Dimethy4-1 (methytkin)-2-buttanone-O           If methytamino(cabboryf) oxime         P045           P045         alpha,alpha-Omethytemethytamine         P07           P046         alpha,alpha-Omethytemethytamine         P07           P047         4.6-Dintro-created and salls         P07           P048         alpha,alpha-Omethytemethytamine         P07           P049         24-Dintrop-created and salls         P07           P049         24-Dintrop-created and salls         P07           DiNOSEBE see P020         P08         P08           Dowl Colloge see P020         DOW GENERAL see P108         P07           DOW GENERAL see P020         P00         DOW SELECTIVE WEED KILLER see P020         P08           DOW GENERAL wEED KILLER see P020         P08         EASTERN STATES DUCCDE see P091         P08           ELAGEND         EO Colloge See P030         P08         EASTERN STATES DUCCDE see P001         P08           ELMydynade         Euthytemenine         P08         EUthytemenine         P08           P051         Endown         Euthytemenine         P08         P08           P055         Flemon         P08         Flemone         P08 <t< td=""><td></td><td>DIMETATE see PO44</td><td>.P07</td></t<>		DIMETATE see PO44	.P07
endo see P000           P044         3.3-Dimetryl-1 (methylthio)-2-butanone-O.           I(methyliamino)cathomyl oxime           Duritocyclohengiptenol see P034           P048         alpha.alpha-Omethylphenethylamine           Duritocyclohengiptenol see P034           P048         2.4-Duritophenol           DinOSEBE see P020         P03           DOLCO MOUSE CEREAL see P108         P049           DOW GENERAL WEED KILLER see P020         P03           DOW GENERAL WEED KILLER see P021         P03           Eloction See P032         P041           DYANACID see P032         P041           P054         Ethylenokanine         P052           P055         Endon         P058           Fenct cyanide         P058         P100roacctariade           P059         Ferric cyanide         P059           P059         Ferric cyanide         P059           P059         Ferric cyanide         P059           P059         Ferric cyanide         P059		1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-	
P045       Dimethyda (methytkinio) 2-builtanone-O         Imethyda (nothytkinio) 2-builtanone-O         Imethyda (nothytkinio) 2-builtanone-O         Imethyda (nothytkinio) 2-builtanone-O         P045       alpha alpha-Omethytipenethytamine         Davtrocycloherdythenothytamine       P017         A (-Dintro-Ocreation and salls       P017         P048       2,4-Dintro-Ocreation and salls         P049       2,4-Dintrophenol         DiNOSEB see P020       P01         DiNOSEB see P020       P02         Dollo CO MOUSE CEREAL see P108       P02         DOW GENERAL see P020       P03         DOW GENERAL see P020       P03         DOW GENERAL see P020       P03         DOW GENERAL see P020       P04         DOW GENERAL see P020       P05         DOW GENERAL see P020       P05         DOW SELECTIVE WEED KILLER see P021       P05         DOW SELECTIVE WEED KILLER see P021       P05         P051       E broknownie       P05         P052       E broknownie       P05         P053       E broknownie       P05         P054       E broknownie       P05         P055       Ferric cyanide       P05         P056		nexachioro-1,4,4a,5,8,8a-nexanydro endo,	
P045       3.2 Dimethyl (methylanine) carbonyl) oxime         P046       alpha.alpha.Omethylpheneltylamine         Dutrocyclohexylphenol see P034       P01         P047       4.5 Dintoro-coresol and salts         P048       2.4 Dintoro-coresol and salts         P049       2.4 Dintoburet         DNOSEB see P020       P02         DOLCO MOUSE CEREAL see P108       P02         DOW GENERAL WED KILLER see P020       P02         DOW GENERAL WED KILLER see P020       P03         DOW GENERAL WED KILLER see P020       P04         DOW GENERAL WED KILLER see P020       P05         DOW GENERAL WED KILLER see P021       P05         EASTERN STATES DUOCIDE see P021       P05         ELTYlenodamine       P05         P051       Endraine         P053       Ethylenodamine         P054       Ethylenodamine         P055       Ferric cyanide         P056       Fulments of mercury see P065         Fulments of mercury see P065       Fulments of mercury see P065         FUNGTIOX OR see P021       GEARPHOS see P021	P044	Dimethoata Vier Ar 200 anter 1 4.4	
P050       Divitory coheres of and salls       P07         4.5-Divitory coheres of and salls       P07         P048       2.4-Divitory coheres of and salls       P07         P048       2.4-Divitory coheres of and salls       P07         Divitory coheres of and salls       P08         Divitory coheres of and salls       P08         Divitory coheres of and salls       P08         P051       Ethylogradide       P08         P052       Ethylogradide       P08         P053       Ferricing and and salls       P08         P054       Ethylogradide       P08         P055       Fluctory coheres       P08         P056       Fluctory coheres       P08	P045	3,3-Dimethyl-1-(methylthio)-2-butanone-O-	.1
P050       Divitory coheres of and salls       P07         4.5-Divitory coheres of and salls       P07         P048       2.4-Divitory coheres of and salls       P07         P048       2.4-Divitory coheres of and salls       P07         Divitory coheres of and salls       P08         Divitory coheres of and salls       P08         Divitory coheres of and salls       P08         P051       Ethylogradide       P08         P052       Ethylogradide       P08         P053       Ferricing and and salls       P08         P054       Ethylogradide       P08         P055       Fluctory coheres       P08         P056       Fluctory coheres       P08	11 14 miles -	[(methylamino)carbonyl] oxime	
P048	P046	alpha,alpha-Dimethylphenethylamine	P07
P048	P047	A 6-Dinimourney and salls	
DINOSEEE see P020     P01       Davidon see P020     P02       DAVIDSP see P020     P02       DOW GENERAL see P020     P02       DOW GENERAL weed NULLER see P020     P02       DOW GENERAL WEED KILLER see P020     P02       DOW GENERAL WEED KILLER see P020     P02       DOWICIDE G soe P030     P03       EASTERN STATES DUOCIDE see P001     P02       ELGETOL see P020     P03       P051     Endoin       P052     Ethylerodiamine       P053     Ethylerodiamine       P054     Ethylerodiamine       P055     Fluorine       P056     Fluorine       P057     2-Fluoroacetamide       P058     Fluoroacetamide       P059     P059       P059     P059       Full COOL M see P071       FOLCOOL M see P071       FOLOCOL M see P072       FUNGITOX OR see P073       Full COL See P074       P059       Full COL See P075       Full COL See P071       FOLCOOL M see P071       FOLCOOL See P072       FUSSOF see P073       GALLOTOX see P074       FUCOL See P075       FUNCITOX see P075       FUNCITOX see P076       FUNCITOX see P077       FO50       He	P048	2.4-Dintrophenol	P07
P049       2.4-Cithioburet       P01         DNP see P020       DOUCO MOUSE CEREAL see P108       P02         DOW GENERAL weeD XILLER see P020       P00         DOW GENERAL WEED KILLER see P020       P00         P050       Endownian         ELDytenodamine       P00         P051       Endownian         P052       Ethytenodamine         P053       Ethytenodamine         P054       Feinoma         P055       Flooma         P056       Flooma         P057       Schoracetamide         P058       Flooma e001         FOCOLOL & see P071       FORFERNO M 50 see P071         FORST see P057       GALLOTOX see P020         FUNSTOX see P020       FUNCTOX see P020         P059       Heptachior		DINOSEB see PO20	P07
P049       2.4-Dithoburet       P07         DNBP see P020       DOLCO MOUSE CEREAL see P108       P07         DOW GENERAL see P020       P07         DOW GENERAL weed Nillers see P020       P07         DOW GENERAL WEED KILLER see P020       P07         DOW GENERAL WEED KILLER see P020       P07         DOW CIDE G soe P090       DYANACIDE see P092         EASTERN STATES DUOCIDE see P001       ELGETOL see P022         P050       Endosultan         P051       Endosultan         P052       Ethytenodiamine         P053       Ethytenodiamine         P054       Ethytenodiamine         P055       Ferric cyanide         P056       Fluoroaceta and, sodium salt         P057       2-Fluoroacetamide         P058       Fluoroaceta and, sodium salt         P059       FOCOCU-L80 see P071         FOLCOOL As see P020       F08         FUNGTOX OR see P020       F08         FUNGTOX ora see P020       F08         FUNGTOX ora see P020       F08         F060       12.3.4.10.10-Hoxachloro-1.4.4a.5.8.8a-         P061       Heatchioroppone         P062       FUNGTOX ora see P020         P063       Heatachioroppone	10-11-0-11	DINOSEBE see PO20	P07
DOLCO MOUSE CEREAL see P108     P00       DOW GENERAL wee P020     P00       DOW SELECTIVE WEED KILLER see P020     P00       DOW SELECTIVE WEED KILLER see P020     P00       DOWACDD G see P092     P01       EASTERN STATES DUOCIDE see P001     P02       Electrol see P022     P03       P050     Endoxilian       P051     Endoxilian       P052     Ethylenodumine       P053     Ethylenodumine       P054     Ethylenodumine       P055     Fencic cyanide       P056     Fluoracetu acd, sodium salt       F01COOL-80 see P071     P02       F02COL-80 see P071     F02       F02COL-80 see P071     F03       F02COL-80 see P071     F03       F02COL-80 see P071     F03       F02SOF see P053     F04       FUTOX See P092     F04       GEARPHOS see P071     F03       GEARPHOS see P071     GEARPHOS see P071       GEARPHOS see P071     GEARPHOS see P071	Dava	Disulfation see P039	P07
DOLCO MOUSE CEREAL see P108     P00       DOW GENERAL wee P020     P00       DOW SELECTIVE WEED KILLER see P020     P00       DOW SELECTIVE WEED KILLER see P020     P00       DOWACDD G see P092     P01       EASTERN STATES DUOCIDE see P001     P02       Electrol see P022     P03       P050     Endoxilian       P051     Endoxilian       P052     Ethylenodumine       P053     Ethylenodumine       P054     Ethylenodumine       P055     Fencic cyanide       P056     Fluoracetu acd, sodium salt       F01COOL-80 see P071     P02       F02COL-80 see P071     F02       F02COL-80 see P071     F03       F02COL-80 see P071     F03       F02COL-80 see P071     F03       F02SOF see P053     F04       FUTOX See P092     F04       GEARPHOS see P071     F03       GEARPHOS see P071     GEARPHOS see P071       GEARPHOS see P071     GEARPHOS see P071	P049	DNRP top P020	P079
DOW GENERAL WEED KILLER see P020     P00       DOW SELECTIVE WEED KILLER see P020     P00       DOWALLER See P032     P01       EASTERN STATES DUDCIDE see P001     P02       ELGETOL see P020     P03       P050     Endosulfan       P051     Editon       Eprephrine see P042     P03       P051     Ethylerodiamine       P052     Ethylerodiamine       P053     Ethylerodiamine       P054     Ethylerodiamine       P055     Ferric cyanide       P056     Fluoroacetamide       P057     2-Fluoroacetamide       P058     Fluoroacetamide       P059     2-Fluoroacetamide       P058     Fluoroacetamide       P059     P059       P059     P050       P059     P050       P059     P050       P050     P050       P051     Fulmonae of mercury see P065       FUNCITOX OR see P071     FOS8       Fulmonae of p020     GEARPHOS see P071       GALLOTOX see P020     GEARPHOS see P071       GERUTOX see P020     GEARPHOS see P071       GERUTOX see P020     GEARPHOS see P021       GALLOTOX see P022     P059       Hostachior     P050       1,4,5,6,7,7-Hexachloro-cyclic-5-norbormene-2,3-d			
DOW GENERAL WEED KILLER see P020     P06       DOW SELECTIVE WEED KILLER see P020     P07       DOW GENERAL WEED KILLER see P020     P07       DOW GENERAL WEED KILLER see P021     P07       EASTERN STATES DUOCIDE see P001     ELGETOL see P020       P050     Endosultan       P051     Endosultan       P052     Ethylenodiamine       P053     Ethylenodiamine       P054     Ethylenodiamine       P055     Femic cyanide       P056     Floatine       P057     2-Fluoroacetamide       P058     Fluoroacetamide       P057     2-Fluoroacetamide       P058     Fluoroacetamide       P059     Fluoroacetamide       P051     FOLCDOL-80 see P071       FOLCDOL-80 see P071     FOLCDOL-80 see P071       FOLTOX See P092     GEARPHOS see P092       GERUTOX see P092     GEARPHOS see P091       P059     Heptachior       P060     1.2.3.4.10.10-Hoxachloro-1,4.4a,5,8,8a-       Perathyle see P050     1.4.5.6.7.7-Hexachloro-cyclic-S-norbormene-2,3-       dmethanol sullite sce P050     P051       Hestachior     P052       P063     Heytazomethane see P058       P064     Hexachiy tetraphosphate       HOOCI see P025     P051       INDOCI see P020<		DOW GENERAL see P020	P08:
DOWICIDE G soe P092       PATIEN STATES DUOCIDE see P001         ELGETOL see P022       P050         Endosultan       P06         P051       Endosultan         P052       Ethyloganide         P053       Ethyloganide         P054       Ethyloganide         P055       Ferric cyanide         P056       Ethyloganide         P057       2-Fluoracetamide         P058       Fluorancetamide         P057       2-Fluoracetamide         P058       Fluorancetamide         P057       2-Fluoracetamide         P058       Fluorancetamide         P059       P057         P058       Fluoracetamide         P059       P057         P058       Fluoracetamide         P059       P057         P058       Fluoracetamide         P059       P059         P059       P059         P059       P059         P059       P059         P059       P059         P050       1.2.3.4.10.10-Maschloro-1.4.4a.5.8.8a-         P060       1.2.3.4.10.10-Maschloro-1.4.4a.5.8.8a-         P059       Hoptachior         P061       Mezac		DOW GENERAL WEED KILLER see P020	P08:
EASTERN STATES DUOCIDE see P001 ELGETOL see P020 P050 Endosultan Eprinephrine see P042 P053 Ethylernemine P054 Ethylernemine P054 Ethylernemine P055 Ferric cyanide P055 Ferric cyanide P057 2-Fluoroacctamide P058 Fluoroacctamide P058 Fluoroacctamide P058 Fluoroacctamide P059 2-Fluoroacctamide P059 2-Fluoroacctamide P059 Fluoroacctamide P059 Fluoroacctamide P050 Fluoroacctamide	ale de la	DOW SELECTIVE WEED KILLER see P020	P08-
EASTERN STATES DUOCIDE see P001 ELGETOL see P020 P050 Endosultan Eprinephrine see P042 P053 Ethylernemine P054 Ethylernemine P054 Ethylernemine P055 Ferric cyanide P055 Ferric cyanide P057 2-Fluoroacctamide P058 Fluoroacctamide P058 Fluoroacctamide P058 Fluoroacctamide P059 2-Fluoroacctamide P059 2-Fluoroacctamide P059 Fluoroacctamide P059 Fluoroacctamide P050 Fluoroacctamide	1 1 2	DOWICIDE G SOO POSO	1.4
P050       Endosultan       P051         Endosultan       Eprephrine see P042         P051       Ethylerootamine         P052       Ethylerootamine         P053       Ethylerootamine         P054       Ethylerootamine         P055       Ethylerootamine         P058       Ferric cyanide         P058       Fluoraceturaide         P059       Hoptachide         P059       Hoptachide			
P050       Eloboschalt       P06         P051       Eloboschalt       P06         P052       Ethykoyande       P06         P053       Ethykoyande       P06         P054       Ethykowanine       P06         P055       Ferric cyanide       P06         P055       Ferric cyanide       P06         P055       Perric cyanide       P06         P057       2-Fluoroacctuanide       P06         P058       Fluoroacctuanide       P06         P058       Fluoroacctuanide       P06         P057       2-Fluoroacctuanide       P06         P058       Fluoroacctuanide       P06         P059       P057       FATOL see P071       FOCODUL M see P071         FOLCOOL & see P071       FOSFERNO M 50 see P071       FOSFERNO M 50 see P072       FUSSOF see P057         FUNGITOX OR see P092       GERUTOX see P092       GERUTOX see P092       P06         GERUTOX see P071       GERUTOX see P071       GERUTOX see P071       GERUTOX see P071         F050       12.3.4.10.10-Hoxachloro-14.4.5.8.8a       hexathydro-1.4.5.8.endo, endo-dimethanonaph-thaleno       1.4.5.6.7.7-Hexachloro-cyclic-5-norbormene-2.3-dimethanol suilite see P050       P06         P061       Mexachlyd tetraph		ELGETOL seo PO20	
P052       Ethylenodiamine       24144         P054       Ethylenodiamine       24144         P054       Ethylenodiamine       P054         P055       FemMA soe P091       P05         FEMMA soe P091       P05       P057         P055       Flooring       P057         P056       Flooring       P057         2-Fluoroacetamide       P057         P057       2-Fluoroacetamide         P058       Fluoroacetamide         P059       Fluoroacetamide         P050       2-Fluoroacetamide         P051       FOLCDOL-80 see P071         FOLDOL M see P053       Fluoroacetamide         Fulmate of mercury see P065       FUNGITOX OR see P092         GERUTOX see P092       GEARPHOS see P071         GERUTOX see P092       GEARPHOS see P071         GERUTOX see P092       Metrachior         P060       1.2.3.4.10.10-Hexachloro-1.4.4a,5.8.8a         herathiot       Netrachior         P061       Hexachior         P062       Hexachioropopene         P063       Hexachioropopene         P064       Hexachiotese P037         INDOCI see P037       P05         INDOCI see P037       P05<	P050	Endosulfan	POB
P052       Ethylenodiamine       24144         P054       Ethylenodiamine       24144         P054       Ethylenodiamine       P054         P055       FemMA soe P091       P05         FEMMA soe P091       P05       P057         P055       Flooring       P057         P056       Flooring       P057         2-Fluoroacetamide       P057         P057       2-Fluoroacetamide         P058       Fluoroacetamide         P059       Fluoroacetamide         P050       2-Fluoroacetamide         P051       FOLCDOL-80 see P071         FOLDOL M see P053       Fluoroacetamide         Fulmate of mercury see P065       FUNGITOX OR see P092         GERUTOX see P092       GEARPHOS see P071         GERUTOX see P092       GEARPHOS see P071         GERUTOX see P092       Metrachior         P060       1.2.3.4.10.10-Hexachloro-1.4.4a,5.8.8a         herathiot       Netrachior         P061       Hexachior         P062       Hexachioropopene         P063       Hexachioropopene         P064       Hexachiotese P037         INDOCI see P037       P05         INDOCI see P037       P05<	P051	Endon	1
P053       Ethylenodiamine       P054         Ethylenodiamine       FASCO FASCRAT POWDER see P001       P05         FASCO FASCRAT POWDER see P001       P055         Ferric cyanide       P055         P055       Ferric cyanide         P055       Fluorine         P057       2-Fluoroaceta acid, sodium salt         F01COL60 see P071       F01COCOL60 see P071         F0257       F0257         FRATOL see P058         Fulminate of mercury see P065         FUNGITOX on see P092         GEALTOX see P092         GEALTOX see P092         GEAPHOS see P071         GEARPHOS see P072         FUSSOF see P053         I         GALLOTOX see P092         GEARPHOS see P071         GEARPHOS see P071         GEARPHOS see P072         P069         Heptachior         P061         12.3.4.10.10-Hoxachloro-1.4.4a.5.8.8a-         herathydro-1.4.5.8-endo, endo-dimethanonaph-         thaleno         1.4.5.6.7.7-Hexachloro-cyclic-5-norbornene-2.3-         domethanot suitite see P050         P061         Hexacthydrota acid         HOY conyanc acid         HLOXOL see P037			
P054       Ethylenemino       P06         FASCO FASCRAT POWDER see P001       P05         FEMMA soe P091       P055         Fenic cyanide       P057         P055       Fenic cyanide         P057       2-Fluoroacctamide         P058       Fluoroacctamide         P057       2-Fluoroacctamide         P058       Fluoroaccta acid, sodium salt         F0LCOOL 80 see P071       F0CDOL M see P071         F0AFCRAME of mercury see P065       Flummate of mercury see P065         FUNGTOX 0R see P092       GEARPHOS see P092         GERUTOX see P092       GERUTOX see P092         MostAcUlt see P092       MostAcUlt see P092         P060       1.2.3.4.10.10-Hoxachloro-cyclic-5-norbormene-2.3-d         dmethanol sullite see P050       P063         MostAcUlt see P092       P064         MostACUlt see P092       P065         MoStACUlt see P037       P065         Indomethacin see P050       P053         Indomethacin see P050       P054         Is		Family descent and an and a family and a second	
FEMMA see P091         P055       Ferric cyanide         P055       Fluorine         P057       2-Fluoroaceta acid, sodium salt         P058       Fluoroaceta acid, sodium salt         FOLCOL-80 see P071       FOLCOL-80 see P071         FOLCOL-80 see P071       FOLCOL-80 see P071         FRATOL see P058       Fulminate of mercury see P065         FUNSITOX see P092       GEARPHOS see P071         GERUTOX see P092       P060         1,2,3,4,10,10-Hoxachloro-1,4,4a,5,8,8a-       heraitydro-1,4,5,8-endo, endo-dimethanonaph-thaleno         thaleno       1,4,5,6,7,7-Hexachloro-cyclic-5-norbornene-2,3-         dimethanot suittle see P050       P061         Mexachloropropene       P062         P063       Hexachloropropene         P063       Hydroryanc acid         ILLOXOL see P037       P05         Indomethacinasin see P050       P05         INDOCT see P025       P05         Indomethacin sein be25       P05		Ethylenemino	P087
P057		FASCO FASCRAT POWDER see P001	POB
P057		FEMMA soe P091	
P057		Fluxing	÷
FOLCOOL-80 see P071       FOLCOOL M see P071         FOLCOOL M see P071       FOLCOOL M see P071         FORERNO M 50 see P071       FRATOL see P058         FUMMATE of mercury see P065       FUMMATE of mercury see P065         FUNGITOX OR see P092       FUSSOF see P057         GEARPHOS see P071       GEARPHOS see P071         GERUTOX are P020       FUSSOF see P071         GEARPHOS see P071       GERUTOX see P020         P059			
FOLCOOL M See P071         FOLCOOL M So see P071         FOLTOL see P053         Fulmate of mercury see P065         FUNGITOX OR see P092         FUNCITOX OR see P092         GELARPHOS see P071         GERUTOX see P092         GERUTOX see P092         GEARPHOS see P071         GERUTOX see P092         GEARPHOS see P071         GEARPHOS see P072         Hotaleno         1,4,5,6,7,7-Hexachloro-cryclic-S-norbornene-2,3-         dmethanon sullite sce P050         P061         Hexacthyl tetraphosphate         HOSTACUIK sce P092         HOSTACUIK sce P092         Hydrozyanc acid         HUOCI see P037         INDOCI see P036         Hydrozyanc acid         ILLOXOL see P030         INSECTOPHENE see P050         INSECTOPHENE see P030         <			P089
POSECRNO M 50 see P071         FRATOL see P058         Fulmate of mercury see P065         FUNGITOX OR see P092         FUSSOF see P057         GALLOTOX See P092         GEARPHOS see P071         GEARPHOS see P072         Hostachore         P061         Hexacthyl tetraphosphale         HOSTACULK see P022         Hydrocyane acid         LLOXOL see P037         INDOCI see P025         INSECTOPHENE see P050         P051         INSCECTOPHENE see P020         KUC3EB see P020         KUC3EB see P020         KWIK-SAN see P030         KWIK-SAN see P030 <td< td=""><td></td><td>FOLCOOL-80 see P071</td><td></td></td<>		FOLCOOL-80 see P071	
FRATOL see P058       P05         Fulmate of mercury see P065       Fulmate of mercury see P065         FUNCITOX OR see P092       FUSSOF see P092         GALLOTOX see P092       GEARPHOS see P071         GERUTOX are P092       GEARPHOS see P071         GEARPHOS see P071       GEARPHOS see P071         GEARPHOS see P071       GEARPHOS see P071         GEARPHOS see P070       Hotachior         P059       Hotachior         P060       1.2.3.4.10.10-Hoxachloro-1.4.4a.5.8.8a-         herathior       Herathior         P061       Herathior         N4.5.6.7.7-Hexachloro-cyclic-5-norbornene-2.3-         dmethanol sullite see P050         P061       Herathyl tetraphosphate         HOSTAQUIK sae P092       P05         Hydrocyanc acid       HLOCCL see P025         ILLOXOL see P037       P05         INDOCI see P025       P05         INSECTOPHENE see P050       P05         ISocyanc acid, methyl ester       KLOSEB see P020         KWIK-KIL see P103       P05         KWIK-SAN see P030       P05         KWIK-SAN see P030       P05         KWIK-SAN see P030       P05         KWIK-SAN see P030       P05         KWIK-SAN see		FOLCOUL M See POT	1.15
FUNGITOX OR see P092         FUSSOF see P057         GALLOTOX see P092         GERUTOX see P092         Heptachier         P059         Heptachier         P061         1,4,5,6,7,7-Hexachloro-cyclic-5-norbornene-2,3-         dmethanol sullite see P050         Hestachieropropene         P062         Hestachieropropene         P063         Hydrazomothane see P068         P063         Hydrochane seid         LLOXOUL see P037         INDOCI see P025         INSECTOPHENE see P050         P051         Isocyane acd, methyl ester         KLOSEB see P020         KWIK-NIL see P103         KWIK-SAN see P030         KWIK-SAN see P030         KWIK-SAN see P030         KWIK-SAN see P030         KWIK-SAN see P031         KWIK-SAN see P032         KWIK-SAN see P033         KWIK-SAN see P034         KWIK-SAN see P035		FRATOL see P058	Pnor
i       GALLOTOX see P092 GEARPHOS see P071 GERUTOX see P071 GERUTOX see P020         P059		Fulminate of mercury see P065	
i       GALLOTOX see P092 GEARPHOS see P071 GERUTOX see P071 GERUTOX see P020         P059		FUNGITOX OR see P092	6
GEARPHOS see P071 GERUTOX see P020 Heptachior P059		CHILOTOX 0002	
GERUTOX see P020         P059       Meptachior         P060       1.2.3.4.10.10.40xachloro-1.4.4a.5.8.8a- bexatydro-1.4.5,8-endo, endo-dimethanonaph thaleno         1.4.5.6.7.7-Hexachloro-cyclic-5-norbornene-2.3- dimethanol sullite sce P050.         P061       Mexachloro-cyclic-5-norbornene-2.3- dimethanol sullite sce P050.         P062       Hexachloroppene         P062       Hexachloroppene         P063       Mexachloroppene         MOSTAOUICK sce P032       P05         HOSTAOUICK sce P032       P05         MOSTAOUICK sce P032       P05         Mydrocyanic acid       ILLOXOL see P035         INDOCI see P025       P05         Indometriacin see P050       P05         INSECTOPHENE see P050       P05         Isocyanac acid methyl ester       KILOSEB sce P020         KWIK-SAN see P050       P05         KWIKSAN see P050       P05         KWIKSAN see P051       P05         KUMACER see P001       P05         KUMACER see P001       P10         LEYTCSAN see P052       P05		CEADDUOD DOTA	5 P
P059		GEBITTOY and PO20	
12.3.4.10.10-Hoxachloro-14.43.5,84- berahydro-1.4.5,8-endo, endo-dimethanonaph- thaleno       1.4.5,6.7,7-Hexachloro-cyclic-5-norbornene-2,3- dimethanot suitule soe P050         P061       Hexachloropropene       P062         P062       Hexachloropropene       P052         P063       Hexachloropropene       P053         Hydroynanc acid       HUX7220mothane see P058       P053         P063       Hydroynanc acid       ILLOXOL see P037       P053         INDOCI see P037       INDOCI see P050       P059         INSECTOPHENE see P050       P059         Isochance acid methyl ester       KILOSEB sce P020         KWIK-KNIL see P103       P050         KWIKSAN see P050       P050         KWIKSAN see P050       P050         KWIKSAN see P050       P050         KWIKSAN see P050       P050         KUKSAN see P050       P050         KUKAFARIN see		Meptachior	
thaleno         1.4.5.6.7.7-Hexachloro-cyclic-5-norbornene-2,3- dimethanol suilite sce P050.         P061       Hexachloropropene         P062       Hexachloropropene         P063       Hexachloropropene         HOSTACUICK sce P032       P05         HOSTACUICK sce P032       P05         HOSTACUICK sce P032       P05         Hydrozynac acid       ILLOXOL see P037         ILLOXOL see P037       P05         INDOCI see P025       P05         Indometinacin see P025       P05         Isochan see P030       P054         Socyanc acid, methyl ester       KILOSEB sce P020         KWIK-KNIL see P103       P05         KWIKSAN sce P032       P05         KUMADER see P001       P05         KUMADER see P001       P10         LEYTCSAN see P032       P05	P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-	
1,4,5,6,7,7-Hexachloro-cyclic-5-norbornene-2,3- drmethanol sullite sce P050.         P061	· · · · · · · · · · · · · · · · · · ·		1.1.
dmethanol suilite see P050. P061		and the second	
P062		dimethanol suitite see P050.	
HOSTAQUICK son P092     P05       HOSTAQUIK son P092     P05       Hydrazomothane see P068     P05       Hydrazomothane see P068     P05       Hydrazomothane see P058     P05       ILLOXOL see P025     P05       Indomethatin see P025     P05       INSECTOPHENE see P050     P05       ISSON see P020     P054       KULOSEB see P020     KORAN see P050       KWIK-KIL see P103     P05       KWIKSAN see P021     P05       KUPZER see P001     KYFFARIN see P01       KYFFARIN see P010     P10       LEYTCSAN see P022     P05			P091
HOSTACUIK soe P092 Hydrazomethane see P068 P063 Hydroxyanc acid ILLO.AOL see P037 INDOCI see P025 Indomethacin see P025 INSECTOPHENE see P050 ISochn see P060 P064 ISocyanc acid methyl ester KILOSEB see P020 KOWIK-KIL see P109 KWIKSAN see P050 KWIKSAN s		HOCTACHICH	-
Hydrazomothane see P068 Hydrazomothane see P068 Hydrazhane seid ILLOXOL see P037 INDOCI see P037 INDOCI see P025 Indomethacin sea P025 INSECTOPHENE see P050 P064		HOSTACI IIV son PODO	
ILLOXOL see P037         P03           ILLOXOL see P037         P03           INDOCI see P037         P03           Indometracin sea P025         P03           INSECTOPHENE see P050         P03           Isocran see P050         P03           Isocran see P030         P03           KILOSEB see P020         KC2-THIO2AN see P030           KUKKSAN see P030         P03           KWIKSAN see P030         P03           KVIKSAN see P030         P03           KUKADER see P001         P04           KUFFARIN see P031         P10           LEVTOSAN see P032         P10		Hudrasomothana can DOSO	103.
INDOCI see P025     P03       Indometracin sea P025     P03       INSECTOPHENE see P050     P05       Isochn see P050     P05       Isocyanc acd, methyl ester     KLOSEB see P020       KCP-THIOCAN see P050     KWIK-KIL see P030       KWIK-KIL see P030     P05       KWIK-SAN see P032     P05       KUFZER see P001     KP10       KFZEARIN see P032     P10       LEYTOSAN see P032     P10		nyorocyanic acid	
Indomethacin sea P025 P05 INSECTOPHENE see P050 P05 Isodin see P050 P05 P064 Isocyanic acid, methyl ester KLOSEB size P020 KCP.TH:002AH see P050 KWIKSAN see P050 P052 P05 KWIKSAN see P001 KYPFARIN see P001 KYPFARIN see P001 P10 LEVTOSAN see P002 P10			P094
INSECTOPHENE see P050 P05 Isochn see P050 P05 Isochn see P050 KUCSER see P020 KCP-TH-0050 P050 KWIKSAN see P020 KWIKSAN see P050 KWIKSAN see P050 P052 P05 KWIKSAN see P001 KYFFARIN see P001 P10 KYFFARIN see P001 P10			P095
Isodni see P660 P054Isocyanic acd, methyl ester KILOSEB side P020 KCP-THIOCAN side P050 KWIKI-KIL see P109 KWIKI-KIL see P109 KWIKAN soie P092 KUMADER see P001 KYFFARIN see P001 LEYTOSAN see P002 LEYTOSAN see P092			
P064         Isocyanic acid, methyl ester           KLOSEB sxe P020         KCP.THIOCAN sxe P050           KCP.THIOCAN sxe P050         KWIKSAN sxe P050           KWIKSAN sxe P052         P05           KWIKSAN sxe P051         P05           KUPACER sze P001         P10           LEYTCSAN see P001         P10           LEYTCSAN see P002         P05			1031
KCP-TH:ODAN sole P050         KW:K-KL see P103       P05         KW:K-KL see P103       P05         KW:K-KL see P103       P05         KUMADER see P001       P05         KYFARIN see P001       P10         LEYTOSAN see P092       P05	P064	Isocyanic acid, methyl ester	
KWIK-KIL see P109         P09           KWIKSAN see P092         P09           KUMADER see P001         P09           KUFARIN see P001         P10           LEFTCSAN see P092         P10			
KWIKSAN sev P092         P03           KUUADER see P001         P05           KUFARIN see P001         P10           LEFTCSAN see P002         P10			Poor
KUMADER see P001 KYPFARIN see P001 LEVTOSAN see P092		KWIKSAN See PO92	P098
LEYTOSAN See PO92		KUMADER see POOI	
			P100
P10			
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azardous aste No.	Substance 1
	MALIK see P050
4.	MAREVAN see POOT
	MAR-FRIN see P001 MARTIN'D MAR-FRIN see P001
	MAVERAN see P001
65	MEGATOX see P005 Mercury fulminate
	MERSOLITE see P092
	METACID 50 see P071 METAFOS see P071
1.00	METAPHOR see P071 METAPHOS see P071
· .	METASOL 30 see P092
66 67	Methomyl 2-Methylaziridine
· · · ·	METHYL-E 605 see P071
68	Methyl hydrazine Methyl isocyanate see PC64
69	2-Methyllactonitrile
70	2-Methyl-2-(methylthio)propionaldehyde o- (methylcarbonyl) oxime
	METHYL NIHON See PO42
71	Methyl parathion METRON see P071
J	MULE DEATH See P108
	MOUSE-NOTS see P108
	MOUSE TOX see P108
12	MUSCIMOL see P007 1-Naphthyl-2-thiourea
73	Nickel carbonyl
75	Nickel cyanide Nicotine and salts
76	NIGC OXICE
78	p-Nitroaniline Nitrogen dioxide
	Nitrogen peroxide
81	Nitroalycenne (R)
82	IN-ITICOSCONTIGUIVIANING
	N-Nitrosomethylvinylamine
	NYLMERATE see P092
85	OCTALOX see P037 Octamethylpyrophosphoramide
86	Oleyl alcohol condensed with 2 moles ethylene oxide
	OMPA see P085
	OMPACIDE see P085 OMPAX see P085
B7	Osmium tetroxide 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
	PANIVARFIN see POO1
	PANWARFIN see P001
39	Parathion
-	PENNCAP-M see P071
90	PENOXYL CARBON N see P048 Pentachlorophenol
	Destachierschenste and D000
	PENTA-KILL See P090
	PENWAR see P090
1.	
	PERMAGUARD see P090 PERMATOX see P090 PERMITE see P090
	DEDTOX and DOOD
11 1	
	PHENMAD see P092
	Phenyi dichloroarsine
2 10.1103	
	Phenylmercury acetate N-Phenylthiourea Phill IPS 1851 can POOR
	PHILIPS 1861 see P008
94	
95	Phosgene
	Phosphine * Phosphorothioic acid, 0,0-dimethyl ester, 0-ester
	with N.N-dimethyl benzene sulfonamide
	Phosphorothioic acid 0,0-dimethyl-0-{p-nitro- phenyl) cstar sea P071
	PIED PIPER MOUSE SEED see P108
98	Potassium cyanide Potassium silver cyanide
	PREMERGE see PO20
	1.2-Propanediol Propargyl alcohol see P102
1	Proponitrila

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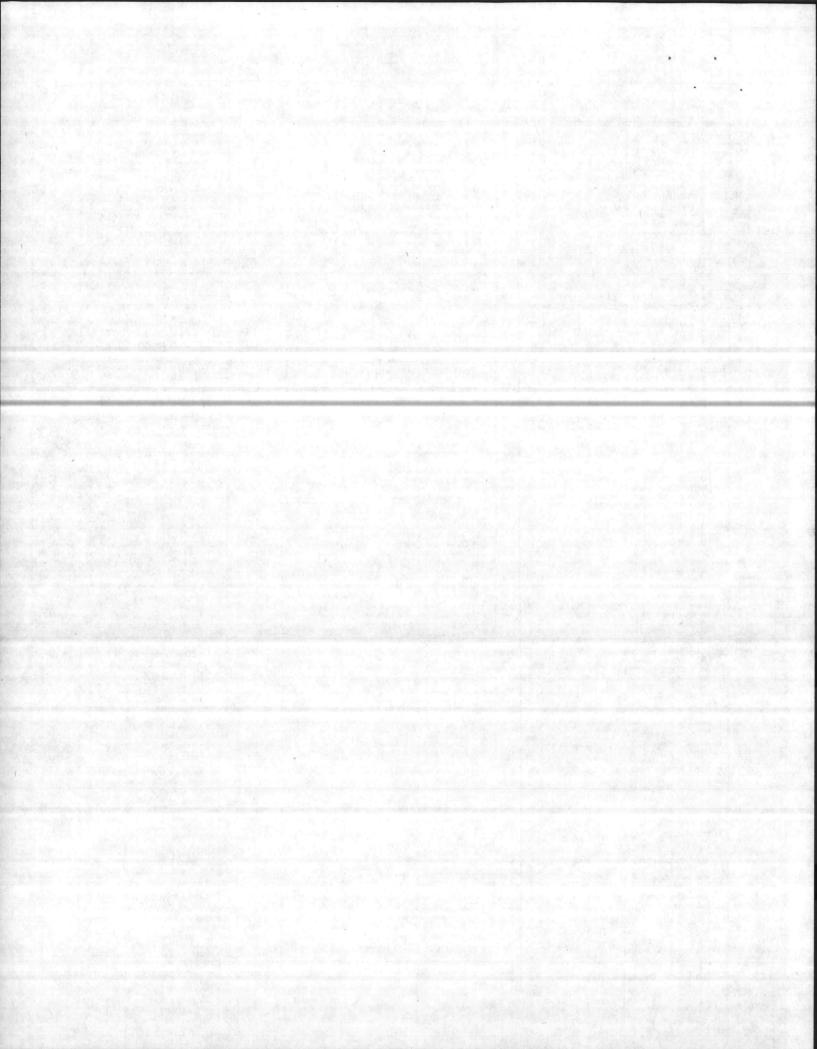
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	Hazardous Substance V waste No.
;	P102 2-Propyn-1-o1 PROTHROMADIN See P001
-	UUICKSAM See PU32
	QUINTOX see P037 RAT AND MICE BAIT see P001
	DAT A WAY can DOOL
	RAT-BGON see P001 RAT-O-CIDE #2 see P001
	RAT-GUARD see P001 RAT-KILL see P001
	RAT-KILL see P001 RAT-MIX see P001
	RATS-NO-MORE see P001
×	HAI-OLA see Pool
*	RATOREX see P001
	PAT-TRUE SEE FOUL
1	RO-DEX see P108
	ROSEX see P001 ROUGH & READY MOUSE MIX see P001
	SANASEED see P108
	SANASEED see P108 SANTOBRITE see P090
	SANTOBRITE see P090 SANTOPHEN see P090 SANTOPHEN 20 see P090 SCHRADAN see P095
-	
	Dini Chung Chanida
1.11-	SMITE see P105
2.1.1	SPARIO SEG PUZU
-	SPRAY-TROL BRAND RODEN-TROL see POO1
-	P105Sodium azide
	Sodium coumadin see P001
	P106 Sodium cyanide Sodium fluoroacetate see P056
	Sodium Cyando Sodium flooracatate see P056 SODIUM WARFARIN see P001
	SOLEASIA SECTOR
	DOLI ODLAGA OD 300 PORO
	P107 Stroncum suince P108 Strychnine and salts
1	P107 Strontium sulfide P108 Strychnine and salts SUBTEX see P020 SYSTAM see P085 TAG FUNGICIDE see P092
-	TAG FUNGICIDE see P092
4	TAG FUNGICIDE see P092 TEKWAISA see P071
	TEKWAISA see P071 TEMIC see P070 TEMIK see P070 TERM-TROL see P090 P109 Tetraethyldithicpyrophosphate
	TERMI-TROL see P090
\$	P109Tetraethylditviopyrophosphate P110Tetraethyl lead
-	P111 Tetraethylpyrophosphate P112 Tetranitromethane
	TETROSULFUR BLACK PB see P048
1	P113 TELACSUL AUR PBR see P048 P113 Thallic oxide Thallium peroxide see P113
	Thallium peroxide see P113
	P114 Thalium selenite P115 Thalium (I) sulfate THICOR see P02
	THIFOR see PO92
	THIMUL see P050 THIODAN see P050 THIODAN see P050 THIOFOR see P050
	THIOFOR see P050
	P116 Thiosemicarbazide Thiosultan tionel see P050 P117 Thiuram
	P117 Thuram
	THOMPSON'S WOOD FIX see P090
	P118 Trichloromethanething
	TWIN LIGHT RAT AWAY see Pool USAF RH-8 see Po69 USAF EK-4890 cee Po02
1	P119 Vanadic acid, ammonium salt
	P120Vanadium pentoxide VOFATOX see P071
	WANADU see P120 WARCOUMIN see P001
	WARFARIN SODIUM see PO01
	WARFICIDE see P001 WOFOTOX see P072
	YANOCK see P057
	YASOKNOCK see P058
	ZIARNIK see P092 P121 Zinc cyanide
	P122 Zinc phosphide (R,T)
	ZOOCOUMARIN see P001 The Agency included those trade names of which it was
	aware; an omission of a trade name does not imply that the
	omitted material is not hazardous. The material is hazardous if it is listed under its generic name.
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Encl (1) Part C

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		Appendix V	II-Basis for Listing Hazardous	Appendix VII-Basis for Listing Hazardous
		4.022.285	Waste-Continued	Waste-Continued
	while the second set is a grade and	EPA hazardous waste No.	Hazardous constituents for which listed	- Waste No Hazardous constituents for which listed
				K022 Phenol, tars (polycyclic aromatic hydrocar-
		K004	Hexavalent chromium. Hexavalent chromium, lead.	bons).
		K006	Hexavalent chromium, lead.	K023 Phthalic anhydride, maleic anhydride.
EPA hazardous	Hazardous constituents for which listed	· K007	Cyanide (complexed), hexavalant chromi-	K024
wasto No.		Summer Cartha	um	K025
F001	Tetrachloroethytene, methylene chlorida	- K003	. Hexavalent chromium. . Chloroform, formaldehyda, methylene chlo-	- K027 Toluene disocyanate, toluene-2, 4-diamine.
	Inchlorocitylene, 1,1,1-trichloroethane,		ride, methyl chloride, paraldehyde, formic	K028 1,1,1-Lichloroethane, vinyl chloride.
•	carbon tetrachlonde, chlorinated luoro-	· · · · · · · · · · · · · · · · · · ·	Bcid.	K029 1,2-dichloroethane, 1,1.1-trichloroethane, vinylichloride, vinylichene chloride, chloro-
	carbons.	.K010	Chloroform, formaldehyde, methylene chlo-	Vinyi chioride, vinyiberie chioride, chioros
F002	Tetrachicroethylene, methylene chloride, michicroethylene, 1,1,1-trichloroethane,		nide, methyl chloride, paraldahyde, formic acid, chloroacetaldahyde	Koso Hexachlorobenzene, hexachlorobutadiene,
· · · ·	chlorobenzene, 1,1,2-trichloro-1,2,2-tri-	K011	Acrylonitrile, acetoninie, hydrocyanic acid.	hexachioroethane, 1,1,1,2-tetrachio-
10. T	fluoroethane, ortho-dichlorobenzene,	. K013	. Hydrocyanic acid, acrylonitrile, acetonitrile.	roethane, 1,1,2,2-tetrachloroethane, eth-
	Inchiorofluoromethane.	K014	Acetonitrile, acrylamide.	K031 Arsenic.
003	. N.A. Cresols and cresylic acid, nitrobenzene.	KU15	Benzyl chloride, chlorcbenzene, toluene, benzotrichloride.	K032 Hexachlorocyclopentadiene.
005	Toluene, methyl ethyl ketone, carbon disul-	K0164	Hexachlorobenzene, hexachlorobutadiene,	K033 Hexachlorocyclopentadiene.
	fide, isobulanol, pyridine.	4:	carbon tetrachloride, hexachloroethane,	K034 Hexachlorocyclopentadiene. K035 Creosote, chrysene, naphthalene, fluor-
005	. Cadmium, hexavalent chromium, nickel,	K017	perchloroethylene. chloroethers	kussing anthene? benzo(a) fluoranthena,
007	cyanide (completed). Cyanide (saits).	NOT	[bis(chloromethyl) ether and bis (2-chlor-	benzo(a)pyrene, indeno(1.2,3-cd) pyrene,
008	Cyande (salts).		oethyl) ethers], trichloropropane, dichlor-	benzo(a)anthracene,
000	Cyande (saits).	A	opropanois.	K038 Toluene, phosphorod: thoic and
010	Cyanide (salls).	K018	1,2-dichloroethane, trichloroethylene, hex-	K038 Toluene, phosphorodithioic and phosphoro-thioic acid esters.
011	Cyanide (salls). Cyanide (complexed).		Ethylene dichloride, 1,1,1-trichloroethane,	K037 Toluene, phosphorodithioic and
044	Oyando (complexed). m	1 1 1 1 1 1 1 1	1.1.2-trichloroethane, tetrachloroethanes	phosphoro-thioic acid esters
	Cranda (Lallo).	C. Artista	. (1,1,2,2-tetrachloroethane and 1,1,1,2-te-	K038 Phorate, formaldehyde, phosphorodithoice and phosphorothioic acid esters.
019	Hexavalent chromium, cyanida (com-	-1	trachloroethane). trichloroethylene, te-	K039 Phosphorodithioic and phosphorothioic acid
K001	Pentachiorophenol, phenol, 2-chiorophenol,	1 250	chloroform, vinyl chloride, vinylidene	esters.
	p-chloro-m-cresol, 2,4-dimethylphenyl,	. Jes Maria	chloride.	K040 Phorate, formaldehyde, phosphorodithioic
	2.4-dinitrophenol, trichlorophenols, te-	K020	Ethylene dichloride, 1.1.1-trichloroethane,	and phosphorothioic acid esters.
	trachlorophenols, 2,4-dinitrophenol, cre- sosote, chrysene, naphthalena, fluoranth-	Sec. Co. C.	1,1,2-trichloroethane, tetrachloroethanes	K042 Hexachlorobenzene, ortho-dichloroben-
	ene. benza(b)lluoranthene.	1	(1,1,2,2-tetrachioroethane and 1,1,1,2-te- trachloroethane), trichloroethylene, te-	. zene. ·
	benzo(a)pyrene, indeno(1,2,3-cd)pyrene,		trachloroethylene, carbon tetrachloride,	K043
	benz(a)anthracene, dibenz(a)anthracene,		. chloroform, vinyl chloride, vinylidene	2,4,6-trichlorophenol. K044N.A
002	acenaphihalene	/ K021	chloride.	K0-15 N.A.
C03	Heravalent chromum, lead.		Antimony, carbon tetrachloride, chloroform.	K046 Lead.
				and the second
	· · · · · · · · · · · · · · · · · · ·			
•		EPA hazardous	· · · · · · · · · · · · · · · · · · ·	The second se
		waste No.	Hazardous constituents for which listed	
			The second s	
11. N		K047	- NA	
	· · · /· ·	* K048	Hoxavalent chromium, lead.	and a second
	그 아이와 집에 가는 것이 같아. 나는 것이 같아.	K049	Hexavalent chromium, lead.	公法:
		K050	Heravalent chromium lead	The second se
		- K052	Lead.	CHINE .
		K060	Cyanide, napthalene, phenolic compounds	h
	A second second second second second second	WORA	Arsenic.	street .
		K061		
	A STATE OF A	Kac	Lead, cadmust	(Appl)
1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -		- 1065	_ Lood, codmium.	
		: KO66	_ Leed, cadmum.	
	그 그 10 이 것이 가지 않는 것이 있었다. 지난 것이 있는 것이 많은 것이 없는 것이 없다.	KGG7	Lead-codman -	

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Lead-oadmum, 3 Hexavalent chromium, lead, cadmium.

Aniline, diphenylamine, nitrobenzer

vlenediamino.

benzene, chloride.

Lead, hexavalent chro

1,1,2-trichloreethane. Chlordane, heplachlor. Toxaphene.

Alsenic.

Arsenic.

Arsenic.

Morcury.

Hexavalen e-Mercury. Chloroform, carbon tetrachloride, hexachol-nocthane, trichloroethane, letrachloro-ethylene, dichloroethylcne, 1,1,2,2-tet-

17715

hexachicrobenzene,

benzyl

20 ......

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dichloro

1 ....

Benzene, dichlorobenzenes, trichloroben-zenes, tetrachlorobenzenes, pentachloro-

Thitalic anhydride.
 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
 1,2-dichloroethane, 1,1,1-trichloroethane,

2.4-dichlorophenol, 2.4.5-trichlorophenol, Hexavalent chromium, lead, cadmium.

Aniline, ndrobenzene, phenylenediamine, Anlino, benzene, dichonylamino, nitroben-zene, phenyleneciamine. Benzene, monochlorobenzene, dichloro-benzenes, 2,4,6-trichlorophenol.

Phenol, naphthalene. Phthalic anhydride, malcic anhydride.

K069

K071 K073 ..... K083

K084

K085 

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K086

K087 K093

K094 K095 K096

K097 K098 K099. K100. K101.

K102

K103

K104

K105

K106.

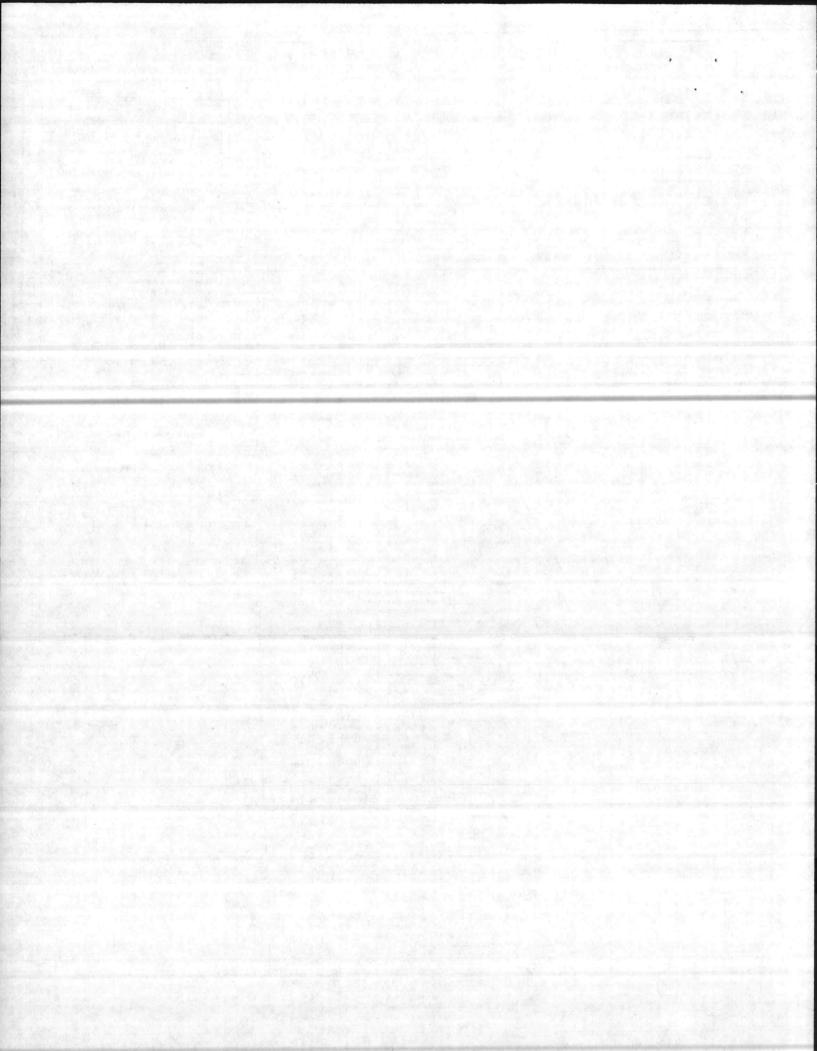
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s. ardous Substan ta No. U223. Toluene diisocyanate 210 U224. Toxaphene .. 2,4.5-TP see U233 : ..... U225... Tribromomethane . 11 14 14 2370 \*\* 1.4.2 1,1,1-Trichloroethane U227. 1,1,2-Trichloroethane Trichloroethene U223. Trichloroethylene see U228 U229. Trichlorofluoromethane U230 2,4,5-Trichlorophenol U231. 2.4.6-Trichlorophenol 2.4.5-Trichlorophenoxyacetic acid U232. U233. 2.4.5-Trichlorophenoxyacetic acti alpha, alpha-Trichlorotoluene acid aloha e U023 TRI-CLENE see U228 U234. Trinitrobenzene (R,T) Tris(2,3-dibromopropyl) phosphate U235. U236. Trypan blue U237. Uracil mustard U238 Urethane. - 5. 177 Vinyl chloride see U043 Vinylidene chloride see U078 U239. Xylena . Trummer Martin

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The following corrections to 40 CFR 261.33 appeared in 46 FR 27474:

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EPA hazardous	S Compound name	Action Taken	Reason
WESTUTIO.		11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Callender be the call of the first of the second state of the
	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts	Spelling corrected	Compound should read: '3-(alpha-Acetonyl-benzyl)-4-hydroxycoumann and
	and a second that the date for tags to the		Salts. Compound should read: Aluminum phosphide (R.T).
06	Aluminum phosphide	Sosling corrected	Compound should read: 4-Aminopyridine.
	4-aAminopyndine		Compound should read: Phosphorofluoridic acid, bis(1-methylethyl) ester
13	Phosphorofluonc acid, bis-(1-methylethyl)-ester	Listing corrected	On May 19, 1980, the compound was originally fisted as 2.4-Din trocreso
47	Phenol, 2,4-0.1.00-0-1100/9*		. and salts. On Nov. 25, 1980, this compound was listed as Phenol, 2.4
• • •			dinitro-6-methyl The words "and sails" were inadvertently left out. The listing should read: Phenot, 2,4-di-nitro-6-methyl-, and saits.
	Herachlorohevahydro-exo,evo-cimethanonaphthalene	Spelling corrected	Compound should read Hoxachlorohexahydro-endo, endo
	Phosphorpthiod acid, O,O-diethyl O-(p-nitrophenyl)	do	Compound should read: Phosphorothioic acid, O.O. diethyl O.(p-nitophonyl
	Phospholodilodi ecit, o,o dietilyi o grint opioni julia	we are any stated at the	ester.
114	Thatium (1) selectio	do	Compound should read: Thatlium (I) selenide.
026	2-Naphthylamine, N.N'-bis(2-chloromothyl)-		Compound should read: 2-Naphthylamine, N.N-bis(2-chloroethyl)
035	Butanoic acid, 4-[Bis(2-chloroethy/)amino]benzene		Compound should read: Butanoic acid, 4-Dis(2
		are a state of a state of the	chloroethyl)amino?benzene.
058	2H-1.3.2-Oxazaphosphorine, 2-[bis(2-chloro-ethyl)aminu	o]o	Compound should read: , 2H-1,3,2-C.cazaphosphonno, 2[Dis(2
1. 1	· tetrahydro-, oxide-2.	그는 이유는 같은 것이라. 이 것 같아요.	chloroethyl)amino]tetrahydro-, 2-oxida.
	Etylene dibrorrido		Compound should read: Ethylene dibromide.
087	Phosphoroditrioic acid, O.O-diethyl-, S-methylester		Compound should read: Phosphorodithioic acid, O.O.diethyl S-methyl ester
1		and the second se	
003	Benzenamine, N.N'-Cimethyl-4-phenylazo-		Compound should read: Benzenamine, N,N-dimethyl-4-(phenylazo)
:05	Eenzene, 1-methyl-2,4-cinitro-		Compound should read: Benzene, 1-methyl1-2,4-dinitro-
111	D-N-pro_yintrosamine		Compound should read: Di-n-propylnitrosodin-propylamine.
111	Ethytenebs(o:theocarbamic acid)	Change to Ethyle	
		and esters.	alts thiocarbameta. The Novembor 25, 1980 Federal Register changed the space compound to Ethylenebis(dithocarbamic acid), without giving a reaso this change. The correct listing of U114, is Ethylenebis(dithocarbami acid), salts and esters; which is a clarification of the May 19, 198
		ente de la companya de la companya Na companya de la comp	compound to Ethylenebis(dithiocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithiocarbami acid), salts and esters; which is a clanification of the May 19, 193 listing.
	Ethlene oxide	Spelling corrected	compound to Ethylenebis(dithiocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithiocarbami acid), salts and esters; which is a clanification of the May 19, 193 listing. Compound should read: Ethylene oxide.
118	Ethlena oxide Ethlymathacrylate	Spelling corrected	compound to Ethylenebis(dithocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanifcation of the May 19, 193 listing. Compound should read: Ethylene oxide. Compound should read: Ethylene oxide.
118	Ethlene oxide Ethlinethacrylate Methane, inchlorofluoro-	Spelling corrected	compound to Ethylenebis(dithiocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithiocarbam acid), salts and esters; which is a clanification of the Alay 19, 192 listing. Compound should read: Ethylene oxide. Compound should read: Ethylene oxide. The compound was inadvertently listed twice.
118 121 137	Ethlene oxide Ethylmethacrylate Methane, Inchlorolluoro- 1.10-(1.2.phenylene)pyrene	Spelling corrected	compound to Ethylenebis(dithiocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithiocarbami acid), salts and esters; which is a clanification of the May 19, 193 listing. Compound should read: Ethylene oxide. Compound should read: Ethylene thatarylate. The compound was inadvertently listed twice. Compound should read: 1,10-(1,2-Phenylene)pyrene.
118 121 137 145	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ithlene oxide     Ithlene trachorolluoro     1,10-(1.2-phenylene)pyrene     Phosthorc acid, Lead sait.	Spelling corrected	compound to Ethylenebis(dithocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanication of the May 19, 195 listing. Compound should read: Ethylene oxide. Compound should read: Ethylene the correct of the May 19, 195 Compound should read: Ethylene the correct of the May 19, 195 Compound should read: Ethylene the correct of the May 19, 195 Compound should read: Ethylene the correct of the May 19, 195 Compound should read: Thylene the correct of the May 19, 195 Compound should read: 1,10-(1,2-Phenylene)pyrene. Compound should read: Phosphoric acid, lead salt.
118 121 137 145	Ethlene oxide Ethline thacrylate Methane, Inchlorolluoro- 1.10-(1.2 phenylene)pyrene Phoschorc acid, Lead salt. 1.2-Ditydo-3.6 pyradizine dione	Spelling corrected	compound to Ethylenebis(dithiocarbamic acid), without giving a reasc for this changa. The correct listing of U114, is Ethylenebis(dithiocarbam acid), salts and esters; which is a clanication of the May 19, 193 listing. Compound should read: Ethylene oxida. The compound was inadvertently listed twice. Compound should read: 1,10-(1,2-Phonylene)pyrene. Compound should read: Phosphoric acid, lead salt. Compound should read: 1,2-Dihydro-3,6-pyridazinecione.
118 121 137 145	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ithlene oxide     Ithlene trachorolluoro     1,10-(1.2-phenylene)pyrene     Phosthorc acid, Lead sait.	Spelling corrected	compound to Ethylenebis(dithiocarbamic acid), without giving a reaso     for this change. The correct listing of U114, is Ethylenebis(dithiocarbam     acid), salts and esters; which is a clanification of the May 19, 19     listing.     Compound should read: Ethylene oxide.     Compound should read: Ethylene hacrylate.     Compound should read: 1,10-(1,2-Phenylene)pyrene.     Compound should read: 1,2-Dinydro3.6-pyridazinedione.     Compound should read: Proshoric acid, lead salt.     Solid Proshoric acid, lead salt.     Solid Proshoric acid, lead salt.     Solid Proshoric acid Proshoricacid Proshoric acid Proshoric acid Proshoric acid Proshoric acid
18 21 37 45 43 55	Ethlene oxide     Ethlene oxide     Ethylmethacrylate     Methane, inchlorofluoro     1,10-(1.2.phenylene)pyrene     Phoschorc acid, Lead sait	Spelling corrected	compound to Ethylenebis(dithiccarbamic acid), without giving a reasc for this changa. The correct listing of U114, is Ethylenebis(dithiccarbami acid), salts and esters; which is a clanification of the May 19, 192 listing. Compound should read: Ethylene oxida. Compound should read: 1,10-(1,2-Phonylene)pyrene. Compound should read: 1,10-(1,2-Phonylene)pyrene. Compound should read: 1,2-Dinylene(logatal) Compound should read: Pyridine, 2-[(2-dimethylamino) ethyl]-2-thanylenino. Compound should read: Our Pyridine, 2-[(2-dimethylamino) ethyl]-2-thanylenino. Compo
118 121 137 145 148 155 163	Ethlene oxide     Ethylmethacrylate     Methane, thchlorofluoro     1,10-(12-phenylene)pyrene     Phoschorc acid, Lead sait     12-Ditydro-3.6-pyradizine-dione     Pyroune, 2-1(2-dimethylamino)-2-thenylamino]-     Guancine, N-nitroso-n-methyl-Ninitro-	Spelling corrected	<ul> <li>compound to Ethylenebis(ditticcarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(ditticcarbam acid), salts and esters; which is a clanification of the May 19, 193 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Ethylenebiyenebyrene.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Nihydro-3,6-pyridazinedione.</li> </ul>
118 121 137 145 143 143 155 163 165	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene troblorolluoro-     I.10-(1.2-phenylene)pyrene     Phosphore acd, Lead salt     1.2-Ditycto-3.6-pyradizine-dione     Pyroune, 2-((2-dimethylamino)-2-thenylamino)-     Guancine, N-nitroso-n-methyl-N'nitro-     1.4-Naphthagunone	Spelling corrected	compound to Ethylenebis(dithocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanication of the May 19, 195 listing. Compound should read: Ethylene oxide. Compound should read: 1,10-(1,2-Phenylene)pyrene. Compound should read: 1,12-Dihydro-3,6-pyridazinedione. Compound should read: 1,2-Dihydro-3,6-pyridazinedione. Compound should read: 1,2-Dihydro-3,6-pyridazinedione. Compound should read: Claunidine, N-nitroso-N-methyl-M-nitros. Compound should read: 1,3-S-Trioxane, 2,4,6-trimethyl.
118 121 137 145 143 155 163 163 165 162	Ethlene oxide     Ethylmethacrylate     Methane, thchlorofluoro     1,10-(12-phenylene)pyrene     Phoschorc acid, Lead sait     12-Ditydro-3.6-pyradizine-dione     Pyroune, 2-1(2-dimethylamino)-2-thenylamino]-     Guancine, N-nitroso-n-methyl-Ninitro-	Spelling corrected	compound to Ethylenebis(dithiccarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithiccarbam acid), salts and esters; which is a clanification of the May 19, 192 listing. Compound should read: Ethylene oxida. Compound should read: Ethylene oxida. Compound should read: Ethylene poxida. Compound should read: Unit methacrylate. Compound should read: 1,10-(1,2 Phonylene)pyrene. Compound should read: 1,2-Dinylene3, lead salt. Compound should read: Proshoric acid, lead salt. Compound should read: Pyridine, 2-(1/2 dimethylamino) ethyl]-2-thank mino. Compound should read: 1,3-Dinylor-3,6-pyndazinedione. Compound should read: 1,4-Naphthoquinone. Compound should read: 1,3-S-Trioxane, 2,4,6-timethyle. Compound sh
118	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene trachlere     Metnane, Inchlorofluoro-     1.10-(1.2-phenylene)pyrene     Phoschorc acid, Lead salt.     1.2-Dinyco-3.6-pyradizine-dione     Pyroune, 2-(12-dimethylamino)-2-thenylamino]-     Guanciane, N-nitroso-n-methyl-Ninitro-     1.4-N softhaquinone     1.3.5-Trioxane 2.4.5-timethyl-     Benzene, pentachloro-nitro-     Phoschorcus sufficial	Spelling corrected	<ul> <li>compound to Ethylenebis(dithiccarbamic acid), without giving a reasc for this changa. The correct listing of U114, is Ethylenebis(dithiccarbam acid), salts and esters; which is a clanification of the May 19, 192 listing.</li> <li>Compound should read: Ethylene oxida.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dinyloro.36-pyridazinecione.</li> <li>Compound should read: Pyridine, 2-[(2-dimethylamino) ethyl]-2-thanyl mino.</li> <li>Compound should read: 1,4-Naphthoquinone.</li> <li>Compound should read: 1,3-S-Trioxane, 2,4,6-timethyl.</li> <li>Compound should read: Prosphorus sullida.</li> </ul>
118	Ethlene oxide     Ethlene oxide     Ethylmethacrylate     Methane, thchlorofluoro     1,10-(1,2-phenylene)pyrene     Phosthoric acid, Lead sait     1,2-Dirydoo-3,6-pyradzine-dione     Pynone, 2-L(2-dimethylamino)-2-thenylamino]-     Guanicine, N-nitroso-n-methyl-N'nitro-     1,4-N sohthaguinone     1,3-5-Trioxane 2,4-5-timethyl-     Bonzene, pentachioro-nitro-	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 195 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 195 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: Clanidine, 2-[(2-dimethylamino) ethyl]-2-thanyl mino.</li> <li>Compound should read: 1,3-Trioxane, 2,4,5-timethyl.</li> <li>Compound should read: Benzene, pontachloronito- Compound should read: Prosphorus sullide.</li> <li>On November 25, 1900, the compound was correctly isted as Sacctar</li> </ul>
118	Ethlene oxide     Ethylmethacrylate     Methane, thehlorolluoro     1,00(12.phenylene)pyrene.     Phosehoric acid, Lead sait     1,2-Dinydoo-3.6-pyradizine-dione     Pynoune, 2-((2-dimethylamino)-2-thenylamino)-     Guaniche, N-nitroso-n-methyl-Ninitro-     1,4-Naonthaquinone     1,3-5-Trioxane 2,4-5-thimethyl-     Benzene, pentachioto-nitro-     Phosphorous suffide     1,2-Benzisothazoin-3-one, 1-1-dioxide	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 195 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 195 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,3-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,3-Trioxane, 2,4-6-timethyl.</li> <li>Compound should read: 1,3-Trioxane, 2,4-6-timethyl.</li> <li>Compound should read: 1,3-5-Trioxane, 2,4-6-timethyl.</li> </ul>
118 121 137 145 148 155 163 163 164 165 162 162 163 163 164 164 165	Ethlene oxide     Ethlene	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithocarbamic acid), salts and esters; which is a clanification of the May 19, 193</li> <li>listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Thoshoric acid, lead salt.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyridazinedione.</li> <li>Compound should read: Clanidine, X-nitroso-N-methyl-M-nitros.</li> <li>Compound should read: 1,3-5-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1980, the compound was correctly fixed as Sacctar and salts, however in the histing under its chemical name, the work "and salts" were inadvertently left out. Compound should read 14.</li> </ul>
118 121 137 145 148 155 163 163 164 165 162 162 163 163 164 164 165	Ethlene oxide Ethylmethacrylate Methacrylate Phosehoric acid, Lead Salt. 12-Diryco-3,6-pyradrzine-dione Pynoine, 2-1(2-dimethyl-Minitro- 1,4-Nisohthaquinone 1,3-5-Trocane 2,4,5-trimethyl- Benzene, pentachioto-nitro- Phosphorous suttida 1,2-Benzisthiazolin-3-one, 1-1-dioxide 1,2-Benzisthiazolin-3-one, 1-1-dioxide	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithocarbamic acid), salts and esters; which is a clanification of the May 19, 193 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dinydro-3,6-pyridazinedione.</li> <li>Compound should read: 1,2-Dinydro-3,6-pyridazinedione.</li> <li>Compound should read: Claudidne, N-nitroso-N-methyl-N-nitro.</li> <li>Compound should read: 1,3-5-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1980, the compound was correctly isted as Sacchard and salts, however in the hsting under its chemical name, the word "and salts" were inadvertently lott cut. Compound should read: 1,4-Boxing and salts.</li> </ul>
118 121 137 145 148 155 163 163 164 185 185 185 185 202 222	Ethlene oxide     Ethlene	Spelling corrected	<ul> <li>compound to Ethylenetis(ditticcarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(ditticcarbamic acid), salts and esters; which is a clanification of the May 19, 193 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: I,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dinylor-3,6-pyridazinedione.</li> <li>Compound should read: Prosphoric acid, lead salt.</li> <li>Compound should read: Claunidine, N-nitroso-N-methyl-N-nitro.</li> <li>Compound should read: I,3-5-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1980, the compound was correctly fisted as Sacchariand salts.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1980, the compound was correctly fisted as Sacchariand salts.</li> <li>Compound should read: Orabinous sullide.</li> <li>On November 25, 1980, the compound was correctly fisted as Sacchariand salts.</li> <li>Compound should read: or Toluidine hydrochloride.</li> <li>Compound should read: or Toluidine hydrochloride.</li> </ul>
118	Ethlene oxide Ethylmethacrylate Methacrylate Phosehoric acid, Lead Salt. 12-Diryco-3,6-pyradrzine-dione Pynoine, 2-1(2-dimethyl-Minitro- 1,4-Nisohthaquinone 1,3-5-Trocane 2,4,5-trimethyl- Benzene, pentachioto-nitro- Phosphorous suttida 1,2-Benzisthiazolin-3-one, 1-1-dioxide 1,2-Benzisthiazolin-3-one, 1-1-dioxide	Spelling corrected do One listing deleted Spelling corrected do	<ul> <li>compound to Ethylenetis(ditticcarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenetis(ditticcarbamic acid), salts and esters; which is a clanification of the May 19, 193 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dinylene)pyrene.</li> <li>Compound should read: 1,3-Dinylene, 2-(1,2-dimethylamino) ethyl1-2-thenylemine.</li> <li>Compound should read: 1,3-Trioxane, 2,4-6-trimethylemine.</li> <li>Compound should read: Benzene, pentachloronitro.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1900, the compound was correctly fisted as Saccharian and salts, however in the histing under its chemical name, the word "and salts" were ingdvertently left cut. Compound should read 1, Benzisothiazolin-3-ona, 1, -dioxide, and salts.</li> <li>Compound should read: Uracil, 5(bis(2-chloroethylamino)-</li> </ul>
118	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene oxide     Metnane, Inchlorolluoro-     1,10-(1,2 phenylene)pyrene     Phoschorc acid, Lead salt,     1,2 phenylene)pyrene     Pyroune, 2-(12-dimethylene)pyrene     Pyroune, 2-(12-dimethylenino)-2-thenylamino]-     Guanicine, N-nitroso-n-methyl-N'nitro-     1,4-N softhaguinone     1,3-5-trouzae 2.4.5-timethyl-     Benzene, pentachloro-nitro-     Phosphorous sufficients     1,2-Benzisothazolin-3-one, 1-1-dioxide     O-Toluiane hydrochloride,     Benzene, 1,3-5-trunto-     Uracl, 5(bis(2-chloromethyl)-amino]-  Uracl, 5(bis(2-chloromethyl)-amino]-	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithocarbamic acid), salts and esters; which is a clanification of the May 19, 193</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Thylenebis(dithocarbamic acid, lead salt.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyrdazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyrdazinedione.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyrdazinedione.</li> <li>Compound should read: 1,3-S-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: 1,3-S-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: 1,3-S-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: 1,3-Trioxane, 2,4,6-trimethyl.</li> <li>Com</li></ul>
118.       121.       121.       137.       143.       145.       146.       163.       163.       164.       165.       162.       162.       163.       164.       165.       165.       162.       162.       163.       164.       165.       165.       166.       167.       168.       202.       222.       223.       223.       237.       220.	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene oxide     Metnane, Inchlorolluoro-     1,10-(1,2 phenylene)pyrene     Phoschorc acid, Lead salt,     1,2 phenylene)pyrene     Pyroune, 2-(12-dimethylene)pyrene     Pyroune, 2-(12-dimethylenino)-2-thenylamino]-     Guanicine, N-nitroso-n-methyl-N'nitro-     1,4-N softhaguinone     1,3-5-trouzae 2.4.5-timethyl-     Benzene, pentachloro-nitro-     Phosphorous sufficients     1,2-Benzisothazolin-3-one, 1-1-dioxide     O-Toluiane hydrochloride,     Benzene, 1,3-5-trunto-     Uracl, 5(bis(2-chloromethyl)-amino]-  Uracl, 5(bis(2-chloromethyl)-amino]-	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 193 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Thoshoric acid, lead salt.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dinytor-3,6-pyridazinedione.</li> <li>Compound should read: Clanidine, X-nitroso-N-methyl-M-nitros.</li> <li>Compound should read: Guanidine, N-nitroso-N-methyl-M-nitros.</li> <li>Compound should read: 1,3-5-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1960, the compound was correctly fisted as Sacctar and salts, howerer in the histing under its chemical name, the word "and salts" were inadvertently left out. Compound should read: 0.10-bing.</li> <li>Compound should read: o-Toluidine hydrochloride.</li> <li>compound should read: 1.10-foxide, and salts.</li> <li>Compound should read: 1.10-bingle, and salts.</li> <li>Compound should read: 2.4-0, salts and esters.</li> <li>This compound should read: 2.4-0, salts and esters.</li> </ul>
118       121       121       137       145       146       155       163       162       162       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       164       165       165       162       202       214       237       220	Ethlene oxide Ethlene oxide Ethlene transviate Methane, inchlorofluoro 1,10-(1,2-phenylene)pyrene Phoschorc acid, Lead salt. 1,2-Drybro 3,6-pyradzine dione Pyrnone, 2-1(2-dimethyl-Minitro- 1,4-Nisonthaquinone 1,3-5-Trozane 2,4,5-trimethyl- Benzene, pentachioro-nitro- Phosphocous suffida 1,2-Benzisothazokin-3-one, 1-1-dioxide 1,2-Benzisothazokin-3-one, 1-1-dioxide 0-Toluidine hydrochlorido. Benzene, 1,3,5-trinitro- Uraci, 5[bis(2-chloromethyl)-amino]	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 193</li> <li>listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Thylene oxide.</li> <li>Compound should read: Thylene oxide.</li> <li>Compound should read: Thoshoric acid, lead salt.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyndainedione.</li> <li>Compound should read: Thoshoric acid, lead salt.</li> <li>Compound should read: 1,2-Dihydro-3,6-pyndainedione.</li> <li>Compound should read: Thoshoric acid, lead salt.</li> <li>Compound should read: 1,3-S-Trioxane, 2,4,6-trimethyl. Fritro.</li> <li>Compound should read: 1,3-S-Trioxane, 2,4,6-trimethyl.</li> <li>Compound should read: 1,10-title out. Compound should read 1,10-title out.</li> <li>Compound should read: 1,10-title out.</li> <li>Compound should read: 1,10-title out.</li> <li>Compound should read: 0-Toluidine hydrochlorde.</li> <li>Compound should read: 1,10-title and salts.</li> <li>Compound should read: 1,2-Dihydrochlorde.</li> <li>Echystardous waste number appears as "0224" and should read 1,20-X,20-X,20-X,20-X,20-X,20-X,20-X,20-X</li></ul>
118       1121       1121       1137       1145       1148       1155       1163	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene theorylate     Methane, Inchlorolluoro-     1,10-(1.2-phenylene)pyrene     Phosphore acd, Lead salt.     1,2-Dinyco-3.6-pyradizine-dione     Pyroune, 2-((2-dimethylenino)-2-thenylamino)-     Guancine, N-nitroso-n-methyl-N'nitro-     1,4-Naohthaquinone     1,3-5-Trioxane 2,4,5-trimethyl-     Benzene, pentachioro-nitro-     Phosphoreus suffidu.     1,2-Benzisothiazolin-3-one, 1-1-dioxide     2-Cluidne hydrochlorido.     Benzene, 1,3-5-trinitro-     Uraci, 5(bis(2-chloromethyl)-amino)-     2,44-D, catts and esters     Methorychior, also known as Ethane, 1,1,1-trichloro-	Spelling corrected	<ul> <li>compound to Ethylenetis(ditticcarbamic acid), without giving a reaso for this change. The correct listing of U114, is Ethylenetis(ditticcarbamic acid), salts and esters; which is a clanification of the May 19, 193 listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: 1,2-Dinydro-3,6-pyndazinedione.</li> <li>Compound should read: 1,3-Dinydro-3,6-pyndazinedione.</li> <li>Compound should read: 1,3-Trixxane, 2,4-6-trimethyl.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1900, the compound was correctly fisted as Saccharia and salts, however in the histing under its chemical name, the word "and salts" were ingavertently left cut. Compound should read: 1,4-Dinydie, and salts.</li> <li>Compound should read: Uracil, 5[bis[2-chloroethylamino].</li> <li>Compound should read: 2,4-D, salts and esters.</li> <li>This compound shou</li></ul>
1240	Ethlene oxide     Ethlene oxide     Ethlene oxide     Ethlene theorylate     Methane, Inchlorolluoro-     1,10-(1.2-phenylene)pyrene     Phosphore acd, Lead salt.     1,2-Dinyco-3.6-pyradizine-dione     Pyroune, 2-((2-dimethylenino)-2-thenylamino)-     Guancine, N-nitroso-n-methyl-N'nitro-     1,4-Naohthaquinone     1,3-5-Trioxane 2,4,5-trimethyl-     Benzene, pentachioro-nitro-     Phosphoreus suffidu.     1,2-Benzisothiazolin-3-one, 1-1-dioxide     2-Cluidne hydrochlorido.     Benzene, 1,3-5-trinitro-     Uraci, 5(bis(2-chloromethyl)-amino)-     2,44-D, catts and esters     Methorychior, also known as Ethane, 1,1,1-trichloro-	Spelling corrected	<ul> <li>compound to Ethylenebis(dithocarbamic acid), without giving a reasc for this change. The correct listing of U114, is Ethylenebis(dithocarbam acid), salts and esters; which is a clanification of the May 19, 193</li> <li>listing.</li> <li>Compound should read: Ethylene oxide.</li> <li>Compound should read: Thoshoric acid, lead salt.</li> <li>Compound should read: 1,10-(1,2-Phenylene)pyrene.</li> <li>Compound should read: Plosphoric acid, lead salt.</li> <li>Compound should read: Clanidine, N-nitroso-N-methyl-M-nitros.</li> <li>Compound should read: 1,3-5-Trioxane, 2,4,5-timethyl.</li> <li>Compound should read: Prosphorus sullide.</li> <li>On November 25, 1980, the compound was correctly fisted as Sacctar and salts, howere in the hsing under its chemical name, the word "and salts" were inadvertently left out. Compound should read: 0.11-dioxide, and salts.</li> <li>Compound should read: Clausifice nadvertently left out.</li> <li>Compound should read: 1.10-dixide, and salts.</li> <li>Compound should read: 2.4-0, salts and esters.</li> <li>This compound should read: 1.2-bix/drochinde.</li> <li>Compound should read: 2.4-0, salts and esters.</li> <li>Compound should read: 2.4-0, salts and esters.</li> <li>This compound should read: 1.2-bix/drochinde.</li> <li>Compound should read: 2.4-0, salts and esters.</li> <li>Compound should read: 2.4-0, salts and esters.</li> <li>This compound was omitted mistakenly from § 261.33(f). Methorychlor an EP Toxicity constituent and is also one of the materials regulated is a storicity interior one is well recongraved. The background document for § 251.33 inccated the is a storicity interior is sel</li></ul>

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4.5.

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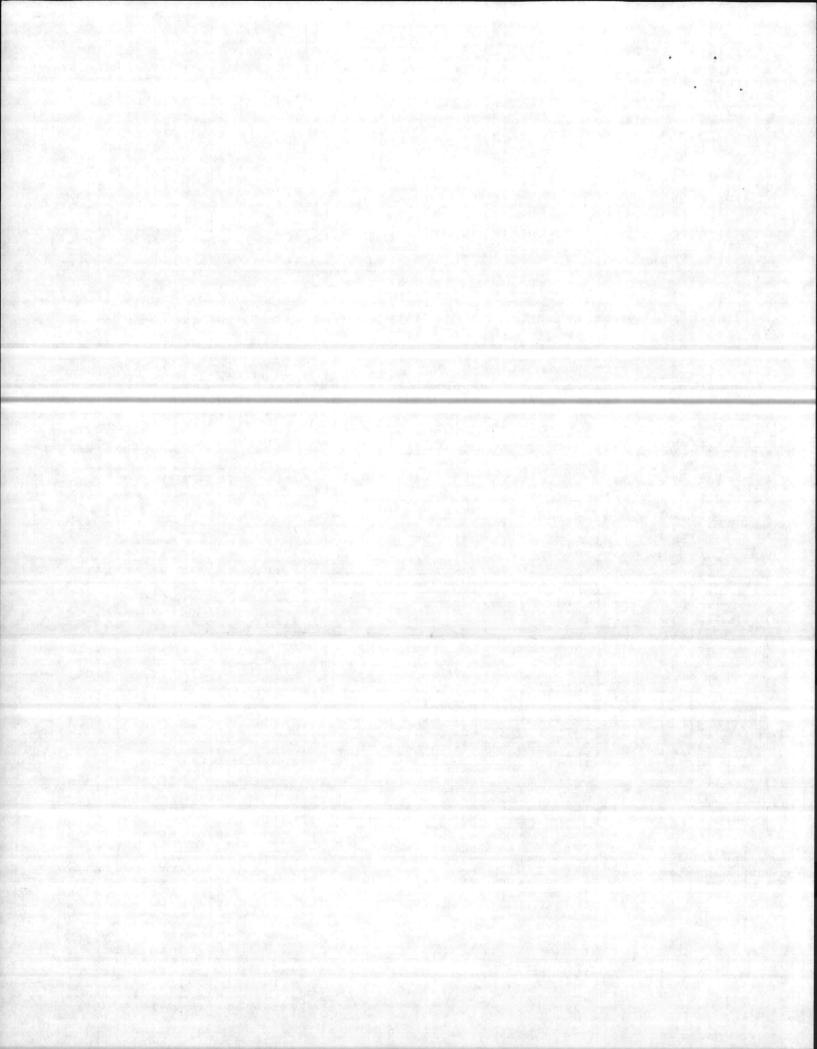
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Bould Find the serves that it has provided adequate notice for inclusion of this com-bound in § 261.33, and is taking the actual to § 251.33. pound in § 261.33, and is taking this opportunity to add it to § 251.33(f).

# Encl (1) Part C



Appendix VIII

مته نز

Hazardous Constituents • Acetonitrile (Ethanenitrile) Acetophenone (Ethanone, 1-phenyl) 3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin

and salts (Warfarin) 2-Acetylaminofluorene (Acetamide, N-(9H-

1.1.7.

.10

- fluoren-2-yl]-) Acetyl chloride (Ethanoyl chloride) 1-Acetyl-2-thiourea (Acetamide, N-

(aminothioxomethyl]-) Acrolein (2-Propenal) Acrylamide (2-Propenamide)

Acrylonitrile (2-Propenenitrile) Aflatoxins

Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,0a,8b-hexahydro-endo,exo-1,4:5,8-Dimethanonaphthalene)

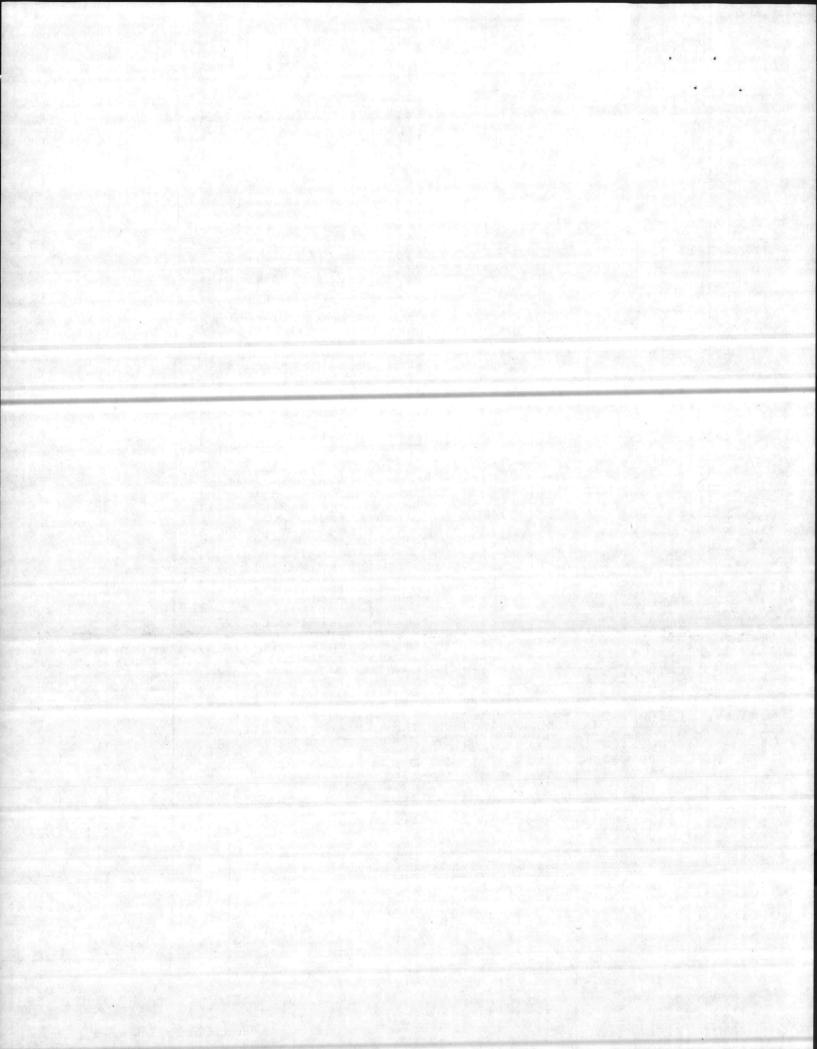
Allyl alcohol (2-Propen-1-ol) ·

4-Aminobiphenyl ([1.1'-Biphenyl]-4-amine)

6-Amino-1,1a,2.8,8a,8b-hexahydro-3-(hydroxymethyl)-8a-methoxy-5-methylcarbamate azirino[2',3':3,4]pyrrolo[1,2a]indole-4.7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4,7-

dione, 6-amino-8-[((aminocarbonylloxy]methyl]-1,1a,2,8,8a,8b= hexahydro-8amethoxy-5-methy-) 5-(Aminomethyl)-2-isoxazolol (3(2H)-Isoxazolone, 5-(aminomethyl)-)4aminopyridine (4-Pyridinamine) Amitrole (111-1,2,4-Triazol-3-amine) Aniline (Benzenamine) Antimony and compounds, N.O.S.\* Aramite (Sulfurous acid, 2-chloroethyl-, 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl -----ester] Arsenic and compounds, N.O.S.\* Arsenic acid (Orthoarsenic acid) Arsenic pentoxide (Arsenic (V) oxide) Arsenic trioxide (Arsenic (III) oxide) Auramine [Benzenamine, 4,4-carbonimidoylbis[N,N-Dimethyl-, monchydrochloride] Azaserine [L-Serine, diazoacetate (ester)] Barium and compounds, N.O.S.\* Barium cyanide Benz[c]acridine (3.4-Benzacridine) Benz[a]anthracene (1,2-Benzanthracene) Benzene (Cyclohexatriene) Benzenearsonic acid (Arsonic acid, phenyl-) Benzene, dichloromethyl- (Benzal chloride) Benzenethiol (Thiophenol) Benzidine [[1,1'-Biphenyl]-4,4'diamine) Benzo[b]fluoranthene (2,3-Benzofluoranthene) Benzo[j]fluoranthene (7,8-Benzofluoranthene) Benzo[a]pyrene (3.4-Benzopyrene) p-Benzoquinone (1.4-Cyclohexadienedione) Benzotrichloride (Benzene, trichloromethyl-) Benzyl chloride (Benzene, (chloromethyl)-) Beryllium and compounds, N.O.S.\* Bis(2-chloroethoxy)methane (Ethane, 1,1 [methylenebis(oxy)]bis[2-chloro-]] Bis(2-chloroethyl) ether [Ethane, 1,1'-oxybis[2-chloro-]] N,N-Bis[2-chloroethyl]-2-naphthylamine (Chlornaphazine) Bis(2-chloroisopropyl) ether (Propane, 2,2'bis[2-chioroisopropy]] ether [Propane, 2,2-oxybis[2-chioro-]] Bis(chioromethyl) ether (Methane, oxybis[chioro-]] Bis(2-ethylhexyl) phthalate [1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester) Bromoacetone (2-Propanone, 1-bromo-) Bromomethane (Methyl bromide) 4-Bromophenyl phenyl ether (Benzene, 1bromo-4-phenoxy-) Brucine (Strychnidin-10-one, 2,3-dimethoxy-) 2-Butanone peroxide (Methyl ethyl ketone, peroxide) · ..... . .... Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester) . . . . . 2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-methylpropyl)-) Cadmium and compounds, N.O.S.\* Calcium chromate (Chromic acid, calcium salt) 1 ward Bright ar weat Calcium cyanida Carbon disulfide (Carbon bisulfide) Carbon oxyfluoride (Carbonyl fluoride) 117 Chloral (Acetaldehyde, trichloro-) Chlorambucil (Butanoic acid, 4-[bis(2chloroethyl]amino]benzene-)

• The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.



Chlordane (alpha and gamma isomers) (4.7-Methanoindan, 1.2.4.5.6.7,8,8-octachloro-3.4.7.7a-tetrahydro-) (alpha and gamma isomers) Chlorinated benzenes, N.O.S.\* Chlorinated ethane, N.O.S.\* Chlorinated fluorocarbons, N.O.S.\* 1171. Tak 1 Chlorinated naphthalene, N.O.S.\* Chlorinated phenol, N.O.S.\* Chloroacetaldehyde (Acetaldehyde, chloro-) Chloroalkyl ethers, N.O.S.\* p-Chloroaniline (Benzenamine, 4-chloro-) Chlorobenzene (Benzene, chloro-) Chlorobenzilate (Benzeneacetic acid, 4chloro-alpha-(4-chlorophenyl)-alpha-1 1912 hydroxy-, ethyl ester) · · / 164.0. 44 p-Chloro-m-cresol (Phenol, 4-chloro-3-methyl) p-Chloro-m-cresol (Phenol, 4-Chloro-2, 3-epoxypropane (Oxirane, 2-(chloromethyl)-) 2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-) Chloroform (Methane, trichloro-) Chloromethane (Methyl chloride) 175 20 Chloromethyl methyl ether (Methane, 2-Chloronaphthalene (Naphthalene, betachloro-) chloro-) 2-Chlorophenol (Phenol, o-chloro-) 1-(o-Chlorophenyl)thiourea (Thiourea, (2chlorophenyl]-] 3-Chloropropionitrile (Propanenitrile, 3chloro-) ...... Ter - 7 Chromium and compounds. N.O.S.\* Chrysene (1.2-Benzphenanthrene) Citrus red No. 2 (2-Naphthol, 1-[(2,5dimethoxyphenyl]azo]-). Coal tars Copper cyanide Creosole (Creosole, wood) Cresols (Cresylic acid) (Phenol, methyl-) Crotonaldehyde (2-Butenal) Cyanides (soluble salts and complexes), N.O.S. Cyanogen (Ethanedinitrile) 1.4.1.2 Cyanogen bromide (Bromine cyanide) 776 Cyanogen chloride (Chlorine cyanide) Cycasin (beta-D-Clucopyranoside, (methyl-ONN-azoxy]methyl-] 2-Cyclohexyl-4.6-dinitrophenol (Phenol, 2cyclohexyl-4.6-dinitro-) Cyclophosphamide (2H-1,3,2,-. with history of Oxazaphosphorine, Ibis(2chloroethyl]amino]-tetrahydro-, 2-oxide] Daunomycin (5.12-Naphthacenedione, (8Scis]-8-acetyl-10-[(3-amino-2,3,6-trideoxy]alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10tetrahydro-6.8.11-trihydroxy-1-methoxy-] DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-bis(pchlorophenyl]-] DDE (Ethylene, 1.1-dichloro-2,2-bis(4chlorophenyl]-) DDT (Dichlorodiphenyltrichloroethane) (Elliane, 1.1.1-trichloro-2,2-bis(pchiorophenyl)-) Diallate (S-(2.3-dichloroallyl) diisopropylthiocarbamate) Dibenz[a,h]acridine (1.2.5.6 Dibenzacridine) Dibenz[a.j]acridine (1.2.7,8-Dibenzacridine) Dibenzla,hlanthracene (1,2,5,0-

Dibenzanthracene)

711-Dibenzo(c.g]carbazole (3.4,5,6-Dibenzcarbazole)

Dibenzo[a.e];yrene (1.2.4.5-Dibenzpyrene) Dibenzo[a.h];yrene (1.2.5.6-Dibenzpyrene] Dibenzo[a.i]pyrene (1.2.7.8-Dibenzpyrene) 1,2-Dibromo-3-chloropropane (Propane, 1,2dibromo-3-chloro-)

1.2-Dibromoethane (Ethylene dibromide) Dibromomethane (Methylene bromide)
Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
Dichlorobenzene, N.O.S.\* (Benzene, dichloro-, N.O.S.\*)
3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-)

-diamine, 3,3'-dichloro-) 1,4-Dichloro-2-butene (2-Butene, 1,4-dichloro-) Dichlorodifluoromethane (Methane, dichlorodifluoro-) 1,1-Dichloroethane (Ethylidene dichloride) An and a ward and a web 1,2-Dichloroethane (Ethylene dichloride) trans-1,2-Dichloroethene (1,2-Dichloroethylene) Dichloroethylene, N.O.S.\* (Ethene, dichloro-, MAR'D N.O.S.\*) And the second 1-Dichloroethylene (Ethene, 1.1-dichloro-) Dichloromethane (Methylene chloride) 2,4-Dichlorophenol (Phenol, 2,4-dichloro-) 2,6-Dichlorophenol (Phenol, 2,6-dichloro-) 2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4dichlorophenoxy-, salts and esters) Dichlorophenylarsine (Phenyl dichloroarsine) 1,2-Dichloropropane (Propylene dichloride) Dichloropropanol, N.O.S.\* (Propanol, dichloro-, N.O.S.\*) Dichloropropene, N.O.S.\* (Propene, dichloro-N.O.S.\*) 1,3-Dichloropropene (1-Propene, 1,3-dichloro-) Dieldrin (1,2,3,4,10.10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo,exo-1.4:5,8-Dimethanonaphthalene) 1,2:3,4-Diepoxybutane (2,2'-Bioxirane) Diethylarsine (Arsine, diethyl-) N.N-Diethylhydrazine (Hydrazine, 1,2diethyl) O,O-Diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester

O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyrazinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Diethylstilbesterol (4.4'-Stilbenediol, alpha, alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-

methylenedioxy-4-propyl-) 3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-

hydroxy-2-(methylamino)ethyl]-) Diisopropylfluorophosphate (DFP)

(Phosphorofluoridic acid, bis(1methylethyl) ester) Dimethoate (Phosphorodithioic acid, O,O-

dimethyl S-[2-(methylamino)-2-oxoethyl] ester

3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4.4'diamine, 3-3'-dimethoxy-)

p-Dimethylaminoazobenzene (Benzenamine, N.N-dimethyl-4-(phenylazo)-)

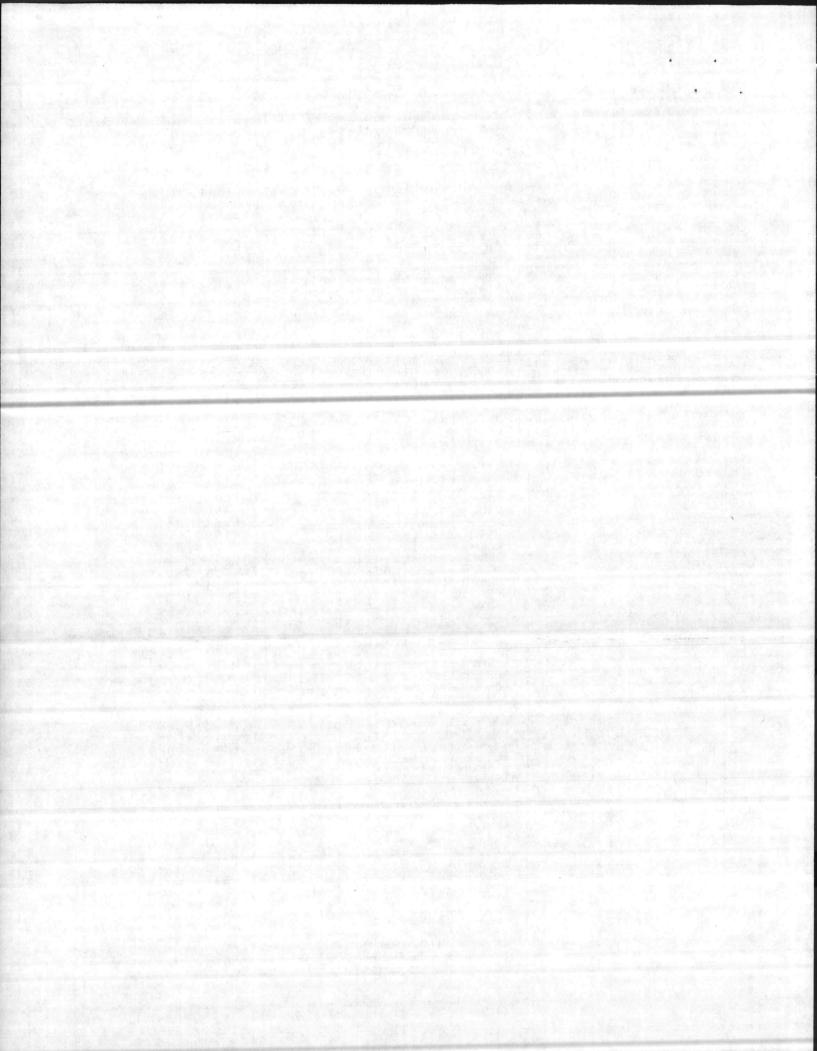
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-) . 3.3'-Dimethylbenzidine [[1.1'-Biphenyl]-4.4'diamine, 3.3'-dimethyl-] Dimethylcarbamoyl chloride [Carbamoyl

chloride, dimethyl-) 1,1-Dimethylhydrazine (Hydrazine, 1,1-

dimethyl-) 2-Dimethylhydrazine (Hydrazine, 1,2-[(methylamino) carbonyl]oxime (Thiofanox) alpha.alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl-) 2.4-Dimethylphenol (Phenol, 2.4-dimethyl-) Dimethyl phthalate (1,2-Benzenedicarboxylic acid, dimethyl ester) Dimethyl sulfate (Sulfuric acid, dimethyl ester) Dinitrobenzene, N.O.S.\* (Benzene, dinitro-• N.O.S.\*) 4,6-Dinitro-o-cresol and salts (Phenol. 2,4dinitro-6-methyl-, and salts) 2,4-Dinitrophenol (Phenol, 2,4-dinitro-) 2,4-Dinitrotoluene (Benzene, 1-methyl-2,4 dinitro-) 2,6-Dinitrotoluene (Benzene, 1-methyl-2,6dinitro-) Di-n-octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester) 1,4-Dioxane (1,4-Diethylene oxide) Diphenylamine (Benzenamine, N-phenyl-) 1,2-Diphenylhydrazine (Hydrazine, 1,2diphenyl-) Di-n-propylnitrosamine [N-Nitroso-di-npropylamine) interesting and in Long Disulfoton (O,O-diethyl S-[2-[ethylthio]ethyl] phosphorodithioate) 2,4-Dithiobiuret (Thioimidodicarbonic diamide) -----Endosulfan (5-Norbornene, 2,3-dimethanol, -1,4,5,6,7,7-hexachloro-, cyclic sulfite) Endrin and metabolites (1,2,3,4,10,10hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8aoctahydro-endo.endo-1.4:5.8dimethanonaphthalene, and metabolites) Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester) Ethyl cyanide (propanenitrile) . \* . \* 24.33 Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters Ethyleneimine (Aziridine) Ethylene oxide (Oxirane) Ethylenethiourea (2-Imidazolidinethione) Ethyl methacrylate (2-Propenoic acid, 2-. 1. methyl-, ethyl ester) Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester) Fluoranthene (Benzo[j.k]fluorene) · partia to section por Fluorine 2-Fluoroacetamide (Acetamide, 2-fluoro-) Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt) Formaldehyde (Methylene oxide) Formic acid (Methanoic acid) Glycidylaldchyde (1-Propanol-2,3-epoxy) Halomethane, N.O.S.\* Heptachlor (4,7-Methano-1H-indene,

1.4.5.6.7.8.8-heptachloro-3a.4.7.7atetrahydro-)

Heptachlor cpoxide (alpha, beta, and gamma isomers) (4.7-Methano-1H-indene. 1.4.5.6.7.8.8-heptachloro-2.3-epoxy-3a.4.7.7tetrahydro-, alpha, beta, and gamma isomers)



Hexachlorobenzene (Benzene, hexachloro-) Hexachlorobutadiene (1.3-Butadiene, 1.1.2.3.4.4-hexachloro-)

Hexachlorocyclohexane (all isomers) 1997 (Lindane and isomers) 12000

Hexachlorocyclopentadiene (1.3w1.4. Cyclopentadiene, 1.2.3.4.5,5-hexachloro-)

Hexachloroethane (Ethane, 1.1,1,2,2,2hexachloro-1 . .....

- 1.2.3.4.10.10-Hexachloro-1.4.4a.5.8.8a-1.94-1 hexahydro-1.4:5.8-endo.endo-dimethanonaphthalene ...... (Hexachlorohexahydro-endo,endo-
- dimethanonaphthalene) Ilexachlorophene (2.2'-Methylenebis(3,4,6-

and the set of the second s

trichlorophenol)) in any option Hexachloropropene (1-Propene, 1,1,2,3,3,3-

hexachloro-) and the second parts shows Hexaethyl tetraphosphate Tetraphosphoric

acid, hexacthyl ester] Hydrazine (Diamine) Hydrocyanic acid (Hydrogen cyanide) -12.5(4)

Hydrofluoric acid (Hydrogen fluoride) Hydrogen sulfide (Sulfur hydride)

Hydroxy dimethylarsine oxide (Cacodylic acid)

acid) Indeno(1,2,3-cd)pyrene (1,10-(1,2-Section Section

phenylene)pyrene) phenylene)pyrene) Iodomethane (Methyl iodide) Iron dextran (Ferric dextran)

Isocyanic acid, methyl ester (Methyl isocyanate) - Wattatit Isobutyl alcohol (1-Propanol, 2-methyl-)

Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)

Kepone (Decachlorooctahydro-1,3,4-Methano-- 2H-cyclobuta[cd]pentalen-2-one)

- Lasiocarpine (2-Butenoic acid, 2-methyl-, 7-[(2,3-dihydroxy-2-[1-methoxyethyl]-3methyl-1-oxobutoxy)methyl]-2,3,5,7a-141 tetrahydro-1H-pyrrolizin-1-yl ester) Lead and compounds, N.O.S.\* Lead acetate (Acetic acid, lead salt) Lead phosphate (Phosphoric acid, lead salt)
- Lead subacetate (Lead, bis[acetato- .... O)tetrahydroxytri-)
- Maleic anhydride (2.5-Furandione) 14.161 Maleic hydrazide (1,2-Dihydro-3,6-مناقبة المحاجبة المحاجة

pyridazinedione) Malononitrile (Propanedinitrile)

- Melphalan (Alanine, 3-[p-bis(2chloroethyl)amino]phenyl-, L-)
- Mercury fulminate (Fulminic acid, mercury salt)

Mercury and compounds, N.O.S.\*

- Methacrylonitrile (2-Propenenitrile, 2-methyl-
- Methanethiol (Thiomethanol)
- Methapyrilene (Pyridine, 2-[(2dimethylaminolethyl]-2-thenylamino-1
- Metholmyl (Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
- Methoxychlor (Ethane, 1,1,1-trichloro-2,2'bis(p-methoxyphenyl)-)
- 2-Methylaziridine (1,2-Propylenimine)
- 3-Methylcholanthrene (Benz[j]aceanthrylene. 1.2-dihydro-3-methyi-)
- Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)
- 4.4'-Methylenebis(2-chloroaniline) (Benzenamine, 4.4'-methylenebis-(2-chloro-)

Methyl ethyl ketone (MEK) (2-Butanone) Methyl hydrazine (Hydrazine, methyl-) 2-Methyllactonitrile (Propanenitrile, 2-

hydroxy-2-methyl-)

Methyl methacrylate (2-Propenoic acid, 2methyl-, methyl ester)

Methyl methanesulfonate (Methanesulfonic acid, methyl ester)

2-Methyl-2-(methylthio)propionaldchyde-o-(methylcarbonyl) oxime (Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime] N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitroso-N-methyl-N'-nitro-) Methyl parathion (O.O-dimethyl O-(4nitrophenyl) phosphorothioate) 1.2.1.1 Methylthiouracil (4-1H-Pyrimidinone, 2,3dihydro-6-methyl-2-thioxo-) Mustard gas (Sulfide, bis(2-chloroethyl)-) Naphthalene 1.4-Naphthoquinone (1.4-Naphthalenedione) 1-Naphthylamine (alpha-Naphthylamine) 2-Naphthylamine (beta-Naphthylamine) 1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-) Nickel and compounds, N.O.S.\* Nickel carbonyl (Nickel tetracarbonyl) Nickel cyanide (Nickel (II) cyanide) Nicotine and salts (Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl]-, and salts] Nitric oxide (Nitrogen (II) oxide) p-Nitroaniline (Benzenamine, 4-nitro-) Nitrobenzine (Benzene, nitro-) Nitrogen dioxide (Nitrogen (IV) oxide) Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt) Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2chloroethyl)-N-methyl-, and hydrochloride salt) ters with a troup of chast water and Nitroglycerine (1,2,3-Propanetriol, trinitrate) 4-Nitrophenol (Phenol, 4-nitro-) 4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1oxide-) Nitrosamine, N.O.S.\* N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-) N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-) N-Nitrosodiethylamine (Ethanamine, N-ethyl-N-nitroso-) a dia xeedin a.w. N-Nitrosodimethylamine (Dimethylnitrosamine) N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-) and and all the states N-Nitrosomethylethylamine (Ethanamine, Nmethyl-N-nitroso-) N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-) N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester) N-Nitrosomethylvinylamine (Ethenamine, Nmethyl-N-nitroso-) 5. a tan di staj ana kat N-Nitrosomorpholine (Morpholine, N-nitroso-N-Nitrosonornicotine (Nornicotine, Nnitroso-) N-Nitrosopiperidine (Pyridine, hexahydro-, Nnitroso-)

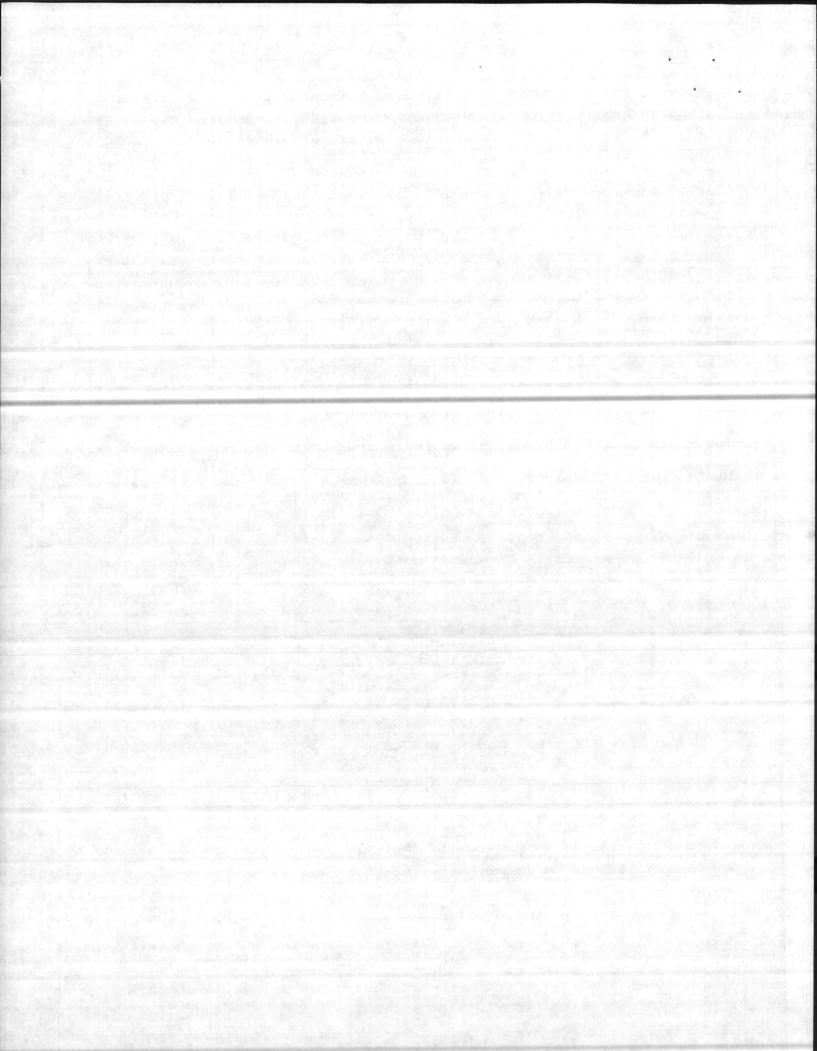
- Nitrosopyrrolidine (Pyrrole, tetrahydro-, Nnitroso-)
- N-Nitrososarcosine (Sarcosine, N-nitroso-)
- 5-Nitro-o-toluidine (Benzenamine, 2-methyl-5nitro-)
- Octamethylpyrophosphoramide (Diphosphoramide, octamethyl-)
- Osmium tetroxide (Osmium (VIII) oxide) 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid (Endothal)
- Paraldehyde (1.3.5-Trioxane, 2.4.6-trimethyl-) Parathion (Phosphorothioic acid, O,O-diethy) O-(p-nitrophenyl) ester

Pentachlorobenzene (Benzene, pentachloro-) Pentachloroethane (Ethane, pentachloro-) Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-) Pentachlorophenol (Phenol, pentachloro-) Phenacetin (Acetamide, N-(4-ethoxyphenyl)-) Phenacetin (Acetamine, Marchane) Phenol (Benzene, Benzenediamine) Phenylmercury acetate (Mercury, acetatophenyl-)

N-Phenylthiourea (Thiourea, phenyl-) Phosgene (Carbonyl chloride) Phosphine (Hydrogen phosphide)

Phosphine (Hydrogen phosphilae) Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester (Phorate) Phosphorothioic acid, O,O-dimethyl O-[p-[[dimethylamino]sulfonyl]phenyl] ester (Famphur) Phthalic acid esters, N.O.S.\* (Benzene, 1,2dicarboxylic acid, esters, N.O.S.\*) Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride (1,2-benzenenicarboxylic 2-Picoline (Pyridine, 2-methyl-) Polychlorinated biphenyl, N.O.S. Potassium cyanide Potassium silver cyanide (Argentate(1-), dicyano, potassium) Pronamide (3.5-Dichloro-N-[1,1-dimethyl-2propynyl)benzamide) 1,3-Propane sultone (1,2-Oxathiolane, 2,2- .... n-Propylamine (1-Propanamine) Propylthiouracil (Undecamethylenediamine, N,N'-bis[2-chlorobenzyl]-, dihydrochloride] 2-Propyn-1-ol (Propargyl alcohol) Reserpine (Yohimban-16-carboxylic acid, -== 2 11,17-dimethoxy-18-[[3,4,5- 34010:3531412. itrimethoxybenzoyl]oxy]-, methyl ester] Resorcinol (1,3-Benzenediol) Saccharin and salts (1,2-Benzoisothiazolin-3one, 1,1-dioxide, and salts) Safrole (Benzene, 1,2-methylenedioxy-4-allyl-) Selenious acid (Selenium dioxide) Selenium and compounds, N.O.S. Selenium sulfide (Sulfur selenide) Selenourca (Carbamimidoselenoic acid) Silver and compounds, N.O.S.\* Silver cyanide Sodium cyanide

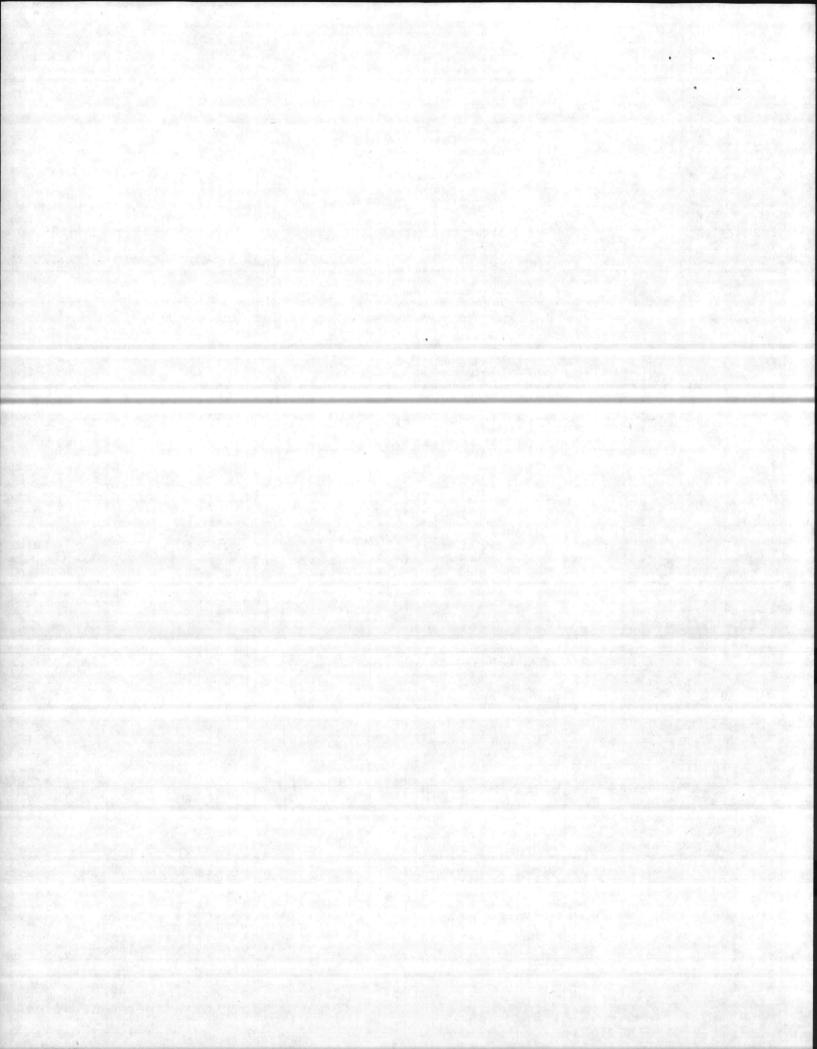
- Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-) Strontium sulfide
- Strychnine and salts [Strychnidin-10-one, and salts) 2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5
- tetrachloro-) 3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
- (Dibenzo-p-dioxin, 2,3.7,8-tetrachloro-)
- Tetrachloroethane, N.O.S.\* (Ethane, tetrachloro-, N.O.S.\*)
- 1,1,2-Tetrachlorethane (Ethane, 1,1,1,2tetrachloro-)
- 1.2.2-Tetrachlorethane (Ethane, 1,1,2,2tetrachloro-)
- Tetrachlorethane (Ethene, 1,1,2,2-tetrachloro-)
- Tetrachloromethane (Carbon tetrachloride)
- 2,3,4,6,-Tetrachlorophenol (Phenol, 2,3,4,6tetrachloro-)
- Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-
- ester)
- Tetraethyl lead (Plumbane. tetraethyl-) Tetraethylpyrophosphate (Pyrophosphoric acide, tetraethyl ester)



Tetranitromethane (Methane, tetranitro-) Thallium and compounds. N.O.S. Thallic oxide (Thallium (III) oxide) Thallium (I) acetate (Acetic acid. thallium (I) salt) Thallium (I) carbonate (Carbonic acid. dithallium (I) salt) Thallium (I) chloride Thallium (I) nitrate (Nitric acid, thallium (I) salt) · Thallium selenite Thallium (I) sulfate (Sulfuric acid, thallium (I) salt) Thioacetamide (Ethanethioamide) Thiosemicarbazide -(Hydrazinecarbothioamide) Thiourea (Carbamide thio-) Thiuram (Bis(dimethylthiocarbamoyl) disulfide) Toluene (Benzene, methyl-) Toluenediamine (Diaminotoluene) o-Toluidine hydrochloride (Benzenamine, 2methyl-, hydrochloride) Tolylene diisocyanate (Benzene, 1.3-diisocyanatomethyl-) Toxaphene (Camphene, octachloro-) Tribromomethane (Bromoform) 1.2.4-Trichlorobenzene (Benzene. 1.2.4trichloro-) 1,1.1-Trichloroethane (Methyl chloroform) 1,1.2-Trichloroethane (Ethane, 1,1.2-trichloro-) Trichloroethene (Trichloroethylene) Trichloromethanethiol (Methanethiol. trichloro-) Trichloromonofluoromethane (Methane, trichlorofluoro-) 2.4.5-Trichlorophenol (Phenol. 2,4.5-trichloro-) 2.4.6-Trichlorophenol (Phenol, 2.4.6-trichloro-) 2.4.5-Trichlorophenoxyacetic acid (2.4.5-1) (Acetic acid, 2.4.5-trichlorophenoxy-) 2.4.5-Trichlorophenoxypropionic acid (2.4,5-TP) (Silvex) (Propionoic acid, 2-(2,4,5trichlorophenoxy)-) Trichloropropane. N.O.S.\* (Propane. trichloro-, N.O.S.\*) 1.2.3-Trichloropropane (Propane, 1.2.3trichloro-) O.O.O-Triethyl phosphorothioate (Phosphorothioic acid, O.O.O-triethyl ester) sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-) Tris(1-azridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl-) Tris(2.3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate (1-Propanol, 2,3-dibromo-, phosphate) Trypan blue (2,7-Naphthalenedisulfonic acid, 3.3'-[(3.3'-dimethyl(1,1'-biphenyl)-4.4'diyl)bis(azo)]bis(5-amino-4-hydroxy-. tetrasodium salt) Uracil mustard (Uracil 5-[bis(2chloroethyl]amino]-) Vanadic acid, ammonium salt (ammonium vanadate) Vanadium pentoxide (Vanadium (V) oxide) Vinyl chloride (Ethene, chloro-)

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Zinc cyanide Zinc phosphide



### DRAFT ORDER

BI1:RCY:mmg

ENCLOSURE

From: Commanding General To: Distribution

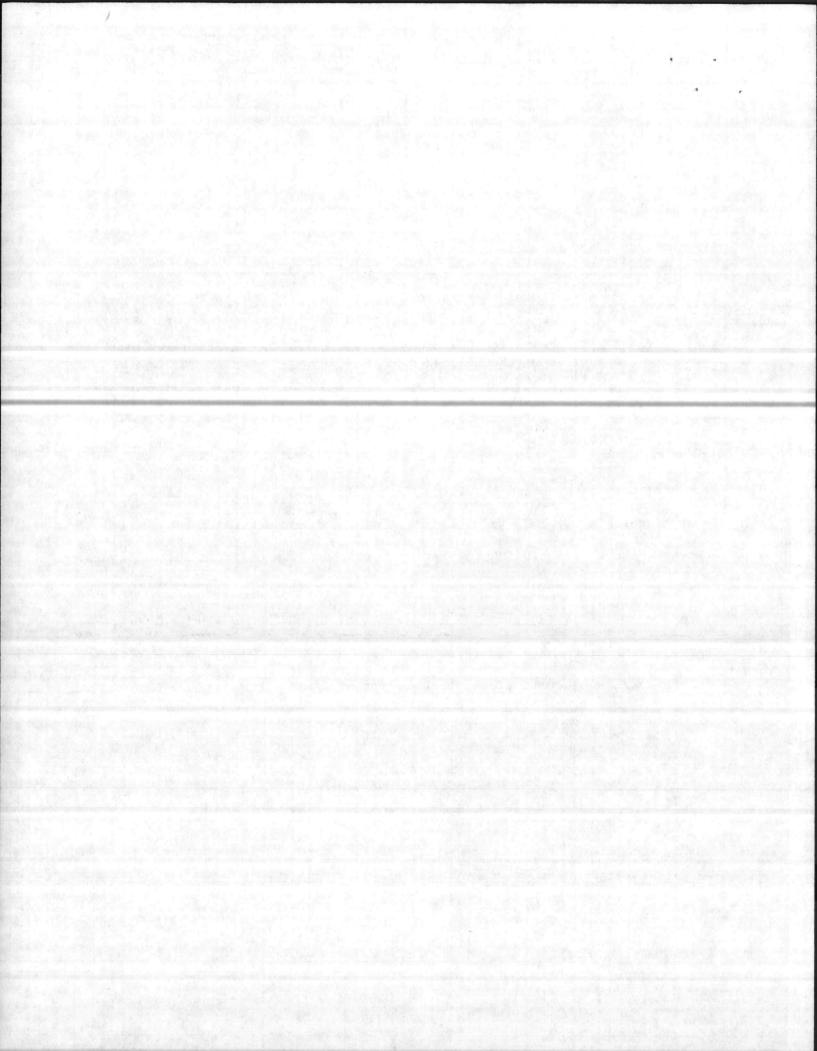
Subj: Reporting releases of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)
Ref: (a) The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-57
(b) MCO P11000.8A

Encl: (1) List of hazardous substances subject to CERCLA release reporting requirements

1. <u>Background</u>. In 1980, Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), reference (a), which is applicable to not only private individuals and corporations, but the United States Government, including the Marine Corps, and its officers and employees. CERCLA provides that all "releases" into "the environment" of the substances listed in enclosure (1) must be immediately reported to the National Response Center. Failure to make the report required by CERCLA is a criminal offense. Violators are subject to prosecution in United States District Court or under the Uniform Code of Military Justice, as appropriate.

2. Information. The following definitions apply:

a. <u>Release</u> means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.



b. <u>Environment</u> means navigable waters, any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States. It specifically includes all parts of Camp Pendleton.

c. <u>Report</u> means to inform the designated CERCLA Report Officer as soon as possible, either by telephone or other expeditious means, of any release of a hazardous substance.

d. <u>Hazardous substance(s)</u> means all of those materials listed in enclosure
 (1) in the quantities listed.

# 3. Action.

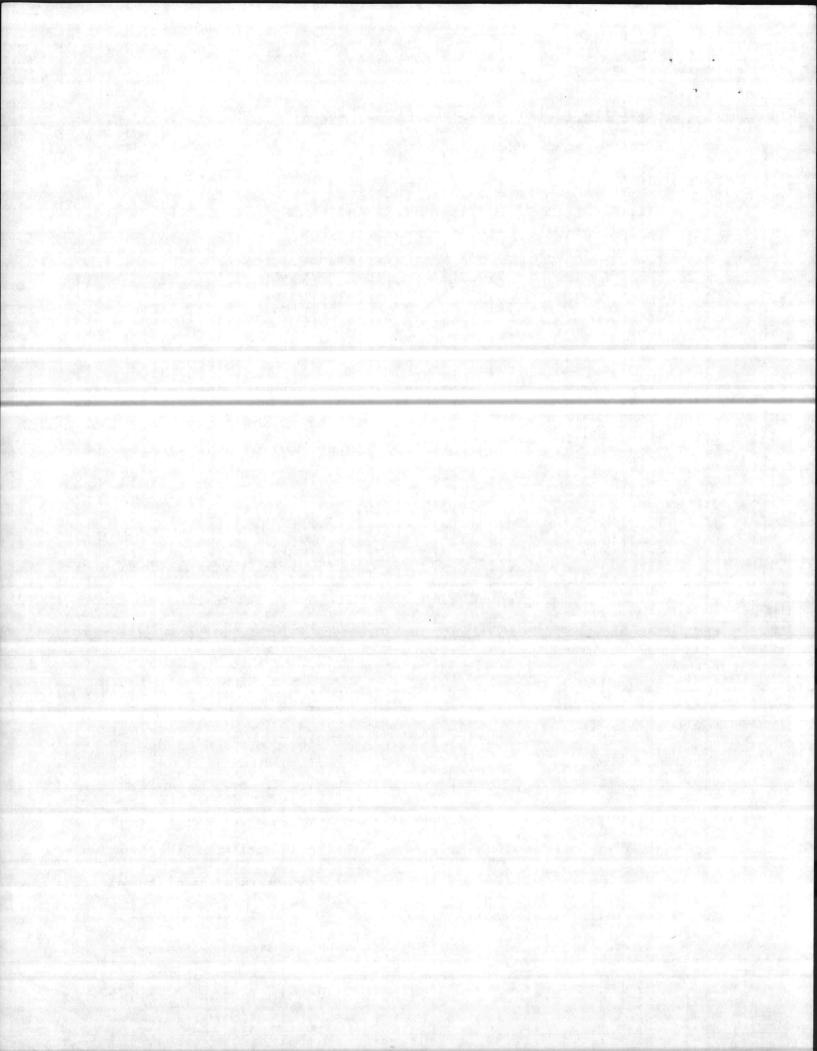
a. All persons at Marine Corps Base, Camp Pendleton, having knowledge of a release of any of the hazardous substances listed on enclosure (1) shall report the matter as soon as possible to the Director, Natural Resources Office at Building 25154, telephone 4512.

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b. Director, Natural Resources Office

(1) The Director, NRO, is the CERCLA Report Officer. He shall receive reports of releases of hazardous material. Upon verifying the location of any reported release and the identity, date, time and quantity of the hazardous substance released, the Director, NRO, will report all releases in reportable quantitites to the National Response Center. The initial report will be by

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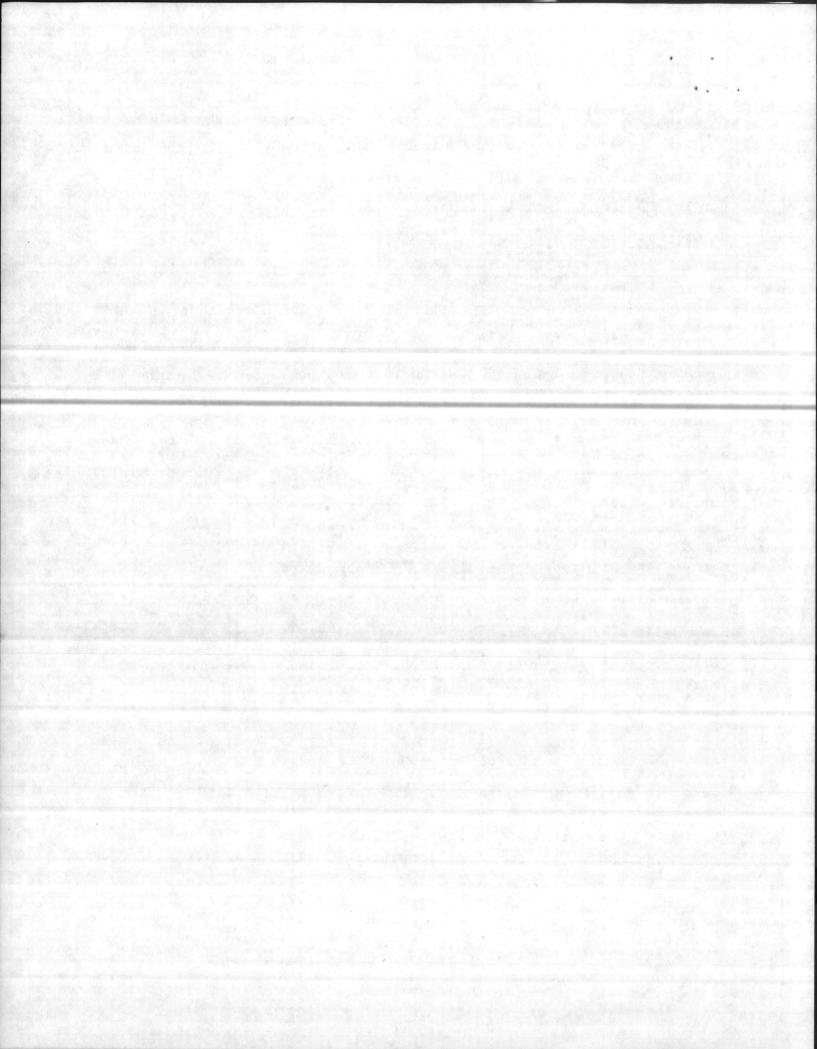


telephone, (800) 424-8802, with confirmation by message. See Figure P-2 of reference (b) for format. The Director, NRO, will also notify the Assistant Chief of Staff, Facilities, and the Director, Joint Public Affairs Office, upon verification of a reportable release. The Director, NRO, will also initiate action in accordance with the Spill Contingency Plan (SCP).

(2) The Director, NRO, shall maintain a permanent log of all CERCLA reports received. This log shall indicate the date and time a CERCLA report is received, the name and quantity of the hazardous substance, the location of the release, the name, rank, duty address, and telephone number of the individual making the report, the date and time the release was reported to the National Response Center, and the name of the individual contacted at the National Response Center.

c. The Director, JPAO, will take appropriate public affairs action upon receipt of a verified report of a release in a reportable quantity and will make liaison with the Director, NRC, and with the Assistant Chief of Staff, Staff Judge Advocate to determine if a notice of the release must be published in a local newspaper.

4. <u>Dissemination</u>. A copy of this order shall be delivered to all persons who work with hazardous substances. A copy of this order will be posted on appropriate bulletin boards and will be made a part of turn-over files for billets designated by the Assistant Chief of Staff, Facilities, and the Assistant Chief of Staff, Logistic and Supply Services.



5. <u>Application</u>. By previous agreement this order applies to all commands and tenant activities at Camp Pendleton, California, and to all persons on the installation.

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W. J. WOODRING, JR. Chief of Staff

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DISTRIBUTION:

