

FILE FOLDER

DESCRIPTION ON TAB:

11330 Water Treatment

(GENERAL) 1983 (83)

- Outside/inside of actual folder did not contain hand written information
- Outside/inside of actual folder did contain hand written information
*Scanned as next image

11330 WATER TREATMENT (GENERAL) (83)

OPEN

CLOSED

JAN 1985 - DESTROY
SECNAVINST 5215.5B, Part II
Chap. 11, par. 11300(2) 2 year ✓

MAIN/WRP/shk
11330
28 June 1983

Mr. John Klein
McKim Creed Engineers
224 N. Front Street
Wilmington, North Carolina 28401

Dear Mr. Klein:

As per your request, I am sending you all of the available raw water analysis; you will notice this is only a partial list of what you asked for. Several of these wells are no longer in use and are being replaced very soon. I hope the enclosed will give an indication of what you are looking for. If I can be of further service to you, please call (919) 451-1081.

Yours truly,

Willard R. Price
Utility Systems General Foreman

Enclosures

100-100000-100000
100-100000-100000
100-100000-100000

100-100000-100000
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WRP

RAY STURGILL & ASSOCIATES, INC.

1875 I-85 SOUTH, CHARLOTTE, NORTH CAROLINA 28208, (704) 392-5301

July 8, 1983

US Marine Corps Base
Camp Lejeune, NC 28542

Attention: Mr. Ronnie Vick--Hadnot Point Water
Treatment Plant

Subject: Foxboro Recorder Charts
T. T. Elevated Tank

Gentlemen:

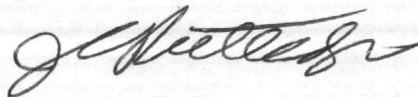
Thank you for sending us the charts from this recorder. We have made copies for our records and are returning the originals to you.

They look good except for some questionable excursions on June 21 and 24 as you point out. I suggest for the present that you keep an eye on this instrument and see if this type action clears up, or becomes more serious. It would be helpful if you could check for telephone line conditions if you could check it while you were seeing questionable operation.

We certainly appreciate your help and cooperation on this project.

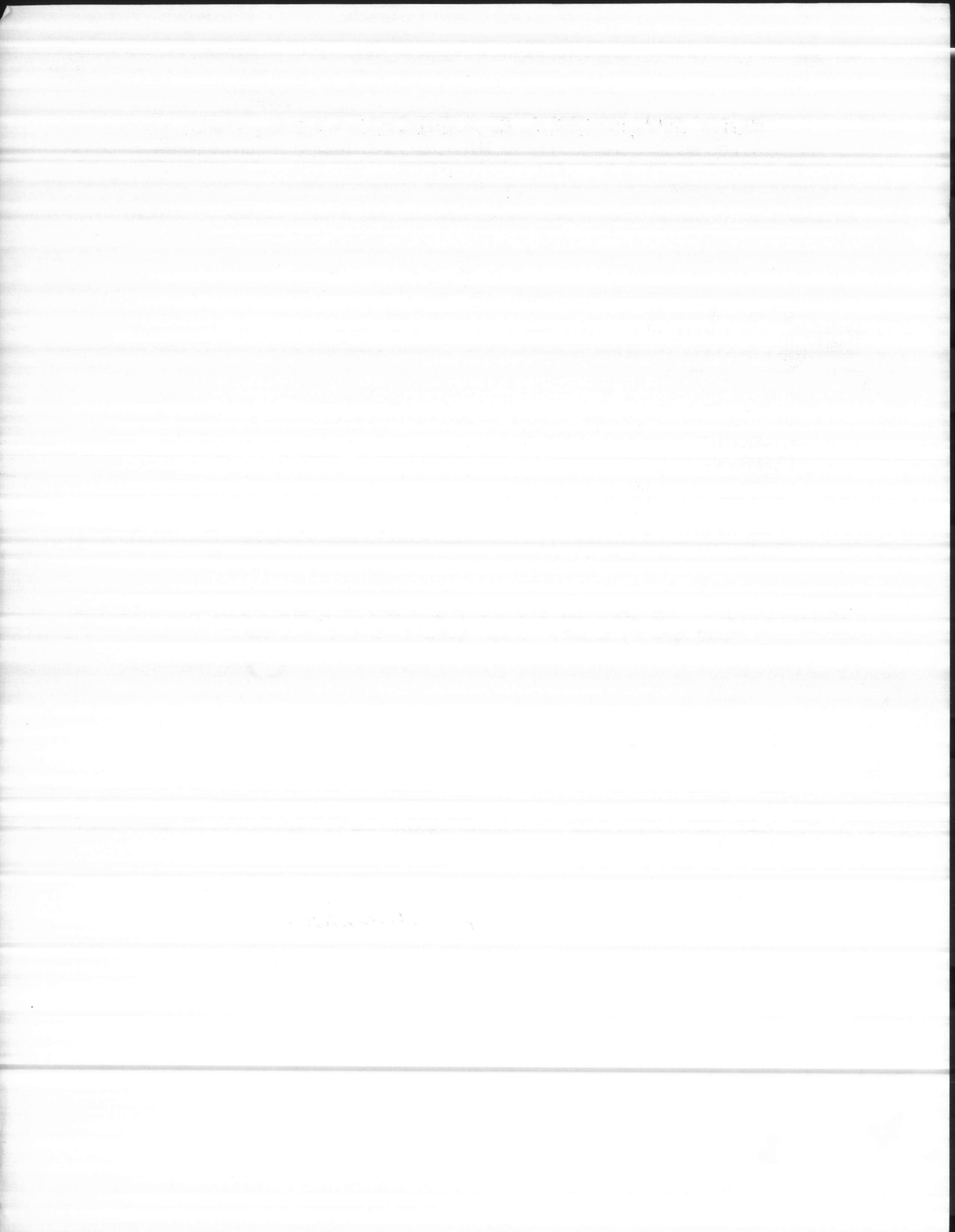
Very truly yours,

RAY STURGILL AND ASSOCIATES, INC.



John C. Rutledge

JCR:kc
Enclosures--Charts



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

jm
DB

MAIN/CL/cb
4330
11 March 1983

From: Base Maintenance Officer
To: Resident Officer in Charge of Construction

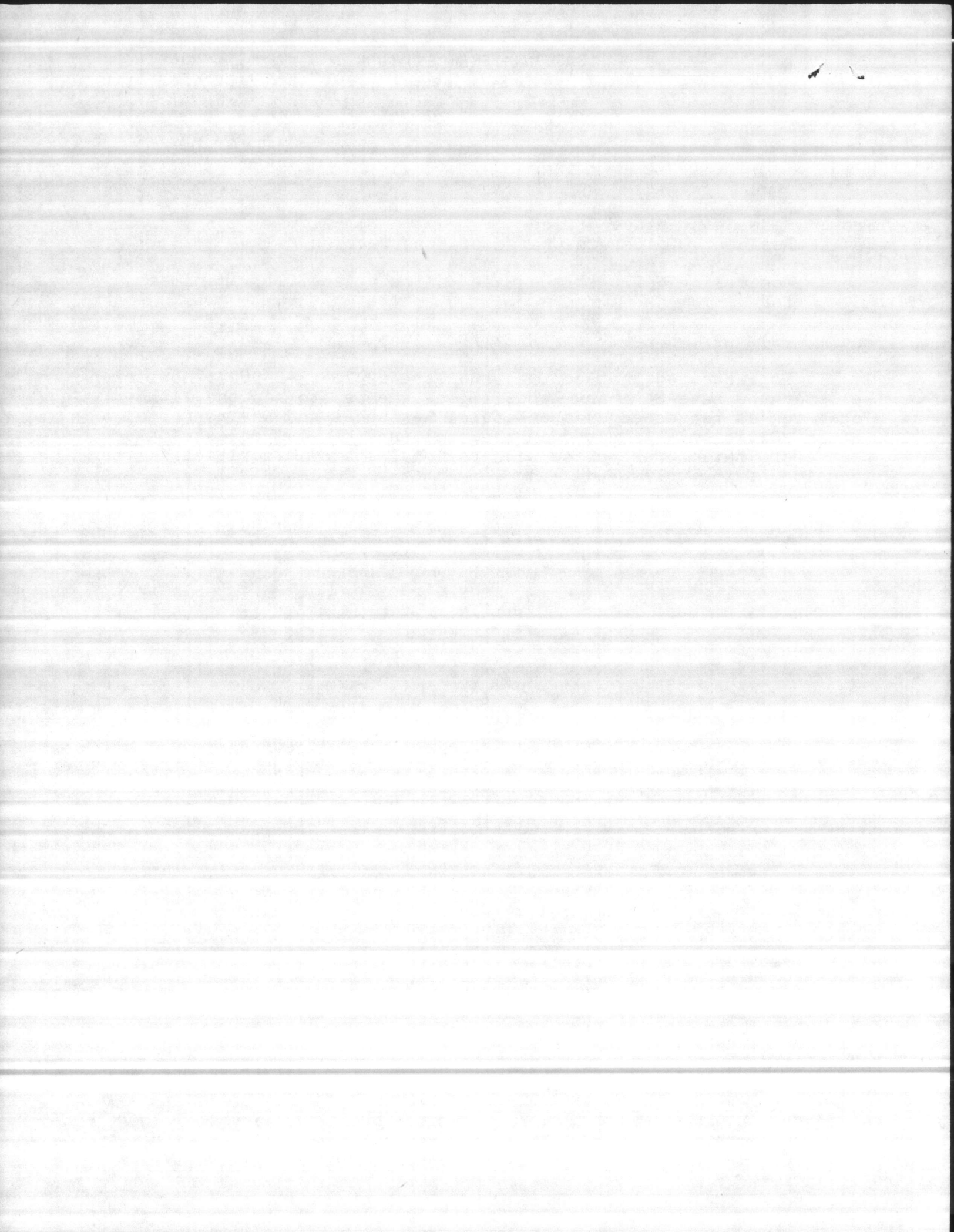
Subj: Monitoring Wells at the Base Sanitary Landfill; amendment
for

Encl: (1) Dir, NREADIV ltr NREAD/DDS/jvc 11350/1 dtd 7 Mar 1983

1. It is requested that contract number N62470-83-B-5827, Monitoring Wells at the Base Sanitary Landfill, be amended to add the lithologic log as requested by the Natural Resources and Environmental Affairs Division. As noted in the enclosure, it is requested also that coordination take place with regional state authorities in the location of the wells.

R.M. Dillon
R. M. DILLON
By direction

Cy to util



NATURAL RESOURCES AND ENVIRONMENTAL AFF. S DIVISION
Marine Corps Base.
Camp Lejeune, North Carolina 28542

NREAD/DDS/jvc
11350/1
7 March 1983

From: Director
To: Base Maintenance Officer

Subj: Monitoring Wells at the Base Sanitary Landfill; specifications for

Ref: (a) FONECON btwn Mr. Mike March, N. C. Dept of NatRes and ComDev and
Mr. D. Sharpe, NREAD on 3 Mar 1983

Encl: (1) NAVFAC Drawings No. 4080743 and Related Specifications

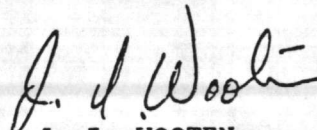
1. The enclosure has been reviewed by NREAD, as requested by Mr. Carl Loop of your office. It is recommended that the following be added to the general notes of the enclosure per guidance obtained during the reference.

"5. Maintain a lithologic log of the formations penetrated and take samples (approximately one quart) of each formation. Log and samples will be turned over to the government."

2. Because of the purpose of the wells, it is important that a qualified firm experienced in construction of monitoring wells be utilized. The following were identified by Mr. March, who advised that many established well-drilling contractors were qualified.

- a. Soil and Material Engineering, Inc., P. O. Box 58069
Raleigh, NC 27658
- b. Low Engineering Testing Co., 2001 Winton Road, Raleigh, NC 27604.
- c. Soil Testing Service of Carolina, Inc., P. O. Box 12015
Research Triangle Area

3. It is recommended that the importance of close supervision of the construction by the PWO/ROICC be stressed. If possible, involvement of regional state authorities in staking exact construction spot should be utilized. Water quality data generated from these wells may have major impact on the command at a future date; consequently, quality control during construction is essential.


J. I. WOOTEN

Copy to:
PWO

ENCLOSURE |||

18 Feb 1983

MEMO TO FILE:

A discussion was held with Jerry Augst (Austin, Brockenbrough and Associates, ext. 804-748-8746) regarding fly larvae in the filters at Building 670. Mr. Augst designed the pollution abatement project to recirculate backwash water. I informed him of our problem and indicated our intention of sending the backwash water from the holding pond to the sanitary sewage system. He saw no problem with doing this as long as the lift stations and plants could handle the additional load.

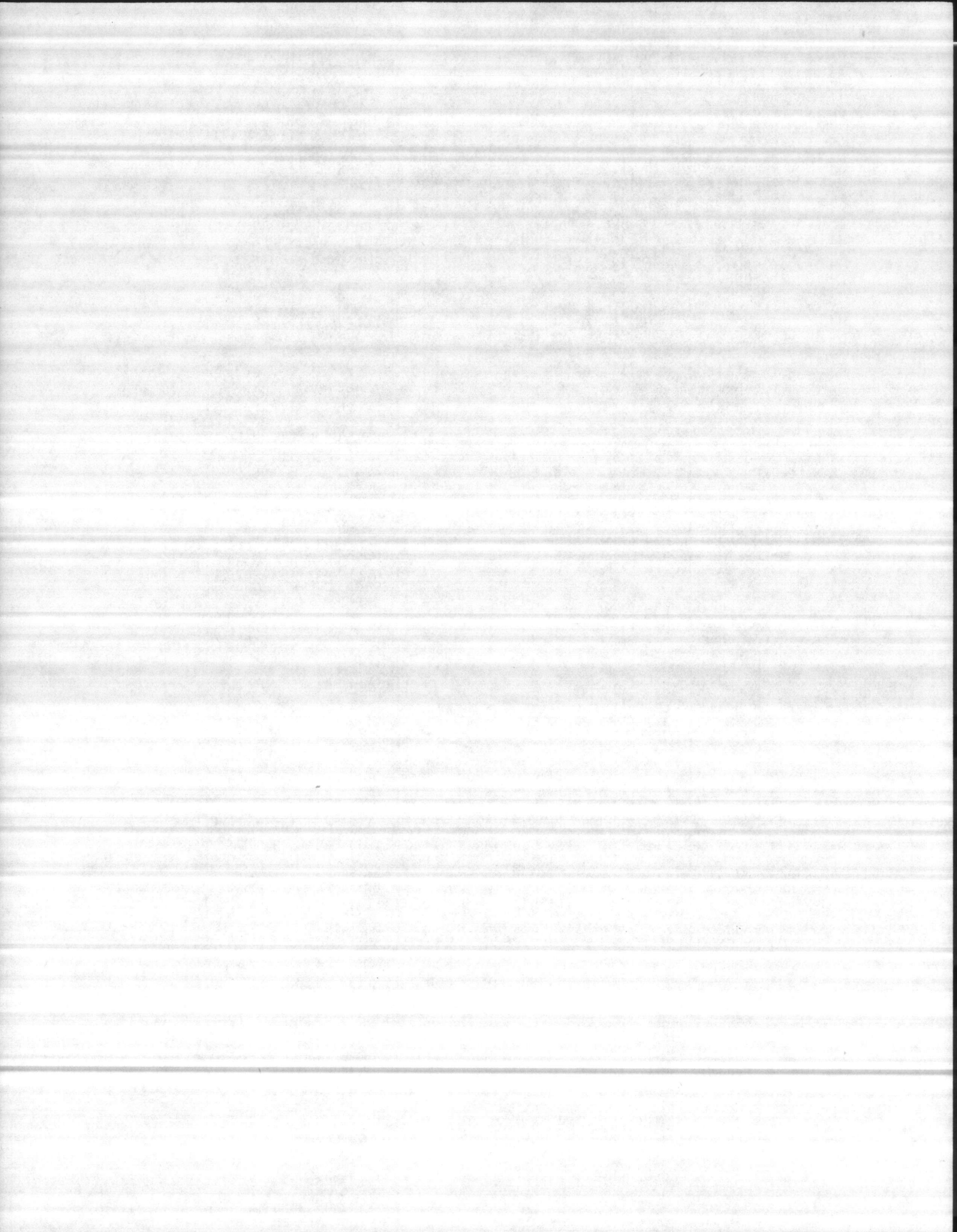
Mr. Augst also feels that the same solution could be applied to MCAS(H) backwash water.

Mr. Augst stated the main reason they designed the system to recirculate backwash water was that the project called for this type of design. There will be some additional costs in treating the backwash water via the sanitary sewage system.

F. E. Cone
F. E. CONE

Copy to:
Shops 83/84

File - 7



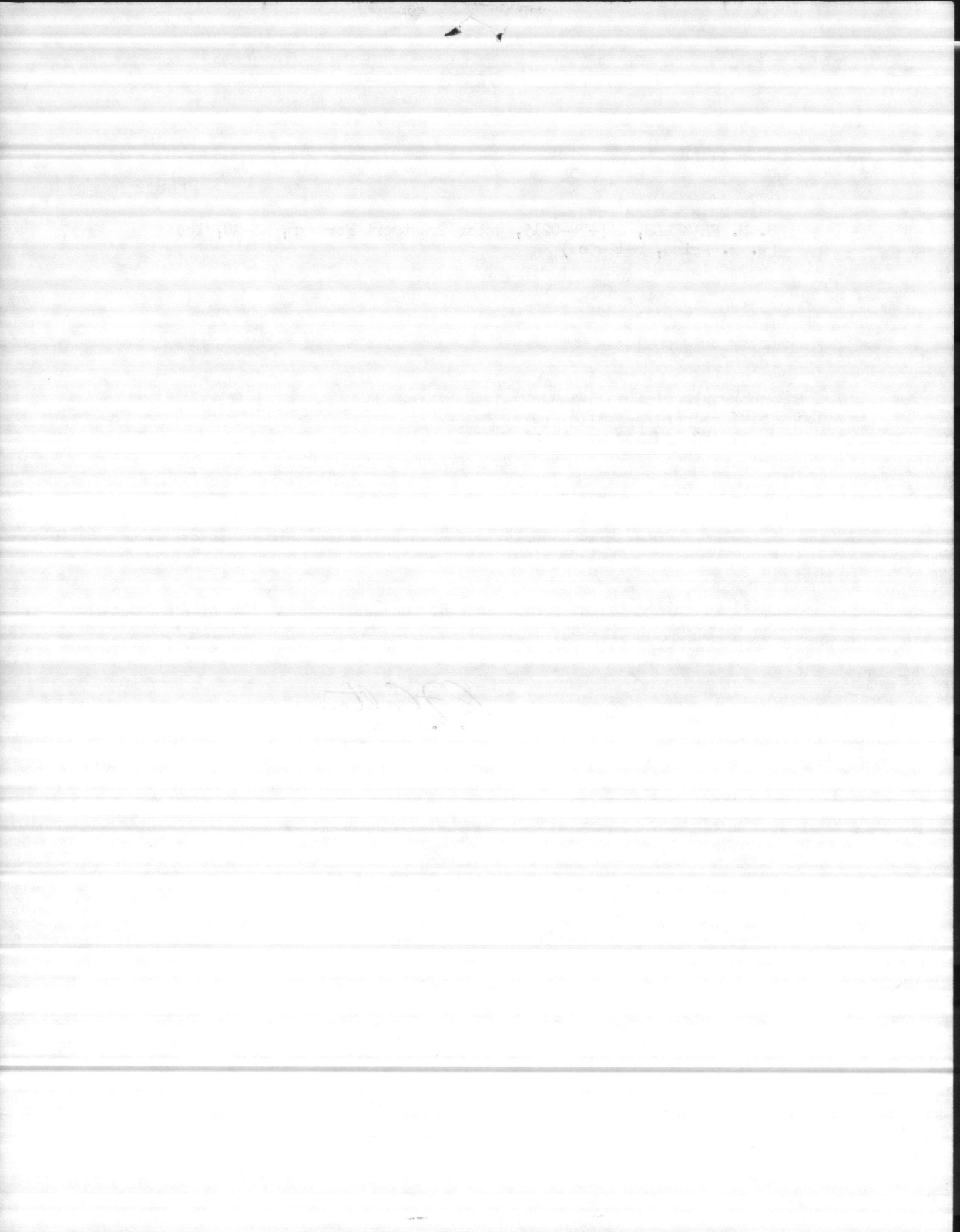
BASE MAINTENANCE DIVISION
Marine Corps Base
Camp Lejeune, North Carolina 28542

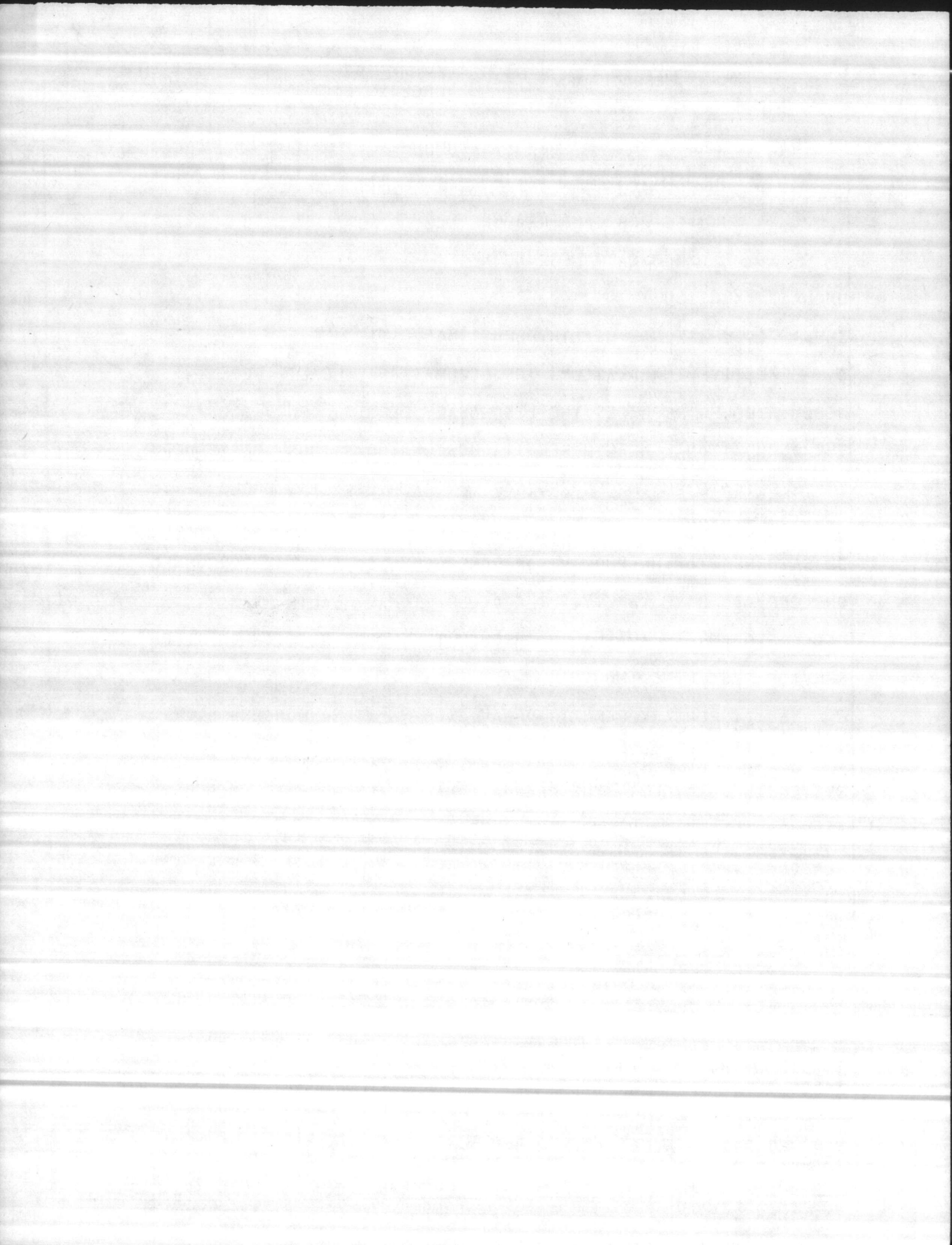
MAIN/BCR/jik
4400
FEB 2 5 1983

From: Base Maintenance Officer
To: B. M. FRAZELLE, 245-78-0215, Water Treatment Foreman, WS-10, Vice
(W. R. Price, relieved)
Subj: Responsible Officer; appointment of
Ref: (a) BO P4400.17
(b) MO 4400.1
(c) MCO P4400.19
(d) MCO P12000.7

1. In accordance with references (a) and (b) you are hereby appointed as responsible officer for all property issued and assigned to Base Maintenance Sub-Account # 83 (Water Treatment). By this appointment you have custodial responsibility for all property issued to sub-account 83.
2. As outlined in Chapter 2 Part "G" of reference (c), Government Property will not be loaned to any individual Marine/Civilian for their personal use on or off Base. Policy governing the issue of basic tools to employees for their trades required for a particular job assignment is contained in reference (d).
3. You will be guided in the performance of your duties by the contents of Section II of reference (b) and instructions issued from time to time by the Base Maintenance Property Officer.


R. F. CALTA





7

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

Atul, Dir.

MAIN/RES/jik
5000
2 May 1983

From: Base Maintenance Officer
To: Distribution List

Subj: Telephone Beepers; assignment of

Encl: (1) List of Telephone Beepers

1. The enclosure contains a current listing of telephone beepers assigned to Base Maintenance. Directors should review the listing to ensure that maximum utilization is obtained in beeper assignment. Any beepers not deemed completely necessary for work requirements should be turned in to the Property Management Section for issue to other sections requiring their use.

2. It should be noted that all available telephone lines dedicated for beeper use are being utilized and the Telephone Division has no plans for enlarging this capability. Therefore, any beepers now on order will be assigned duplicate numbers with those noted in the enclosure.

3. Effective immediately no further telephone beepers will be ordered without the expressed approval of the Assistant Base Maintenance Officer.

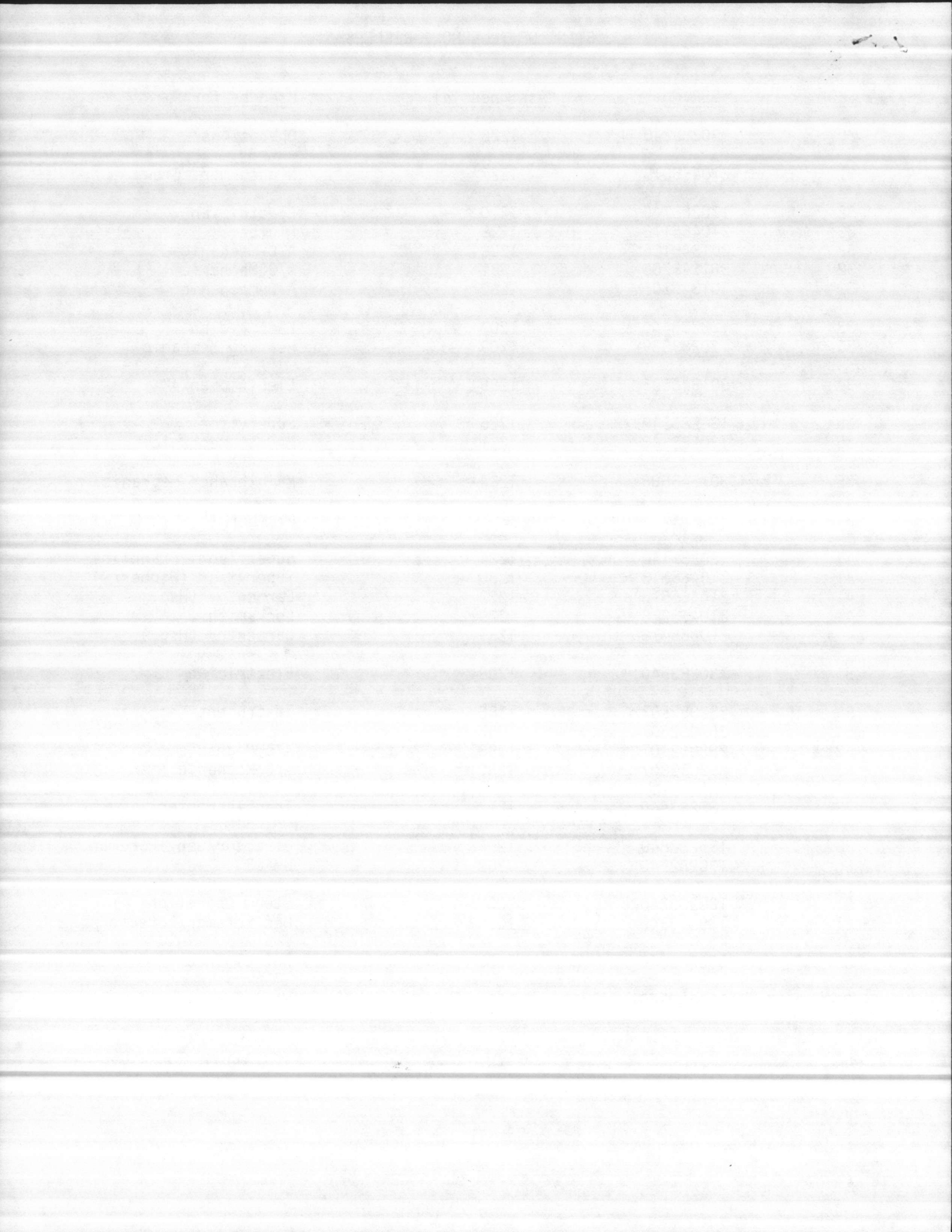
R. E. Scales
R. E. SCALES
By direction

Distribution: C
Prop Mgmt



LISTING OF TELEPHONE BEEPERS

<u>SHOP</u>	<u>SER. NO.</u>	<u>Assigned Tel #</u>	<u>Used by/for</u>
20	130285240	1225	Operations
31	210465018	1227	Night Emer. Crew
32	130283740	1210	Electrician
32	210465118	1228	Plumber
32	301345106	1280	A/C Mechanic
32	301345206	1281	A/C Mechanic
32	301345306	1282	A/C Mechanic
33	130283440	1207	Electrician
33	130283639	1209	Heating Mechanic
34	301345606	1285	Electrician
35	130285340	1226	Supervisor
35	130283840	1211	Maint. Mechanic
36	301345506	1284	Maintenance Mechanic
37	301345704	1283	Plumber
41	130285140	1224	Supervisor (Franklin)
41	210465318	1230	Supervisor (Winberry)
41	210465518	1232	Carpentry (Hsg.)
41	210465218	1229	Locksmith
41	210465418	1231	Carpentry (Hsg.)
51	130283540	1208	Electrician.
53	252052507	1286	Instrument Mechanic
53	252052607	1287	A/C Mechanic
53	252052707	1288	A/C Mechanic
53	252052807	1289	A/C Mechanic
72	130283940	1212	Troubleshooter
80	130282840	1201	Director/Gen. Foreman
80	130282940	1202	UMACS
81	130283240	1205	Steam Operations
81	130213340	1206	Gen Foreman/Foreman
83	130283040	1203	Patrol Truck
84	130283140	1204	Well Truck



-123/84
jm

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

MAIN/DKM/dkm
4330/6
3 November 1982

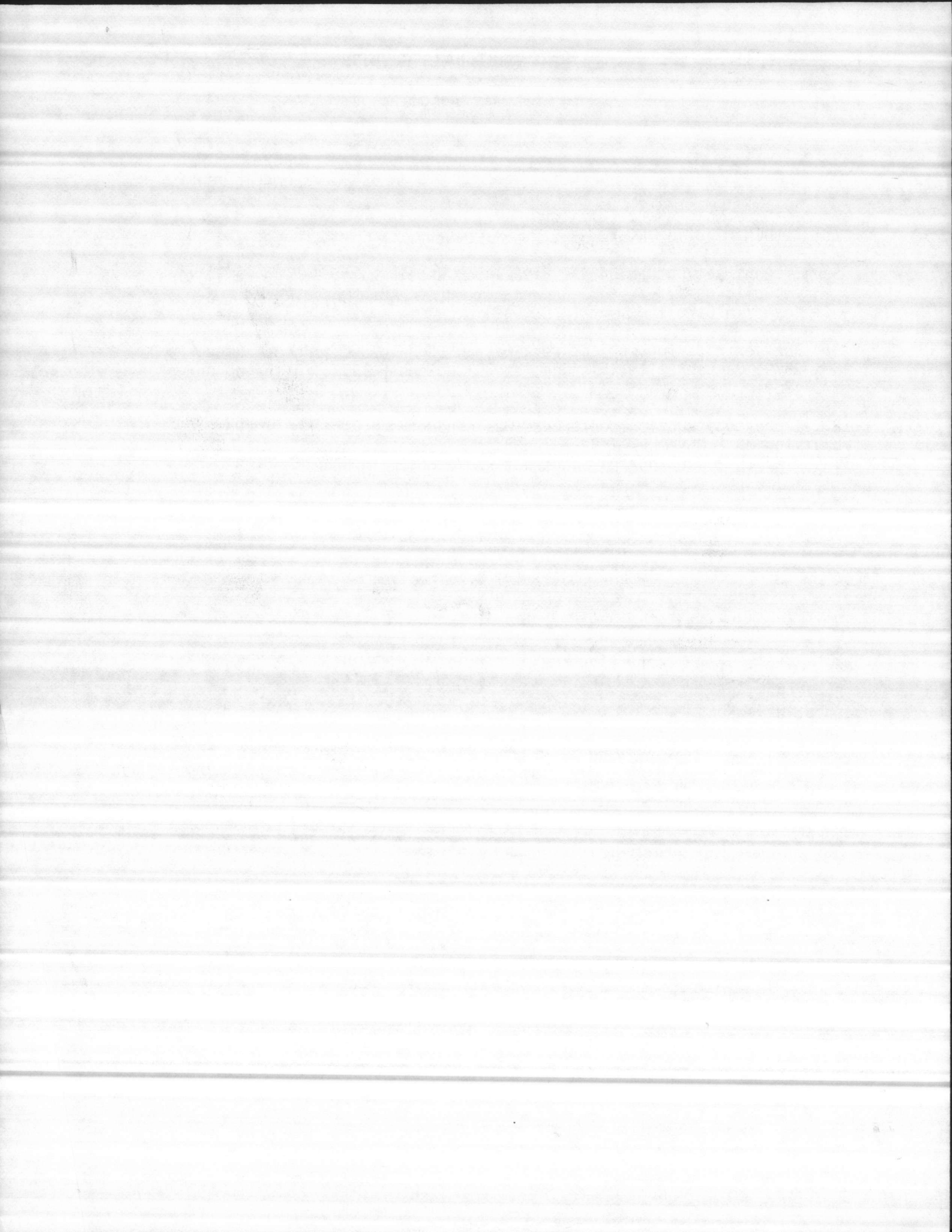
From: Base Maintenance Officer
To: Distribution List

Subj: Contract Number N62470-81-C-1454, Repair Water Sewage Facilities,
Buildings TT-35, 683 and RR-85, Marine Corps Base, Camp Lejeune,
North Carolina

1. The contract for subject work was awarded to CWC, Incorporated, P. O. Box 5579, Jacksonville, Florida, on 30 September 1982, in the amount of \$727,300.
2. A pre-construction conference was conducted by the Public Works Division on 2 November 1982. The Base Maintenance representative was informed that work on this contract would begin in December 1982.

D. D. Blaske Jr
D. D. BLASKE, JR.
By direction

Distribution:
Dir, M&RBr
Dir, UtilBr
Supv, F&ASect
Supv, P&ESect
Supv, WkRecSect
Supv, TnspSect



→ 83 For Action
JML

DEPARTMENT OF THE NAVY
OFFICER IN CHARGE
NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO:
JAX/70/MLM/sel
N62470-82-C-4591
20 October 1982

MEMORANDUM

From: Officer in Charge of Construction, Jacksonville, North Carolina Area
To: Assistant Chief of Staff, Facilities
Via: Base Maintenance Officer, Utilities (Attn: Fred Cone)

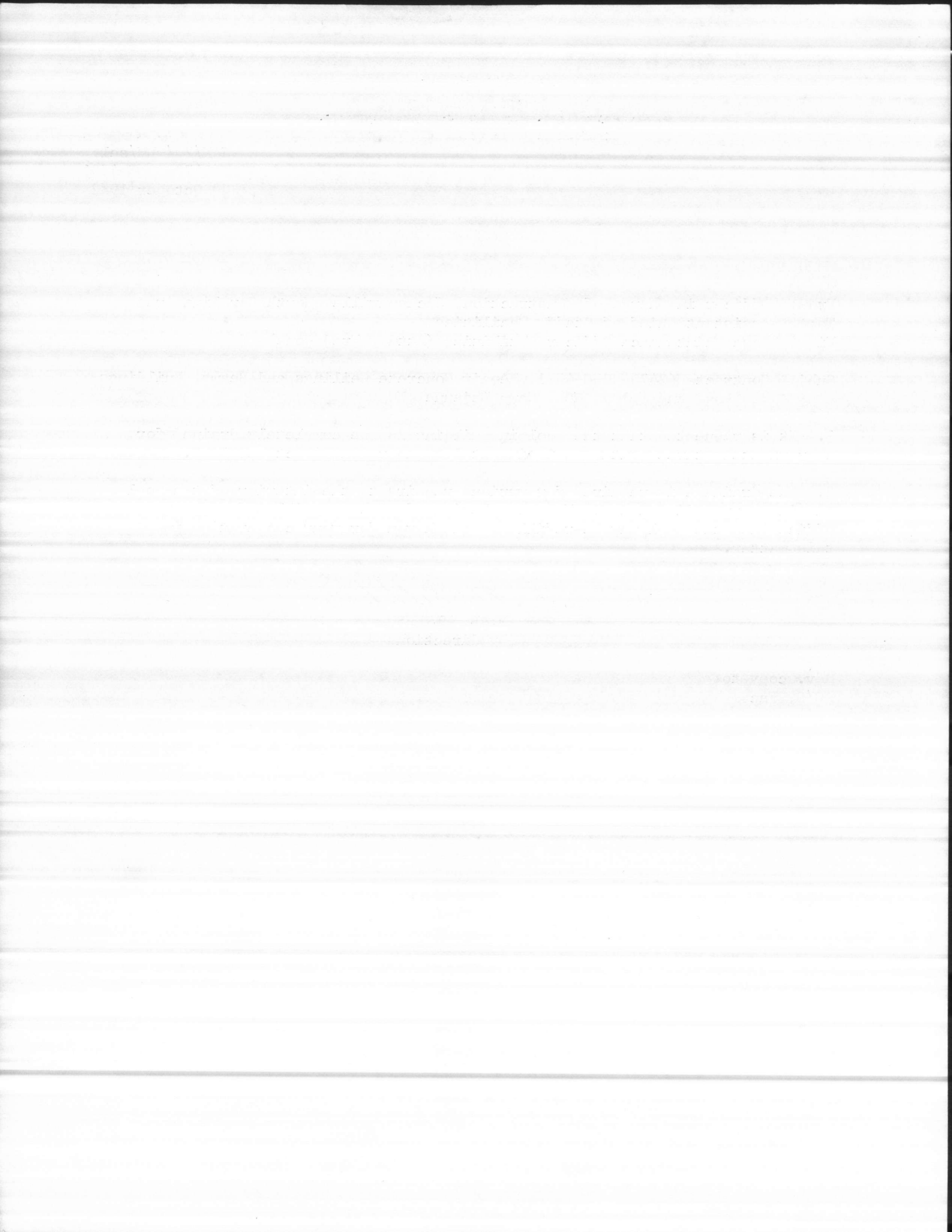
Subj: Contract N62470-82-C-4591, Repair Concrete Ceilings and Beams, Buildings
236, 540 and M-139, MCB, Camp Lejeune, NC

1. It is requested that the pool in Building 236 be completely drained for approximately three months beginning at 1600 hours on 24 October 1982.
2. The drainage is required for various repairs to the interior of the pool and its surrounding areas. Upon completion of work, we will inform your office when the pool may be refilled. Thank you for your cooperation in this matter.



M. L. MLEKUSH
By direction

Adv. copy to:
AC/S, Fac



AS-110 Water Treatment Plant
Generator Loads

Minimum loads required to operate treatment plant:

High Lift Pump, 3Ø, 230/460v, 248A, 100 HP

Raw Water Booster Pump, 3Ø, 230/460v, 182/91A, 75 HP

Clear Well Pump, 3Ø, 208/220/440v, 41/205A, 15 HP

Lime Slaker

Lime Pump 3Ø, 208/220v, 1 HP

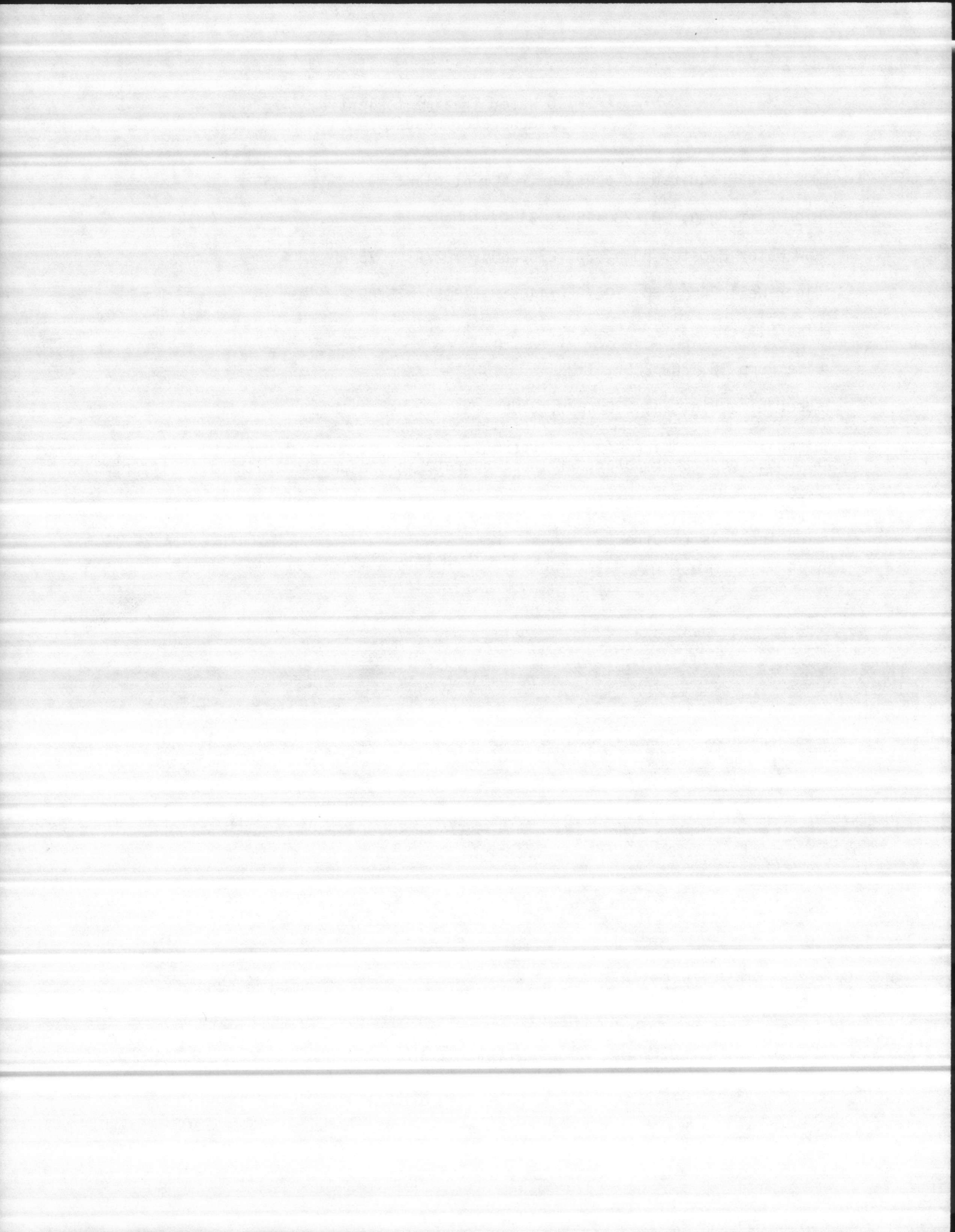
Auger Lime Bin 3Ø, 230/460v, 2 HP

Backwash Pump 3Ø, 230/460v, 196/98A, 75 HP

(Under generator power, will not operate in conjunction with high lift pump)

Clear Well Probe - 10 A

Lighting - As required.



Mr. Price

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

MAIN/RES/jik
5000
16 Feb 1983

FIRST ENDORSEMENT on CO ltr 62-dim 6260.1 of 9 Feb 1983

From: Base Maintenance Officer
To: Director, Maintenance & Repair Branch
→ Director, Utilities Branch

Subj: Industrial Hygiene Noise Level Survey; report of

Encl: (1) Noise Level Survey Results

1. The enclosures are forwarded for appropriate information and action.

[Signature]
R. E. SCALES
By direction

*A/K. Smith
Base Safety
will take care
of*

*file -
M*

NAVAL REGIONAL MEDICAL CENTER
CAMP LEJEUNE, N.C. 28542

IN REPLY REFER TO
62-dlm
6260.1
9 February 1983

From: Commanding Officer
To: Commanding General, Marine Corps Base, Camp Lejeune, NC 28542
(Attn: Base Maintenance Officer)

Subj: Industrial Hygiene Noise Level Survey; report of

Ref: (a) ltr request MAIN/RES/jik, 5100 dtd 27 Jul 82

Encl: (1) Noise Level Survey Results

1. The subject survey was conducted pursuant to reference (a). Enclosure (1) is the survey result from individual Base Maintenance Facilities. All areas/buildings/rooms/equipment with noise level readings of 85 decibels (dBA) or above should be conspicuously posted as "noise hazardous". Decibel readings were taken at the hearing zones of personnel in the vicinity. Personnel occupationally exposed at 85 dBA or above should be identified and placed in the Hearing Conservation Program. Ordering information for "noise hazardous" labels/decals listed below:

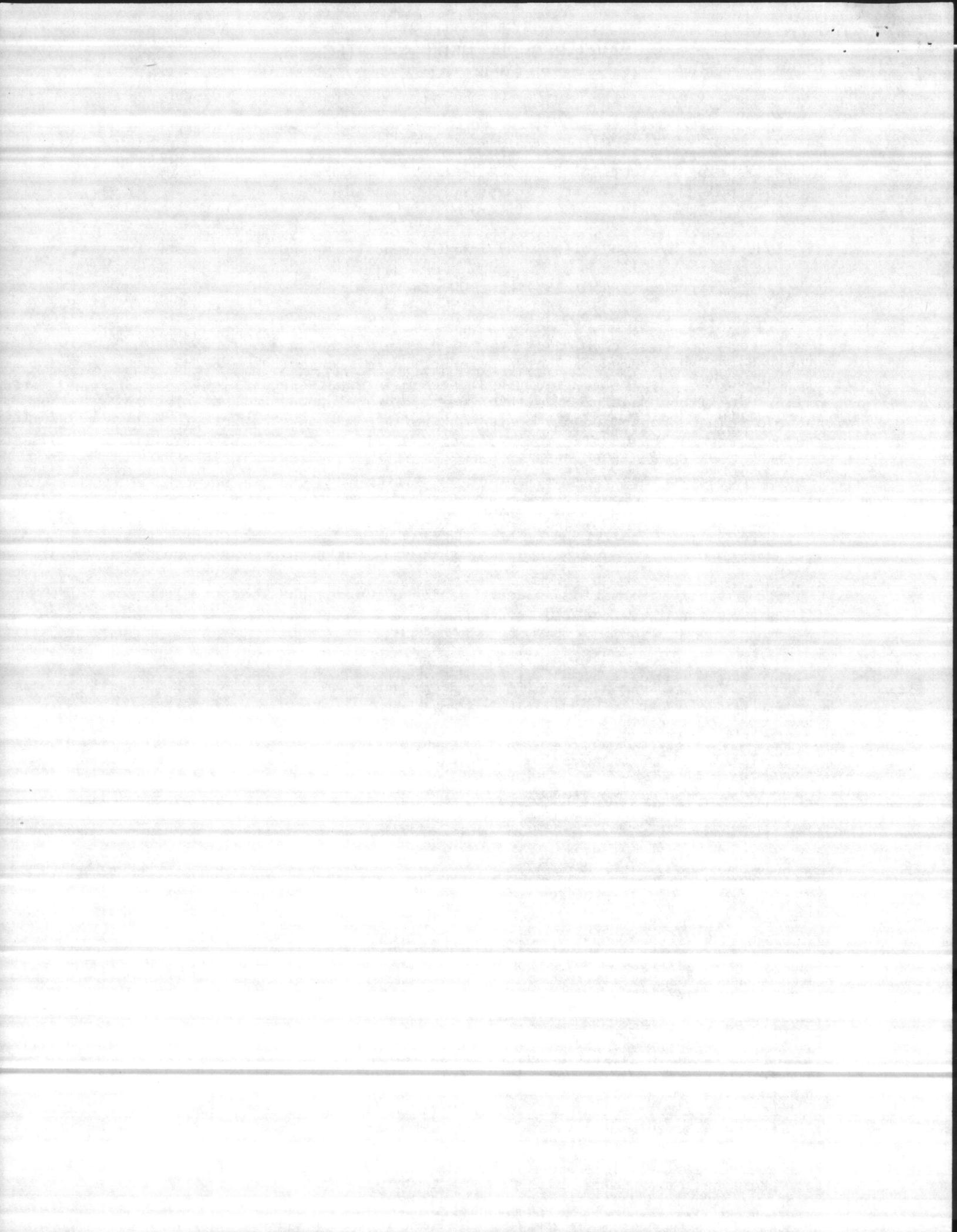
NAVMED 6260.2, Decal 8" X 10½" NSN 0105-LF-206-2605

NAVMED 6260/2A, Label, 1" X 1½", NSN 0105-LF-212-6020

2. Should further information be desired please contact the Industrial Hygiene Section at extension 5707 or 2707.

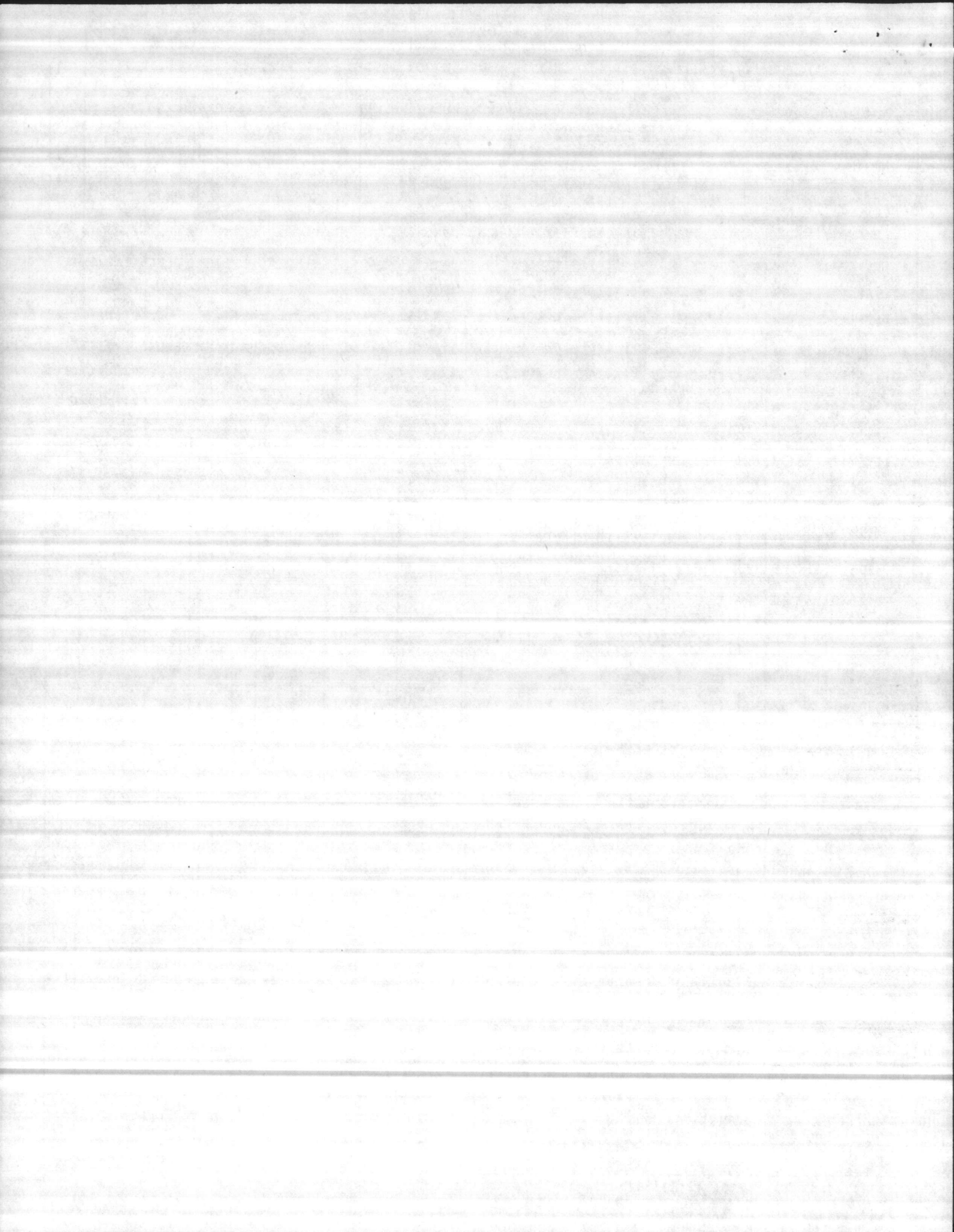
P E Campbell
P. E. CAMPBELL
By direction

Copy to:
Base Saf Off



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 2 1 0 0 8			TYPE SURVEY 2 1-INITIAL SURVEY 2-RE-SURVEY 3-OTHER			
SOUND LEVEL METER		MICROPHONE		CALIBRATOR		
MANUFACTURER Genrad		MANUFACTURER Genrad		MANUFACTURER Genrad		
MODEL 1565-B	SERIAL NO 30403	MODEL 1560-2133	SERIAL NO 42962	MODEL 1562-A	SERIAL NO 16887	
LAST ELECTROACOUSTIC CALIB DATE 8 2 0 7 0 8		LAST ELECTROACOUSTIC CALIB DATE 8 2 0 7 0 8		LAST ELECTROACOUSTIC CALIB DATE 8 2 0 7 0 8		
WIND SCREEN <input type="checkbox"/> USED <input checked="" type="checkbox"/> NOT USED		MEASUREMENTS OBTAINED <input checked="" type="checkbox"/> INDOORS <input type="checkbox"/> OUTDOORS				
DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Water Treatment Plant Bldg. 670 Base Maintenance Camp Lejeune, NC				PRIMARY SOURCE OF NOISE Equipment		
				SECONDARY SOURCE OF NOISE		
SOUND LEVEL DATA				PROTECTION REQUIRED (re: dBA Level)		
LOCATION	METER ACTION	dBc	dBA	RISK ASSESSMENT CODE	NONE less than 85 PLUG OR MUFF 85-108 PLUG AND MUFF 108-118 PLUG + MUFF + TIME LIMIT greater than 118	
Pump Motor	S		78			
Line Feeder, Lime	S		92			
Spiractor Rm	S		85-92		within room	
Filter Rm	S		74			
NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level. METER ACTION: Enter F for fast meter action and S for slow meter action.						
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)						
MORE DETAILED NOISE EVALUATION REQUIRED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "YES", identify type evaluation needed.)						
NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)						
NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE-HAZARDOUS AREA OR OPERATION						
SURVEY PERFORMED BY (Last Name, First Name, MI) McCloskey, John M., Environmental Health Technician				HEARING CONSERVATION MONITOR (Last Name, First Name, MI)		



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 | 2 | 1 | 1 | 0 | 5 TYPE SURVEY 2 1—INITIAL SURVEY 2—RE—SURVEY 3—OTHER

SOUND LEVEL METER MANUFACTURER Columbia
MICROPHONE MANUFACTURER Bruel and Kjaer
CALIBRATOR MANUFACTURER Columbia

MODEL SERIAL NO SPC-14 446
MODEL SERIAL NO 4144 704011
MODEL SERIAL NO SPC-14 660

LAST ELECTROACOUSTIC CALIB DATE purchased 4065 year 8 | 2 | 1 | 0 | 0 | 4
LAST ELECTROACOUSTIC CALIB DATE year 8 | 2 | 1 | 0 | 0 | 4
LAST ELECTROACOUSTIC CALIB DATE year 8 | 2 | 1 | 0 | 0 | 4

WIND SCREEN USED NOT USED MEASUREMENTS OBTAINED INDOORS OUTDOORS

DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form)
Water Treatment Plant
Bldg. RR-85
Rifle Range
Base Maintenance
Camp Lejeune, NC

PRIMARY SOURCE OF NOISE
Equipment

SECONDARY SOURCE OF NOISE
N/A

SOUND LEVEL DATA					PROTECTION REQUIRED (re: dBA Level)			
LOCATION	METER ACTION	dBc	dba	RISK ASSESSMENT CODE	NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Motor, electric 10HP	S		83		X			
Motor, auxiliary continental	S		99			X		
Plant, upper level	S		77		X			

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

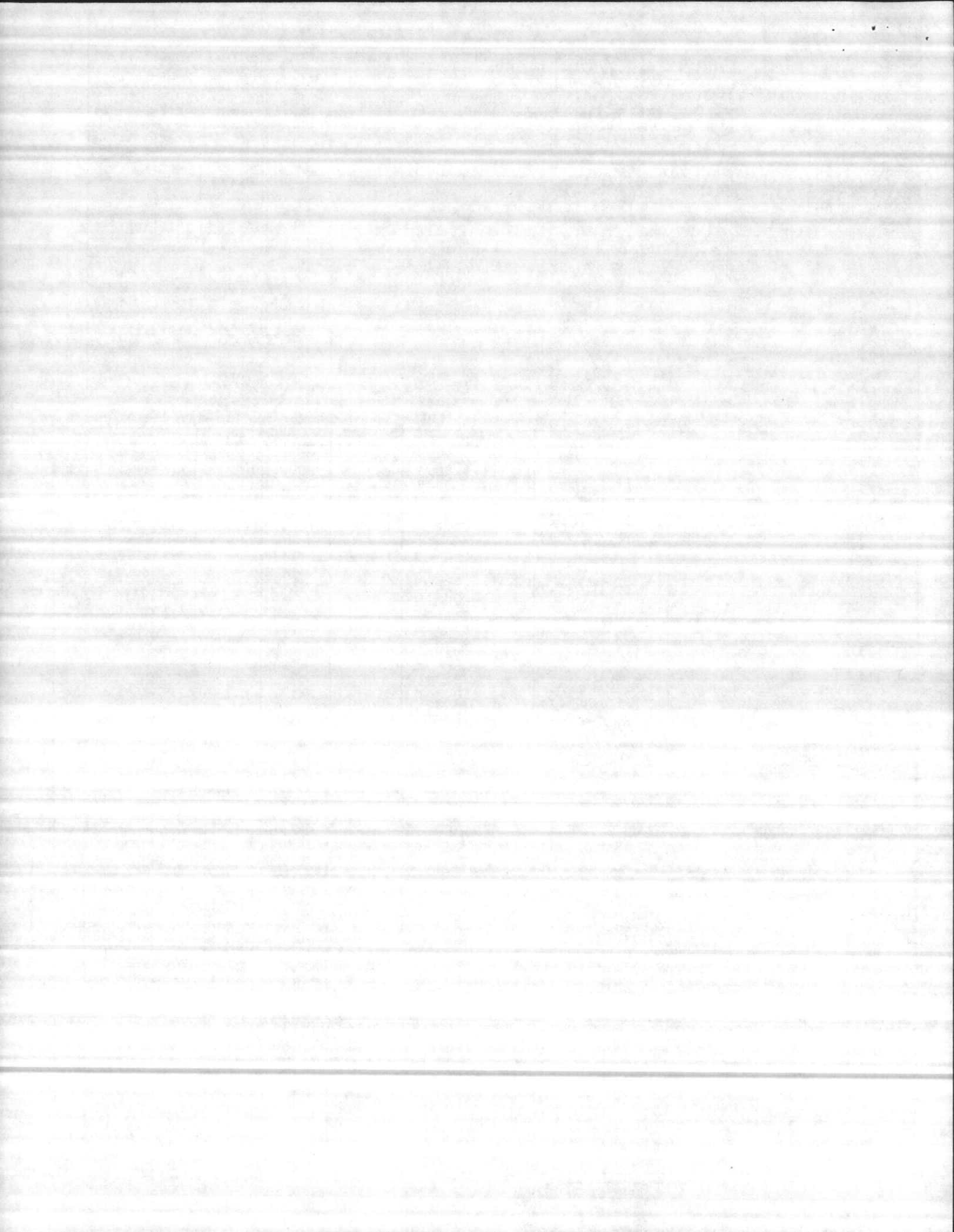
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE—HAZARDOUS AREA OR OPERATION

SURVEY PERFORMED BY (Last Name, First Name, MI) McCloskey, John M. Environmental Health Technician
HEARING CONSERVATION MONITOR (Last Name, First Name, MI)



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 2 1 1 0 8			TYPE SURVEY 2 1-INITIAL SURVEY 2-RE-SURVEY 3-OTHER		
SOUND LEVEL METER		MICROPHONE		CALIBRATOR	
MANUFACTURER Columbia		MANUFACTURER Bruel & Kjaer		MANUFACTURER Columbia	
MODEL SPC-14	SERIAL NO 446	MODEL 4144	SERIAL NO 704011	MODEL SPC-14	SERIAL NO 660
LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4		LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4		LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4	
WIND SCREEN <input type="checkbox"/> USED <input checked="" type="checkbox"/> NOT USED			MEASUREMENTS OBTAINED <input checked="" type="checkbox"/> INDOORS <input type="checkbox"/> OUTDOORS		
DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Water Treatment Plant Bldg. 20 Base Maintenance Camp Lejeune, NC				PRIMARY SOURCE OF NOISE Equipment	
				SECONDARY SOURCE OF NOISE	

SOUND LEVEL DATA					PROTECTION REQUIRED (re: dBA Level)			
LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Outside Generator	S		93			X		
Motor, Aux	S		99			X		
Motor/Pump - High Lift	S		87			X		
Low Lift Water Booster, Raw	S		77		X			
Mixer, Lime Rm	S		75		X			
Pipe Threader Rigid 535	S		95			X		

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

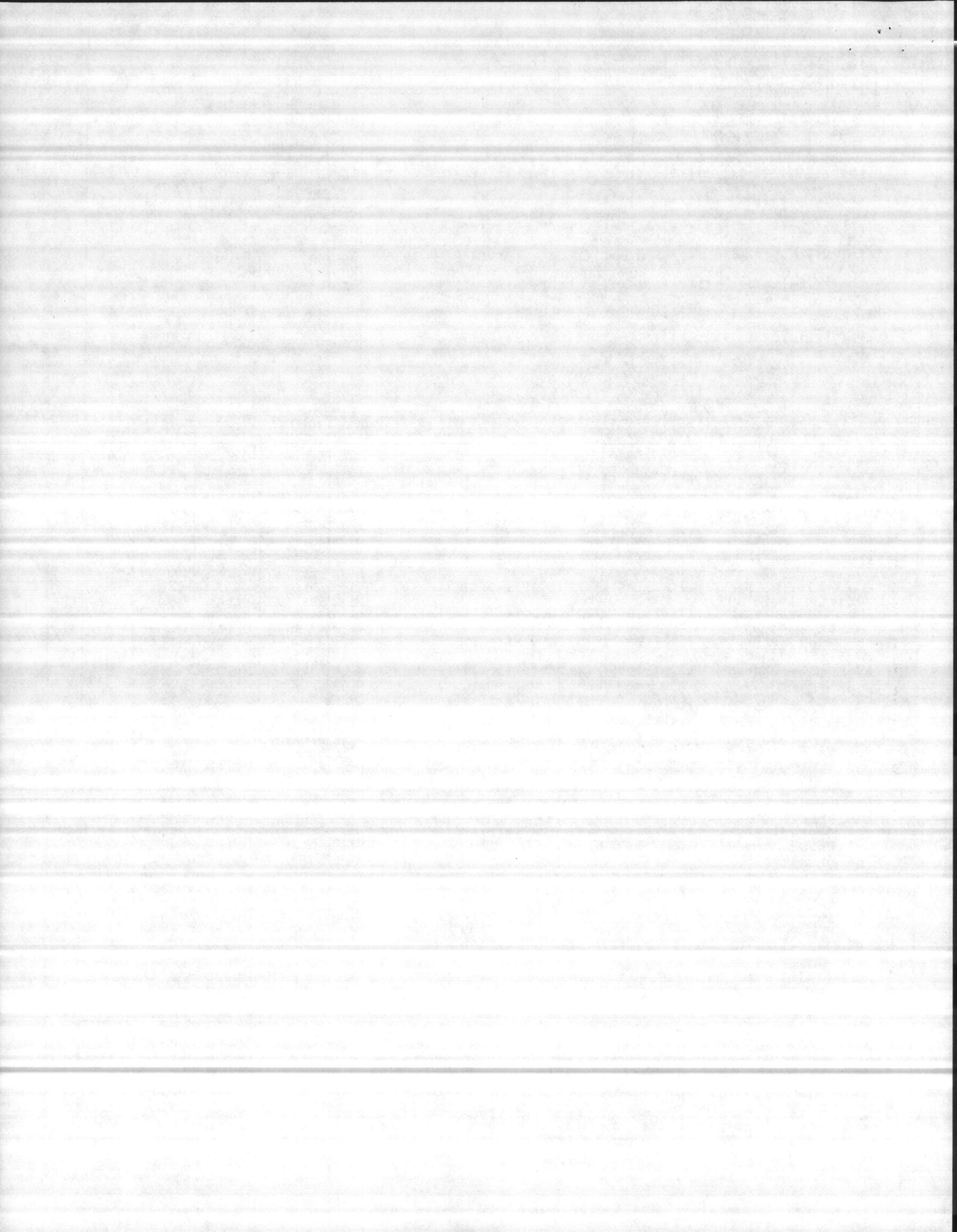
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE-HAZARDOUS AREA OR OPERATION

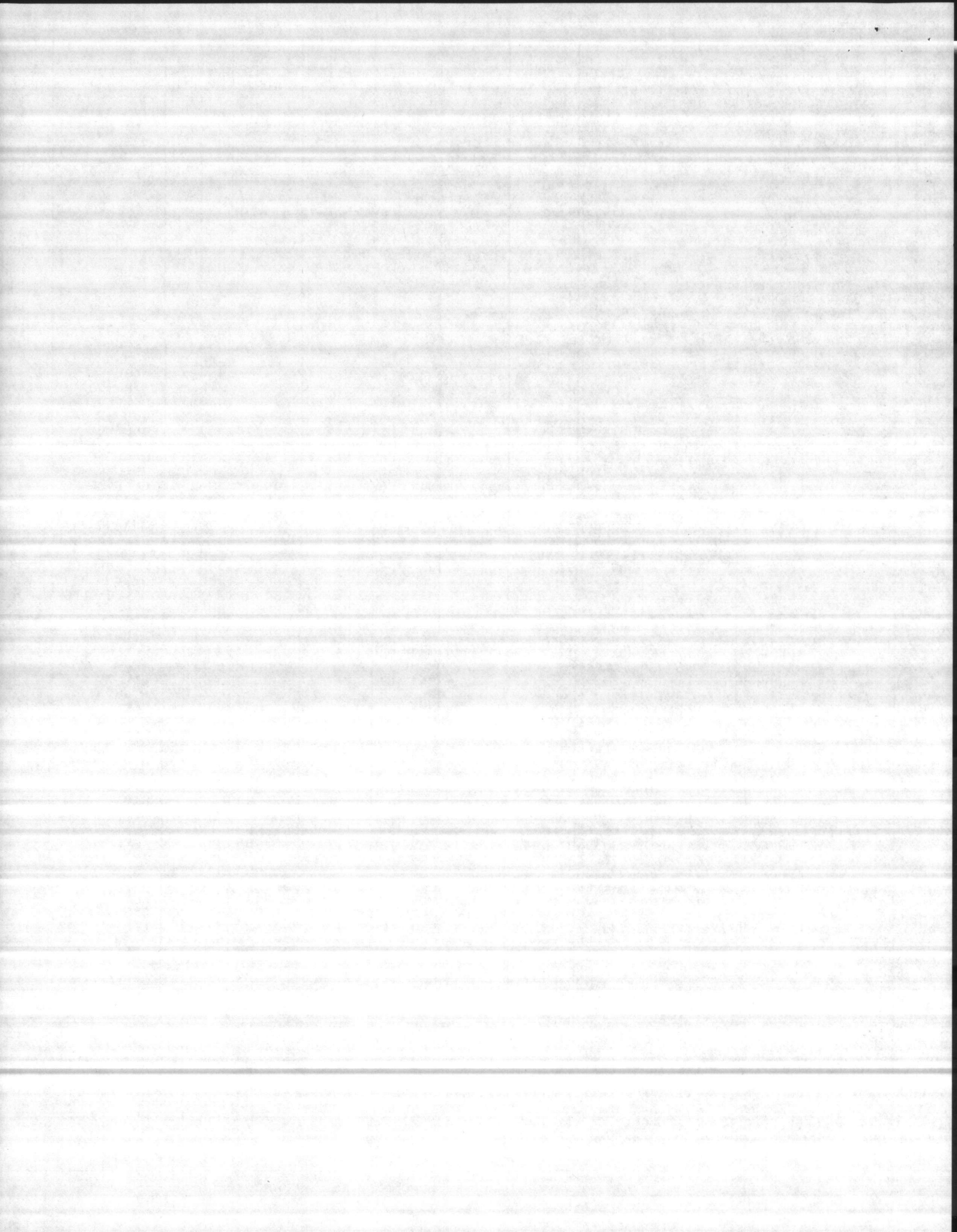
SURVEY PERFORMED BY (Last Name, First Name, MI) McCloskey, John M. Environmental Health Technician	HEARING CONSERVATION MONITOR (Last Name, First Name, MI)
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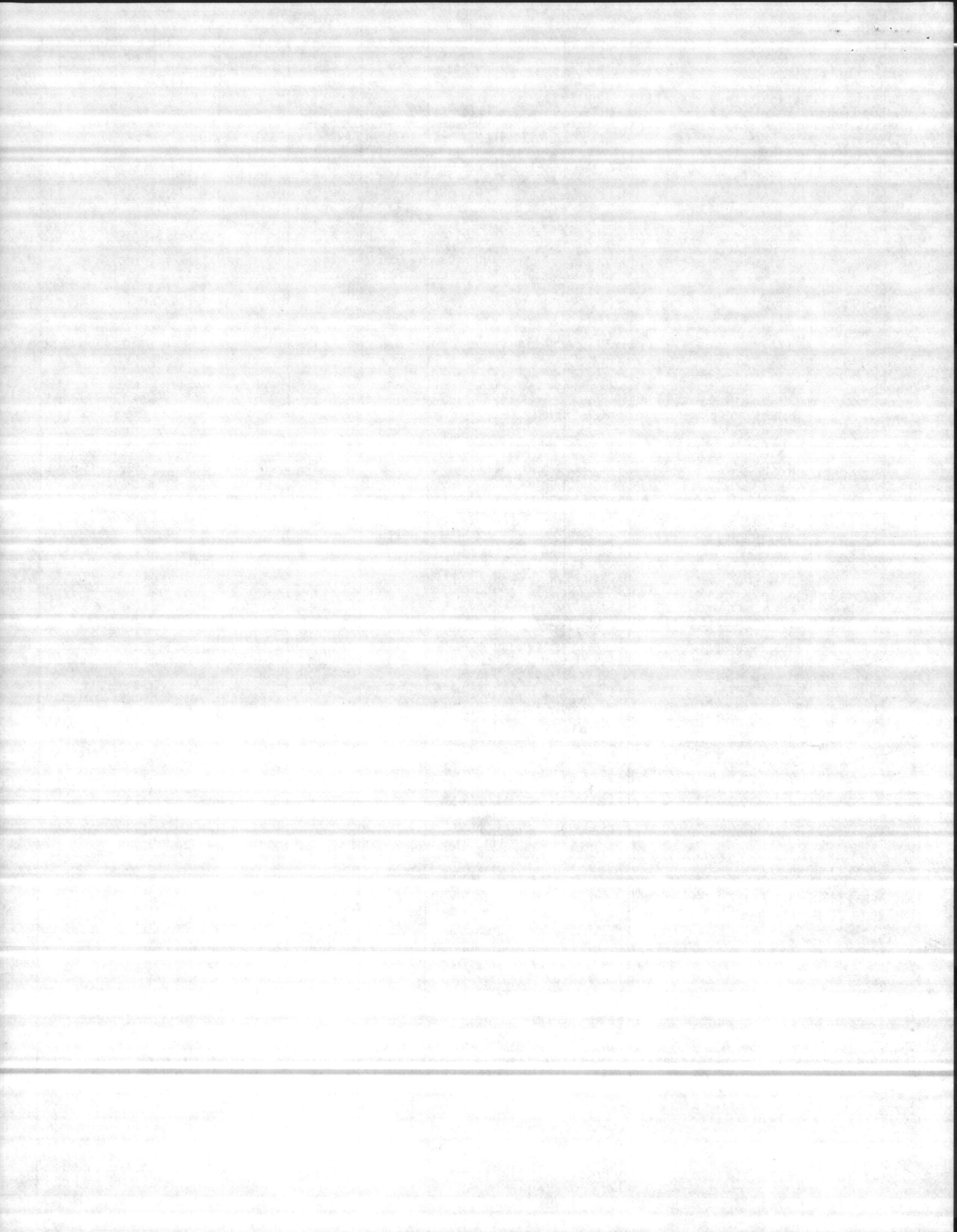


SOUND LEVEL DATA					PROTECTION REQUIRED (re: dBA Level)			
LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Grinder (small)	S		89			X		
Motor, Aux	S		90			X		

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
 METER ACTION: Enter F for fast meter action and S for slow meter action.

REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)





NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day)			TYPE SURVEY								
8	2	1	1	1	7	2	1—INITIAL SURVEY	2—RE—SURVEY	3—OTHER		
SOUND LEVEL METER			MICROPHONE			CALIBRATOR					
MANUFACTURER			MANUFACTURER			MANUFACTURER					
Columbia			Bruel & Kjaer			Columbia					
MODEL		SERIAL NO		MODEL		SERIAL NO		MODEL		SERIAL NO	
SPC-14		446		4144		704011		SPC-14		660	
LAST ELECTROACOUSTIC CALIB DATE				LAST ELECTROACOUSTIC CALIB DATE				LAST ELECTROACOUSTIC CALIB DATE			
year month day				year month day				year month day			
8 2 1 0 0 4				8 2 1 0 0 4				8 2 1 0 0 4			
WIND SCREEN <input type="checkbox"/> USED <input checked="" type="checkbox"/> NOT USED				MEASUREMENTS OBTAINED				<input checked="" type="checkbox"/> INDOORS <input type="checkbox"/> OUTDOORS			

DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form)	PRIMARY SOURCE OF NOISE
Water Treatment Plant Bldg. M-178 Camp Johnson Base Maintenance Camp Lejeune, NC	Motors
	SECONDARY SOURCE OF NOISE

LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	PROTECTION REQUIRED (re: dBA Level)			
					NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Motor, Continental Aux	S		97			X		
Motor/Pump, Electric	S		83		X			

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

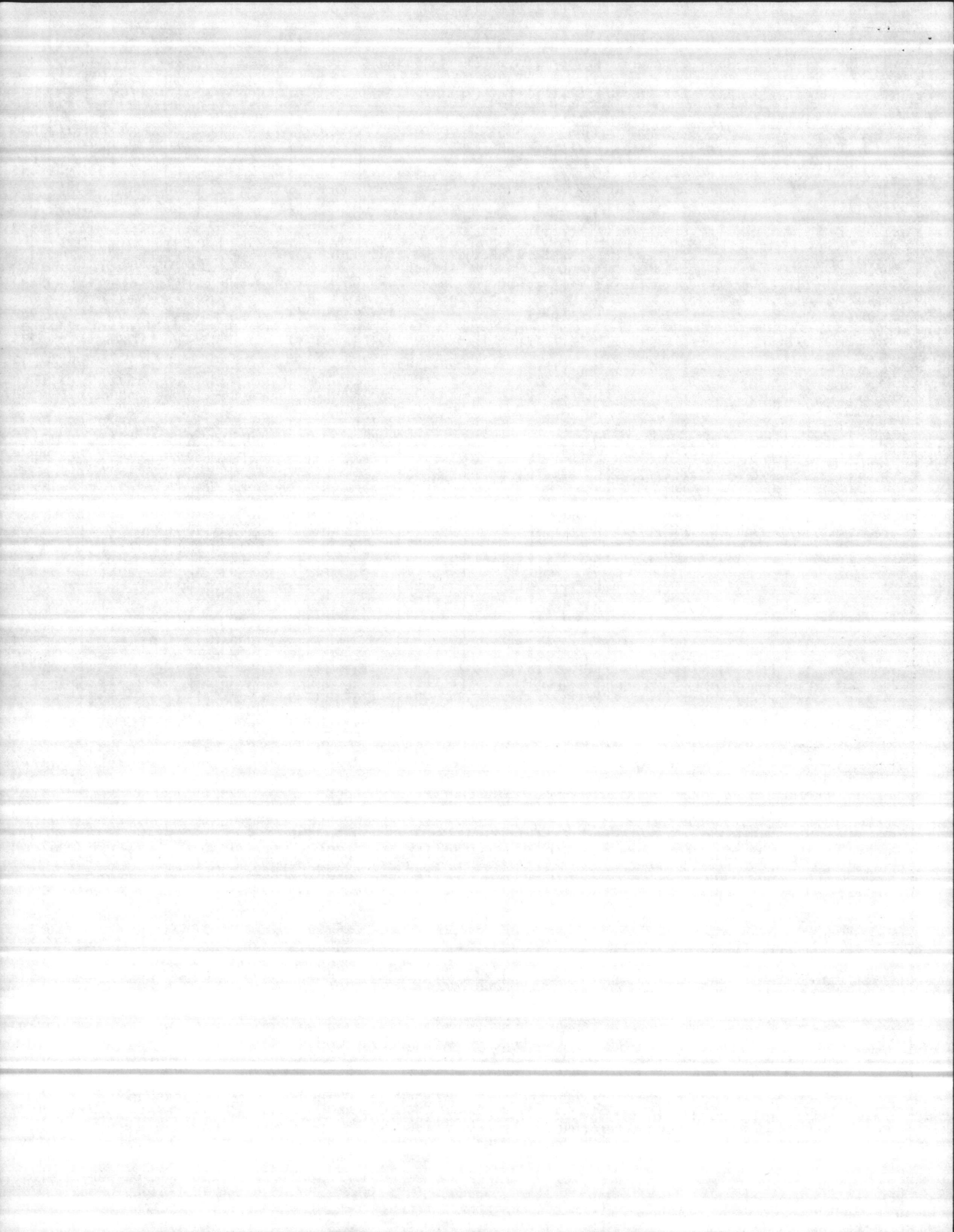
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE—HAZARDOUS AREA OR OPERATION

SURVEY PERFORMED BY (Last Name, First Name, MI) McCloskey, John M. Environmental Health Technician	HEARING CONSERVATION MONITOR (Last Name, First Name, MI)
---	--



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day)
8 | 2 | 1 | 1 | 1 | 8

TYPE SURVEY
2 1-INITIAL SURVEY 2-RE-SURVEY 3-OTHER

SOUND LEVEL METER		MICROPHONE		CALIBRATOR	
MANUFACTURER Columbia		MANUFACTURER Bruel & Kjaer		MANUFACTURER Columbia	
MODEL SPC-14	SERIAL NO 446	MODEL 4144	SERIAL NO 704011	MODEL SPC-14	SERIAL NO 660
LAST ELECTROACOUSTIC CALIB DATE year 8 2 month 1 0 day 0 4		LAST ELECTROACOUSTIC CALIB DATE year 8 2 month 1 0 day 0 4		LAST ELECTROACOUSTIC CALIB DATE year 8 2 month 1 0 day 0 4	
WIND SCREEN <input type="checkbox"/> USED <input checked="" type="checkbox"/> NOT USED		MEASUREMENTS OBTAINED <input checked="" type="checkbox"/> INDOORS <input type="checkbox"/> OUTDOORS			

DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form)

Water Treatment Plant
Bldg. TT-38
Base Maintenance
Tarawa Terrace, NC

PRIMARY SOURCE OF NOISE
Equipment

SECONDARY SOURCE OF NOISE

LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	PROTECTION REQUIRED (re: dBA Level)			
					NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Motor, Continental Aux	S		101			X		
Feeder Pump, Lime	S		74		X			
Mixing Tank, Lime	S		80		X			
Motor/Pump, Electric	S		80		X			

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

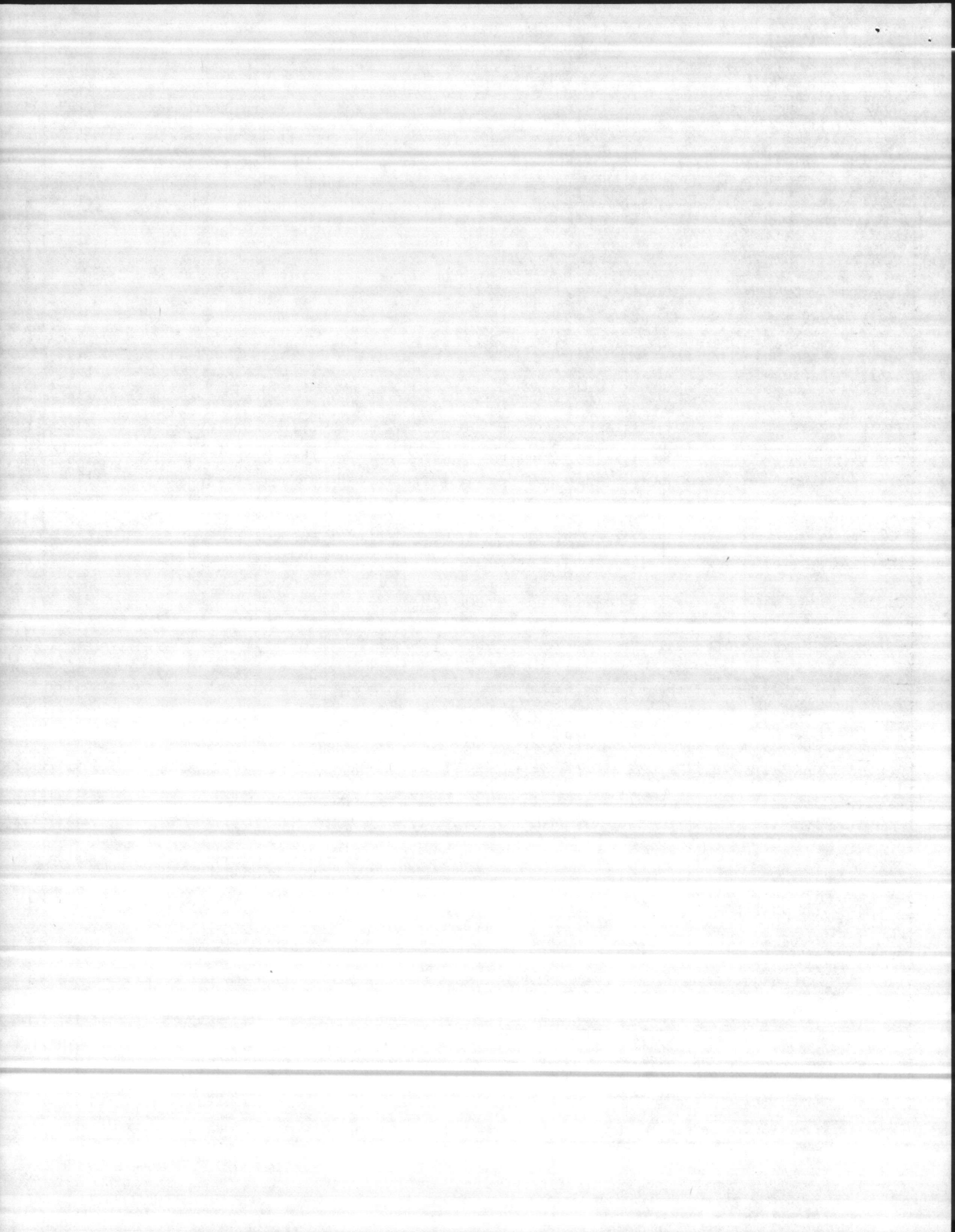
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE-HAZARDOUS AREA OR OPERATION

SURVEY PERFORMED BY (Last Name, First Name, MI) McCloskey, John M. Environmental Health Technician	HEARING CONSERVATION MONITOR (Last Name, First Name, MI)
---	--



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 | 3 | 0 | 1 | 1 | 9 TYPE SURVEY 2 1-INITIAL SURVEY 2-RE-SURVEY 3-OTHER

SOUND LEVEL METER	MICROPHONE	CALIBRATOR
MANUFACTURER Columbia	MANUFACTURER Bruel & Kjaer	MANUFACTURER Columbia

MODEL SPC-14	SERIAL NO 446	MODEL 4144	SERIAL NO 704011	MODEL SPC-14	SERIAL NO 660
LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4		LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4		LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4	

WIND SCREEN USED NOT USED MEASUREMENTS OBTAINED INDOORS OUTDOORS

DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Water Treatment Plant Bldg. BB-190 Base Maintenance Courthouse Bay Camp Lejeune, NC	PRIMARY SOURCE OF NOISE Motors SECONDARY SOURCE OF NOISE N/A
---	---

LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	PROTECTION REQUIRED (re: dBA Level)			
					NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Motor, Continental, Aux	S		96			X		
Motor/Pump, G.E.	S		80		X			

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
 METER ACTION: Enter F for fast meter action and S for slow meter action.

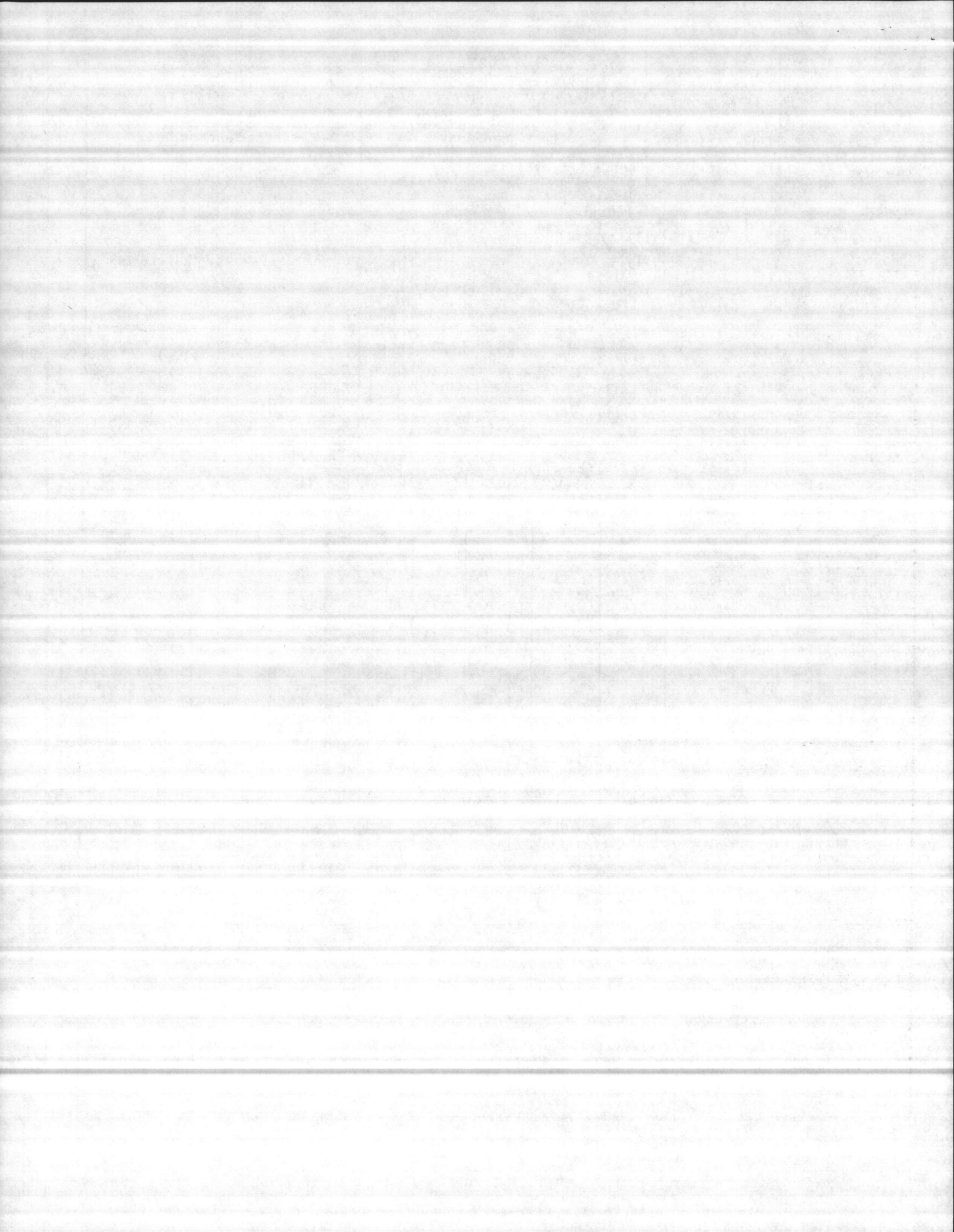
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE-HAZARDOUS AREA OR OPERATION

SURVEY PERFORMED BY (Last Name, First Name, MI) HANER, Charles D., HM2, USN	HEARING CONSERVATION MONITOR (Last Name, First Name, MI)
--	--



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 | 3 | 0 | 1 | 2 | 0 | TYPE SURVEY 1-INITIAL SURVEY 2-RE-SURVEY 3-OTHER

SOUND LEVEL METER MANUFACTURER Columbia MICROPHONE MANUFACTURER Bruel & Kjaer CALIBRATOR MANUFACTURER Columbia

MODEL SERIAL NO SPC-14 446 MODEL SERIAL NO 4144 704011 MODEL SERIAL NO SPC-14 660

LAST ELECTROACOUSTIC CALIB DATE year 8 | 2 | month 1 | 0 | day 0 | 4 LAST ELECTROACOUSTIC CALIB DATE year 8 | 2 | month 1 | 0 | day 0 | 4 LAST ELECTROACOUSTIC CALIB DATE year 8 | 2 | month 1 | 0 | day 0 | 4

WIND SCREEN USED NOT USED MEASUREMENTS OBTAINED INDOORS OUTDOORS

DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form)
Water Treatment Plant
Bldg. TC-501
Base Maintenance
Camp Geiger
Camp Lejeune, NC

PRIMARY SOURCE OF NOISE
Engines
Equipment

SECONDARY SOURCE OF NOISE

SOUND LEVEL DATA					PROTECTION REQUIRED (re: dBA Level)			
LOCATION	METER ACTION	dBc	dba	RISK ASSESSMENT CODE	NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Engine, Bldg. G-508	S		90			X		
Engine, Bldg. G-509	S		94			X		
Chlorine hose pump	S		74		X			

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

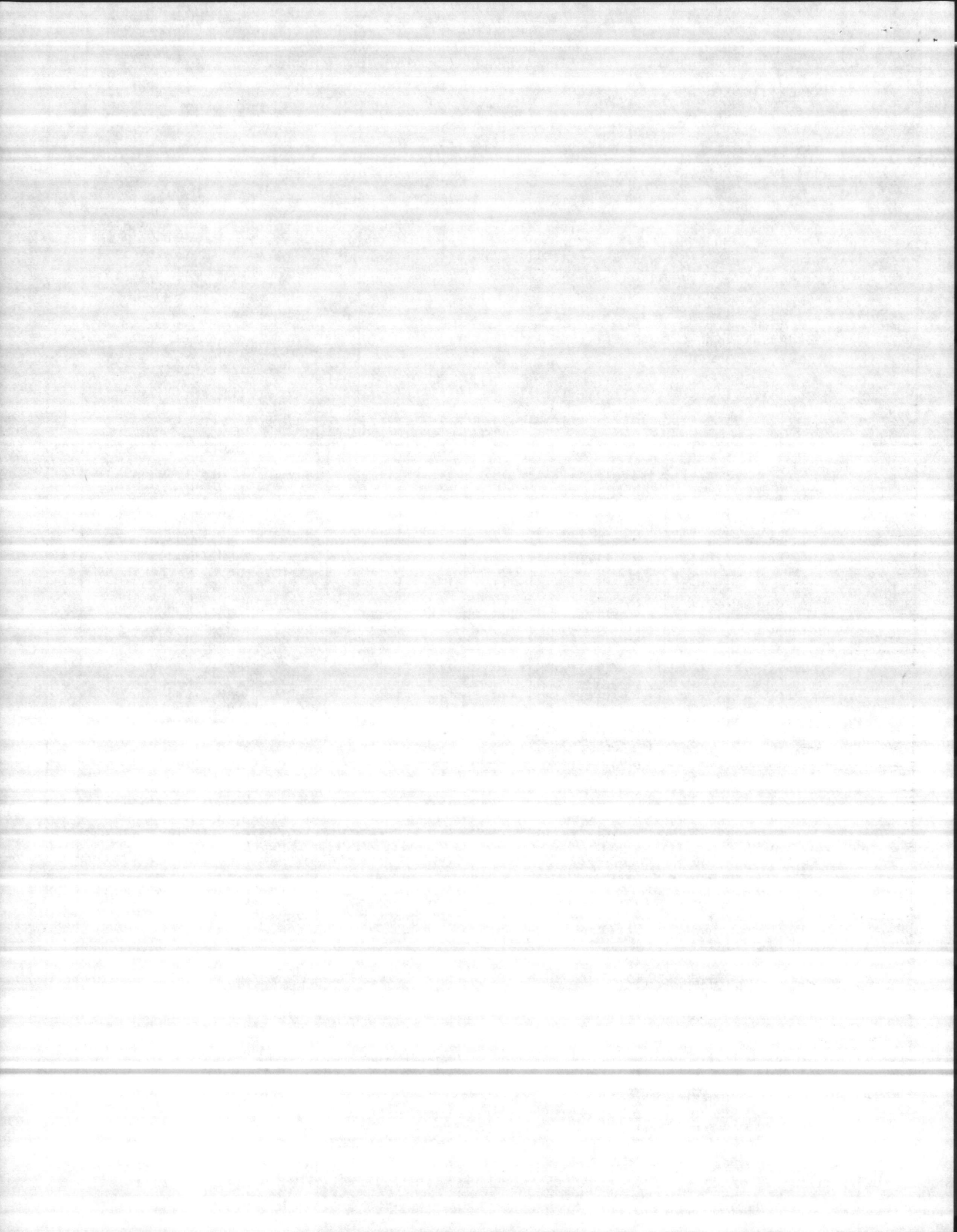
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE-HAZARDOUS AREA OR OPERATION

SURVEY PERFORMED BY (Last Name, First Name, MI) HANER, Charles D., HM2, USN HEARING CONSERVATION MONITOR (Last Name, First Name, MI)



NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 3 0 1 2 0			TYPE SURVEY 2 1-INITIAL SURVEY 2-RE-SURVEY 3-OTHER		
SOUND LEVEL METER		MICROPHONE		CALIBRATOR	
MANUFACTURER Columbia		MANUFACTURER Bruel & Kjaer		MANUFACTURER Columbia	
MODEL SPC-14	SERIAL NO 446	MODEL 4144	SERIAL NO 704011	MODEL SPC-14	SERIAL NO 660
LAST ELECTROACOUSTIC CALIB DATE year 8 2 month 1 0 day 0 4		LAST ELECTROACOUSTIC CALIB DATE year 8 2 month 1 0 day 0 4		LAST ELECTROACOUSTIC CALIB DATE year 8 2 month 1 0 day 0 4	
WIND SCREEN <input type="checkbox"/> USED <input checked="" type="checkbox"/> NOT USED		MEASUREMENTS OBTAINED <input checked="" type="checkbox"/> INDOORS <input type="checkbox"/> OUTDOORS			
DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Water Treatment Plant Bldg. BA-138 Base Maintenance Onslow Beach Camp Lejeune, NC				PRIMARY SOURCE OF NOISE Equipment	
				SECONDARY SOURCE OF NOISE	

LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	PROTECTION REQUIRED (re: dBA Level)			
					NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Motor, Continental, Aux.	S		94			X		
Filter, water	S		72		X			
Motor/ Pumps air #1 banks	S		76		X			
Motor/ Pump air #2 banks	S		83		X			
Motor/ Pump air #3 banks	S		83		X			

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

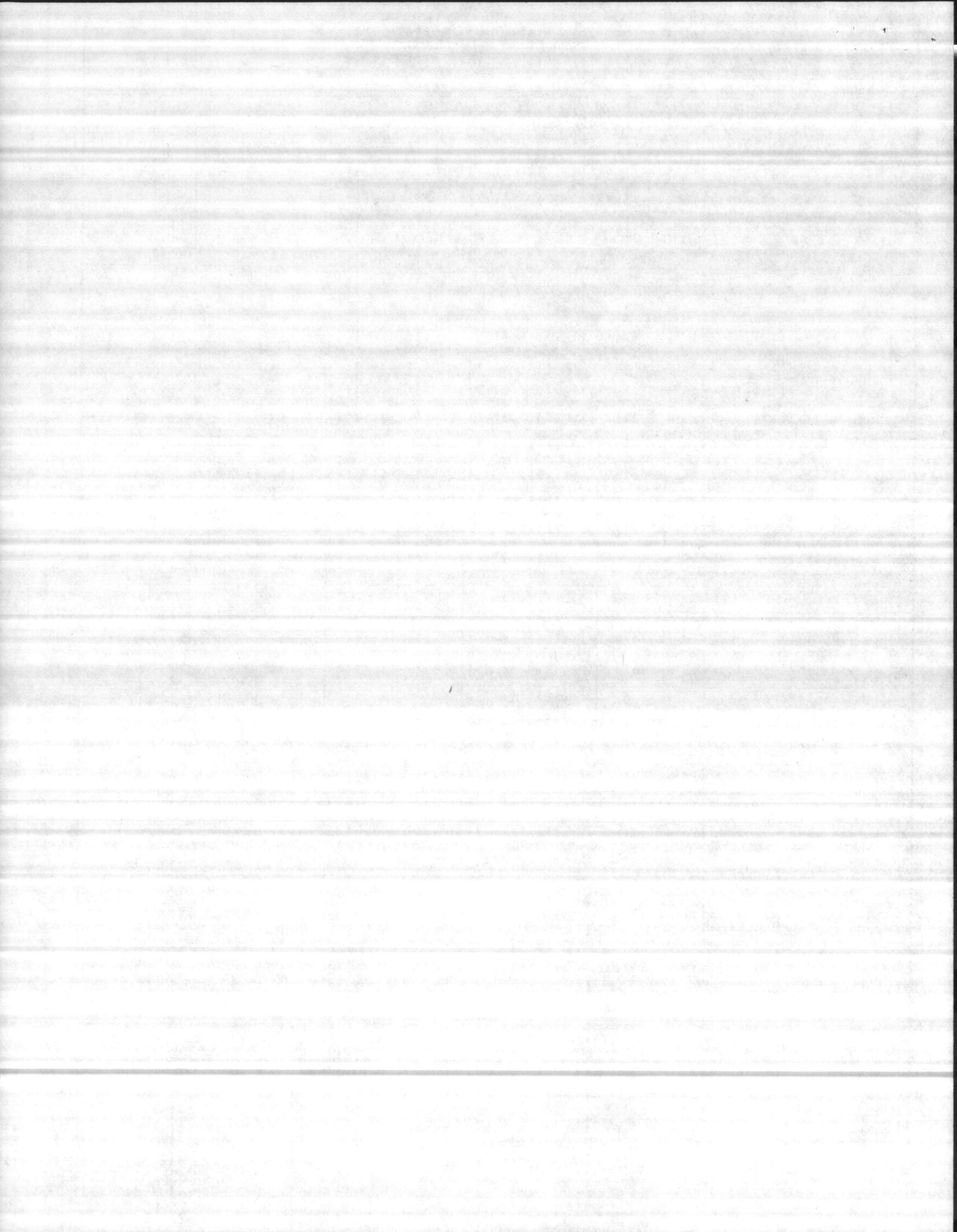
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE-HAZARDOUS AREA OR OPERATION

SURVEY PERFORMED BY (Last Name, First Name, MI) HANER, Charles D., HM2, USN	HEARING CONSERVATION MONITOR (Last Name, First Name, MI)
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NOISE SURVEY
(Sound Level Meter Survey)

DATE (Year Month Day) 8 3 0 1 2 1			TYPE SURVEY 2 1--INITIAL SURVEY 2--RE--SURVEY 3--OTHER		
SOUND LEVEL METER		MICROPHONE		CALIBRATOR	
MANUFACTURER Columbia		MANUFACTURER Bruel & Kjaer		MANUFACTURER Columbia	
MODEL SPC-14	SERIAL NO 446	MODEL 4144	SERIAL NO 704011	MODEL SPC-14	SERIAL NO 660
LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4		LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4		LAST ELECTROACOUSTIC CALIB DATE year month day 8 2 1 0 0 4	
WIND SCREEN <input type="checkbox"/> USED <input checked="" type="checkbox"/> NOT USED		MEASUREMENTS OBTAINED <input checked="" type="checkbox"/> INDOORS <input type="checkbox"/> OUTDOORS			
DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Water Treatment Plant Bldg. AS-110 Base Maintenance MCAS(H), New River Jacksonville, NC				PRIMARY SOURCE OF NOISE Equipment	
				SECONDARY SOURCE OF NOISE	

SOUND LEVEL DATA					PROTECTION REQUIRED (re: dBA Level)			
LOCATION	METER ACTION	dBC	dBA	RISK ASSESSMENT CODE	NONE less than 85	PLUG OR MUFF 85-108	PLUG AND MUFF 108-118	PLUG + MUFF + TIME LIMIT greater than 118
Motor, Continental, Aux	S		100			X		
Marathon Motor/Pump, Electric	S		90			X		
Mixing Tank, Lime	S		88			X		
Pump (Plant Water)	S		91			X		
Submerged Combustion burner	S		91			X		
Grinder, bench, 10"	S		90			X		

NOTES: Range of levels noted by /; i.e., 102/109. At operator work stations, measure at ear level.
METER ACTION: Enter F for fast meter action and S for slow meter action.

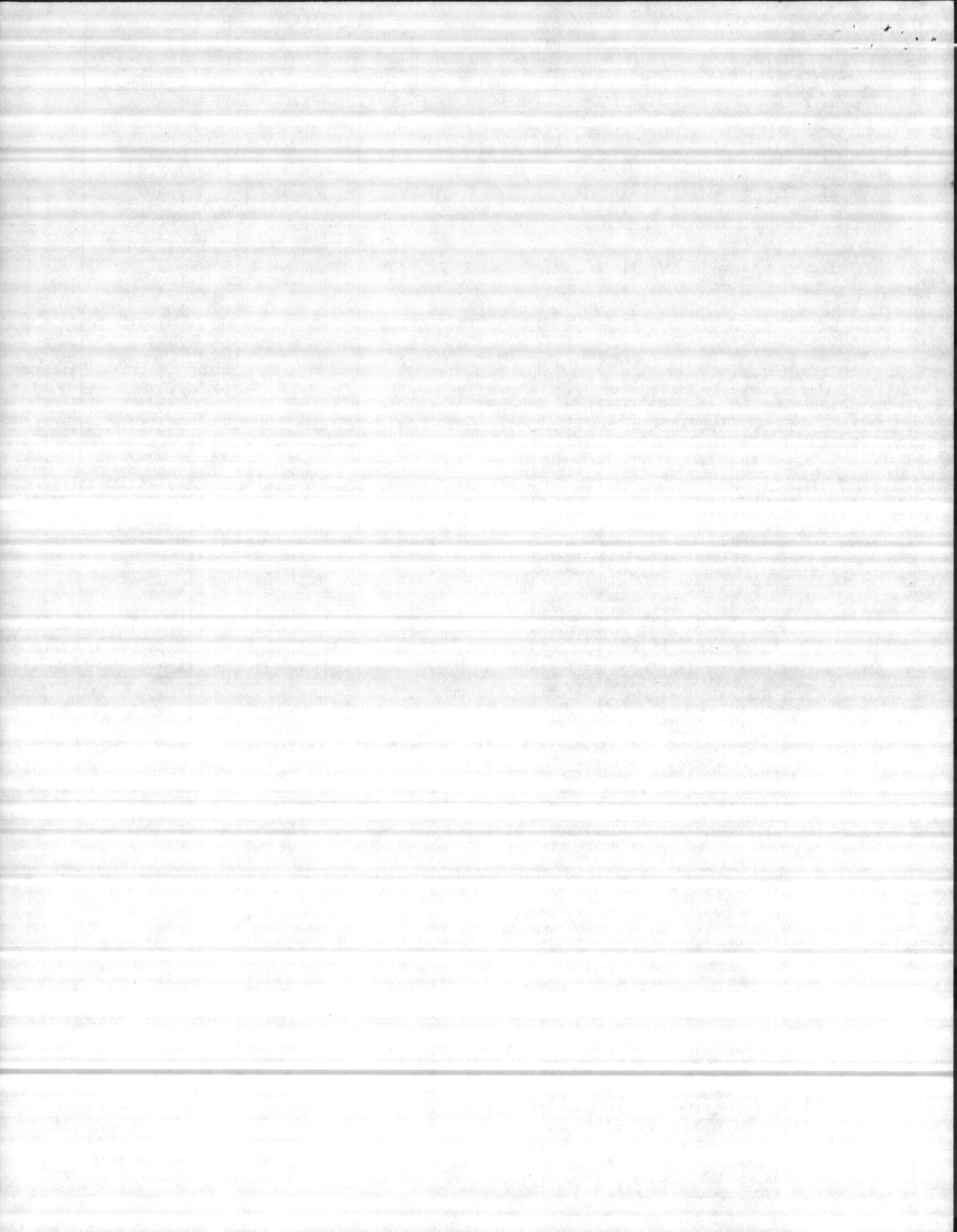
REMARKS (i.e., Area and equipment posted, hearing protection in use, etc.)

MORE DETAILED NOISE EVALUATION REQUIRED: YES NO (If "YES", identify type evaluation needed.)

NAME(S) OF PERSONS IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)

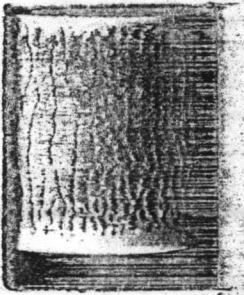
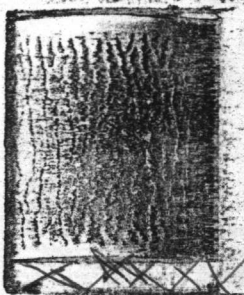
NAME, PHONE NO. AND ORGANIZATION OF SUPERVISOR OF NOISE--HAZARDOUS AREA OR OPERATION

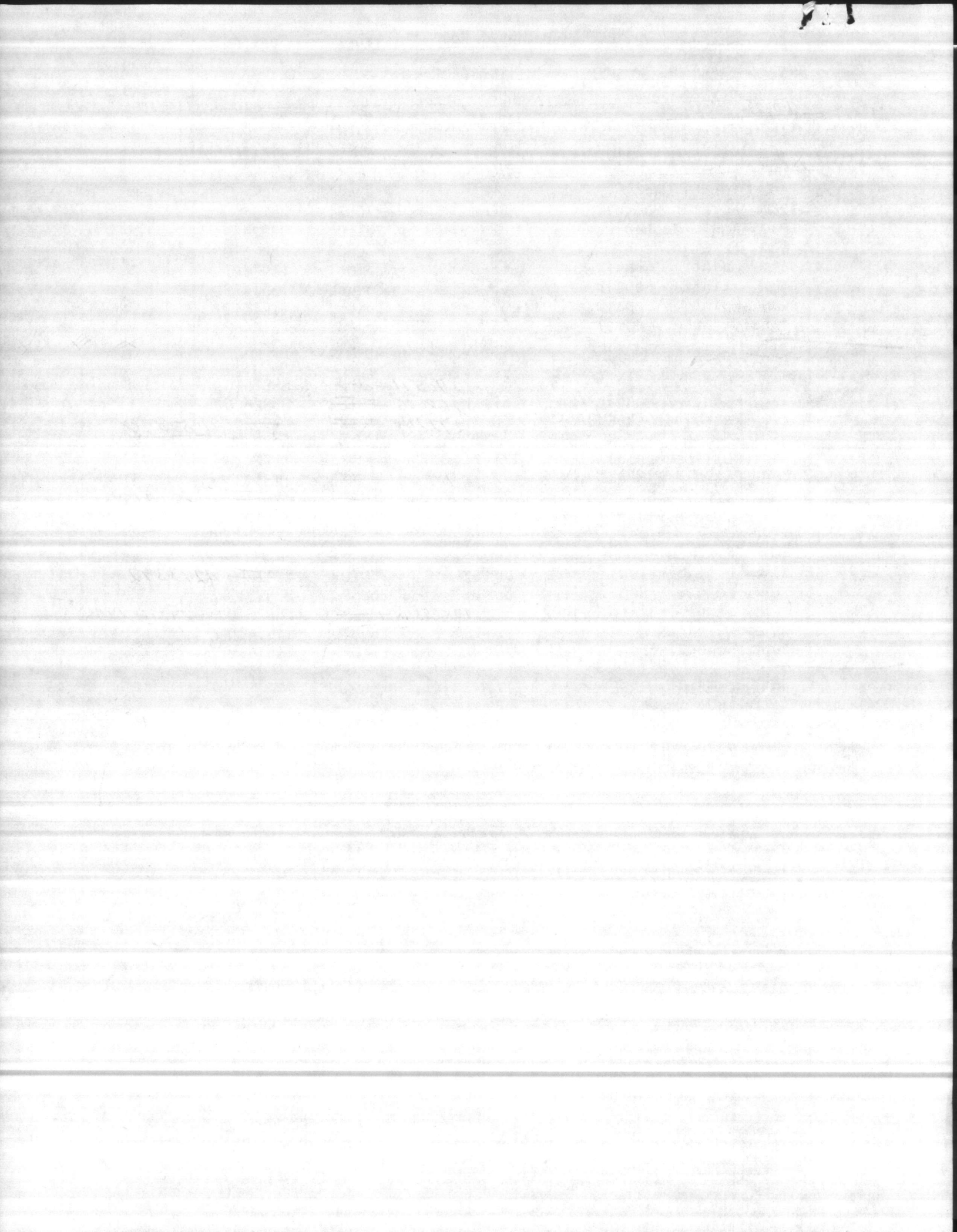
SURVEY PERFORMED BY (Last Name, First Name, MI) HANER, Charles D., HM2, USN	HEARING CONSERVATION MONITOR (Last Name, First Name, MI)
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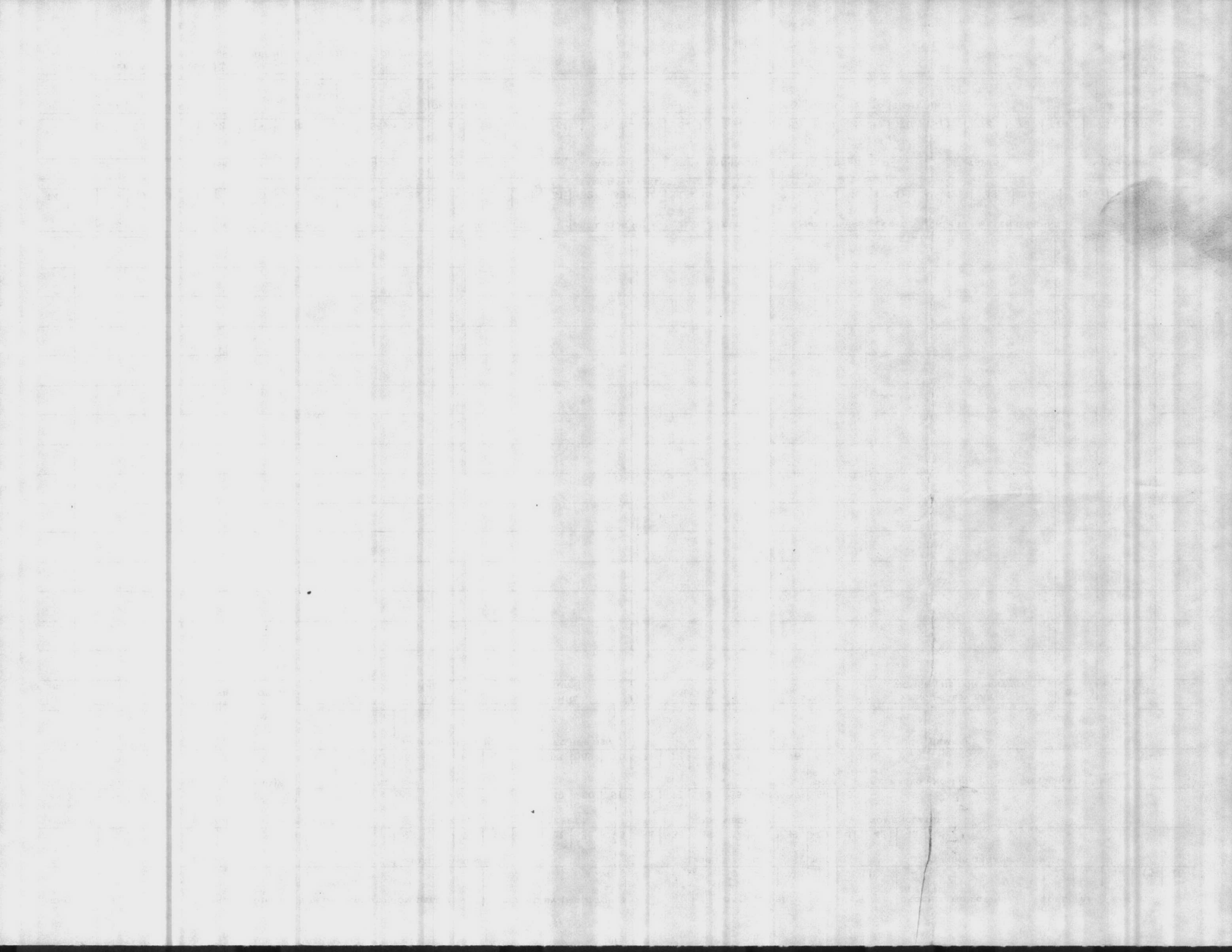


<u>DIV/BRANCH</u>	<u>Call No.</u>	<u>Truck#</u>	<u>Ser. No.</u>
BASE (UMACS)	Utilities Base	-	816200523
Handheld(UMACS)	64		
<i>UMACS Truck</i>		<i>267297</i>	
<u>UTIL OFFICE</u>			
Handheld(Dir/AsstDir)	75	-	115144522
<i>Supvrs Truck</i>	76	<i>268678</i>	
<u>STEAM GENERATION</u>			
Steam, Foreman Patrol	61	270521	2520699
Steam, Inst. Mechanic	62	271104	8532499
Steam, Foreman Mech.	63	270825	8532519
Steam, Maint. & Repair	65	271061	1151441
Steam, Maint. & Repair	66	264666	1151442
Steam, Maint. & Repair	67	264457	1151443
Handheld (Supervisors)	68	-	15144622
<u>WATER TREATMENT</u>			
Water, Supervisor	58	<i>270511</i> 268527	8532510
Water, Maint. & Repair	59	<i>268605</i> 263184	8532520
Water, Patrol Truck(CHB/ RR/OB)	60	<i>272240</i> 270839	4293392 <i>11 51438</i>
Water (Well Mechanic)	71	268914	1151436
Water (Patrol/TT/MP)	72	<i>272263</i> 270845	1151437
Water (Patrol - HP)	73	<i>271039</i> 503234	1151438 <i>8532503</i>
Handheld (Supervisors)	74	-	115144422
<u>SEWAGE TREATMENT</u>			
Sewage, Lift Stations	55	250709	8532503 <i>4293392</i>
Sewage, Maint. & Repair	56	268593	8532511
Sewage(Patrol Truck(C.Geiger)	57	<i>TURNED IN</i> 504639	8532514 <i>RADIO MAINT</i>
Sewage, Maint. & Repair	69	259070	1151440
Sewage, Supervisors	70	271025	1151439
EMERGENCY MAINT. BASE	17	-	

O.K. M







base laundry

(date)

NO: Base Property Control Officer

Submitted

(Unit)

unserviceable mattress:

Base Laundry Officer

DEPARTMENT OF THE NAVY SELF-DUPLICATING NOTE

Use only for an informal, preferably hand-written note. Make duplicate only when required for follow-up or working file. See correspondence manual for formal, official memoranda.

TO:

Dir, Vtcliter

Sewage

FSMAO

- | | | |
|--|--|--|
| <input type="checkbox"/> ACTION | <input type="checkbox"/> COORDINATE | <input type="checkbox"/> PREPARE FOR SIGNATURE |
| <input type="checkbox"/> AS DISCUSSED | <input type="checkbox"/> CORRECTION | <input type="checkbox"/> REPORT BACK |
| <input type="checkbox"/> CALL/SEE ME | <input type="checkbox"/> INFORMATION | <input type="checkbox"/> RETURN |
| <input type="checkbox"/> COMMENT/CLEAR | <input type="checkbox"/> PREPARE DRAFT | <input type="checkbox"/> |

1. BASE MAINT IS SCHEDULED FOR FSMAO INSPECTION DURING WEEK OF 14 FEBRUARY.

2. ATTACHED IS COPY OF PREVIOUS FSMAO REPORT AND OUR CORRECTIVE ACTION.

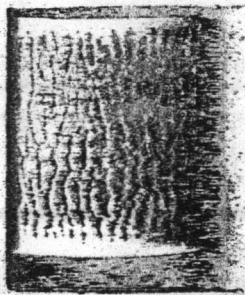
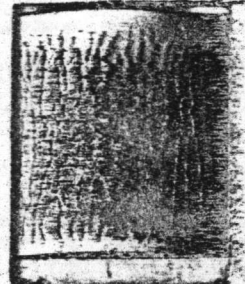
3. ALL BRANCHES WILL REVIEW ATTACHMENTS AND TAKE APPROPRIATE ACTION TO ENSURE THAT AREAS SUBJECT TO FSMAO INSPECTION ARE READY AND THAT PREVIOUS DEFICIENCIES ARE NOT REPEATED.

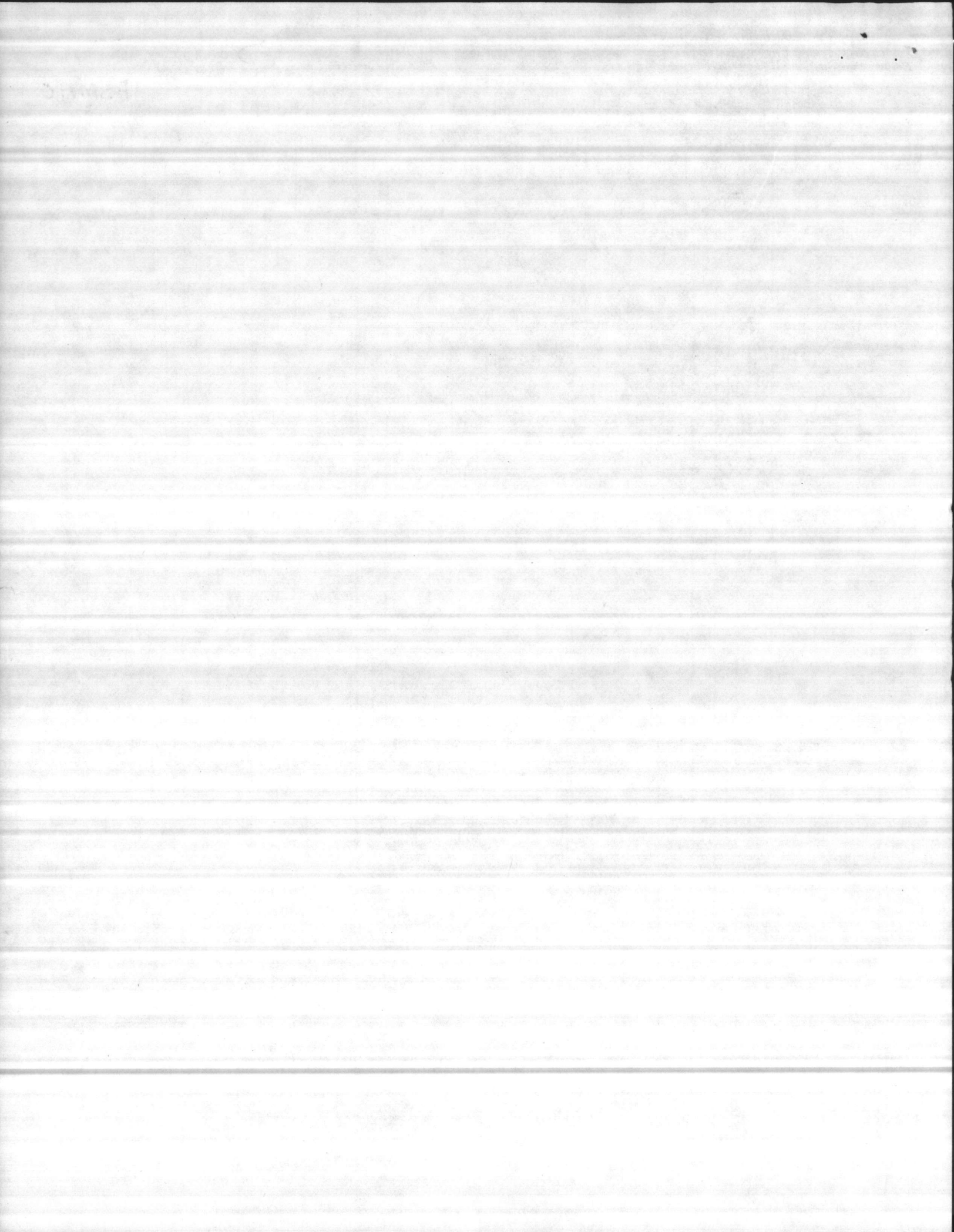
FROM:

DIR ADMIN

DATE

EXT.





T 5040/1

MAIN/RES/vam
5040/1

DEC 3 0 1980

From: Base Maintenance Officer
To: Assistant Chief of Staff, Logistics

Subj: FSMAO Analysis Report 11003

Ref: (a) FSMAO-1 rpt GAT:CCM:pam 5041/1 93182 of 20 Nov 80

1. In accordance with reference (a) corrective action on the recommendations contained in the subject analysis has been taken and the following comments provided:

a. Recommendation #1. Concur. Cash Collection Agents have been refamiliarized with their responsibilities in accordance with the provisions of the NAVCOMPTMAN. Their written instructions concerning turn-in of collected funds have been modified in accordance with regulations.

b. Recommendation #2. Concur. Internal procedures have been adopted by supply personnel to ensure that follow-up and lost shipment/tracer actions are accomplished in accordance with MCO P4400.15H.

c. Recommendation #3. Concur. Action has been taken to establish an intra-department distribution allowance. Correspondence has been submitted to Marine Corps Base requesting missing directives and adjustments to Base Maintenance publication allowances. Action is complete except for receipt of missing publications.

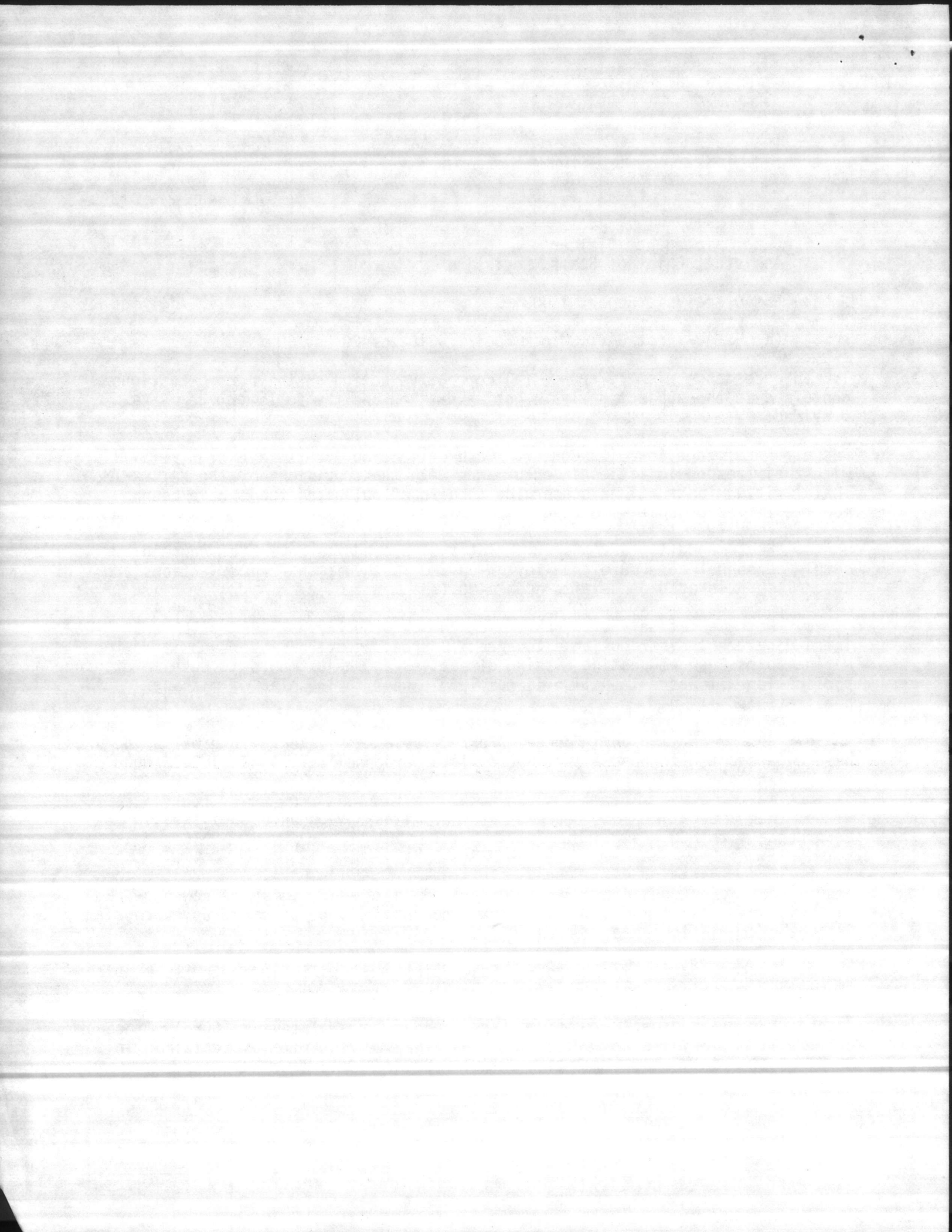
d. Recommendation #4. Concur. Corrective action taken. Internal procedures have been adopted to ensure that appropriate personnel review MCBul 5215 upon receipt and correct internal publication files.

e. Recommendation #5. Concur. Voucher files have been established in accordance with MCO P4400.15H.

f. Recommendation #6. Concur. Internal procedures have been adopted to ensure that adjustment documents are prepared on non-T/E items. A new non-T/E list will be established and adjustment documents will be prepared as appropriate. Estimated completion date 1 March 1981.

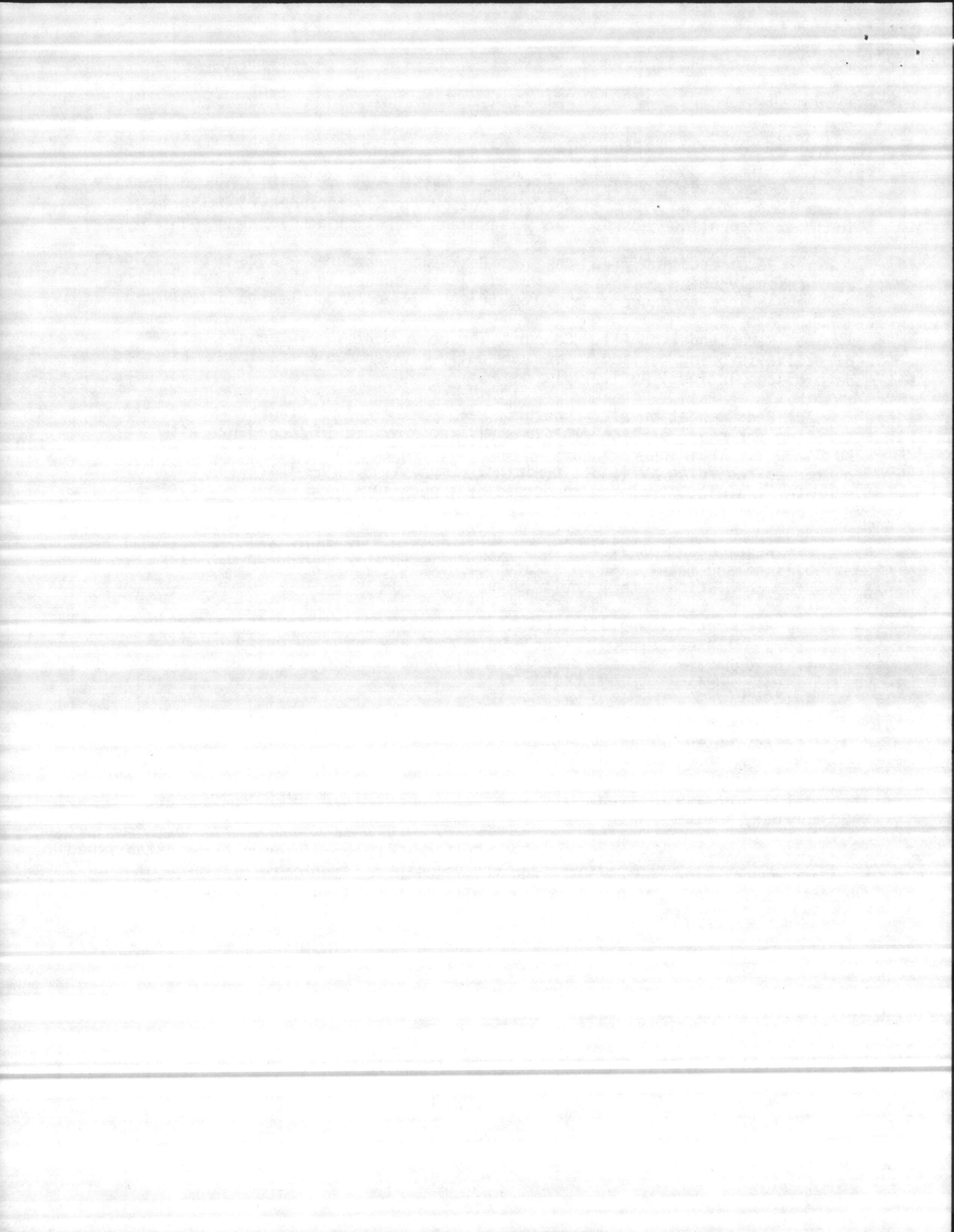
g. Recommendation #7. Concur. Base Maintenance will ensure the submission of M-L-S-R reports on non-T/E items.

h. Recommendation #8. Concur. The present Base Maintenance Supply Procedures order will be modified to reflect the investigative requirements contained in BO P4400.5D. Estimated completion date 1 February 1981.



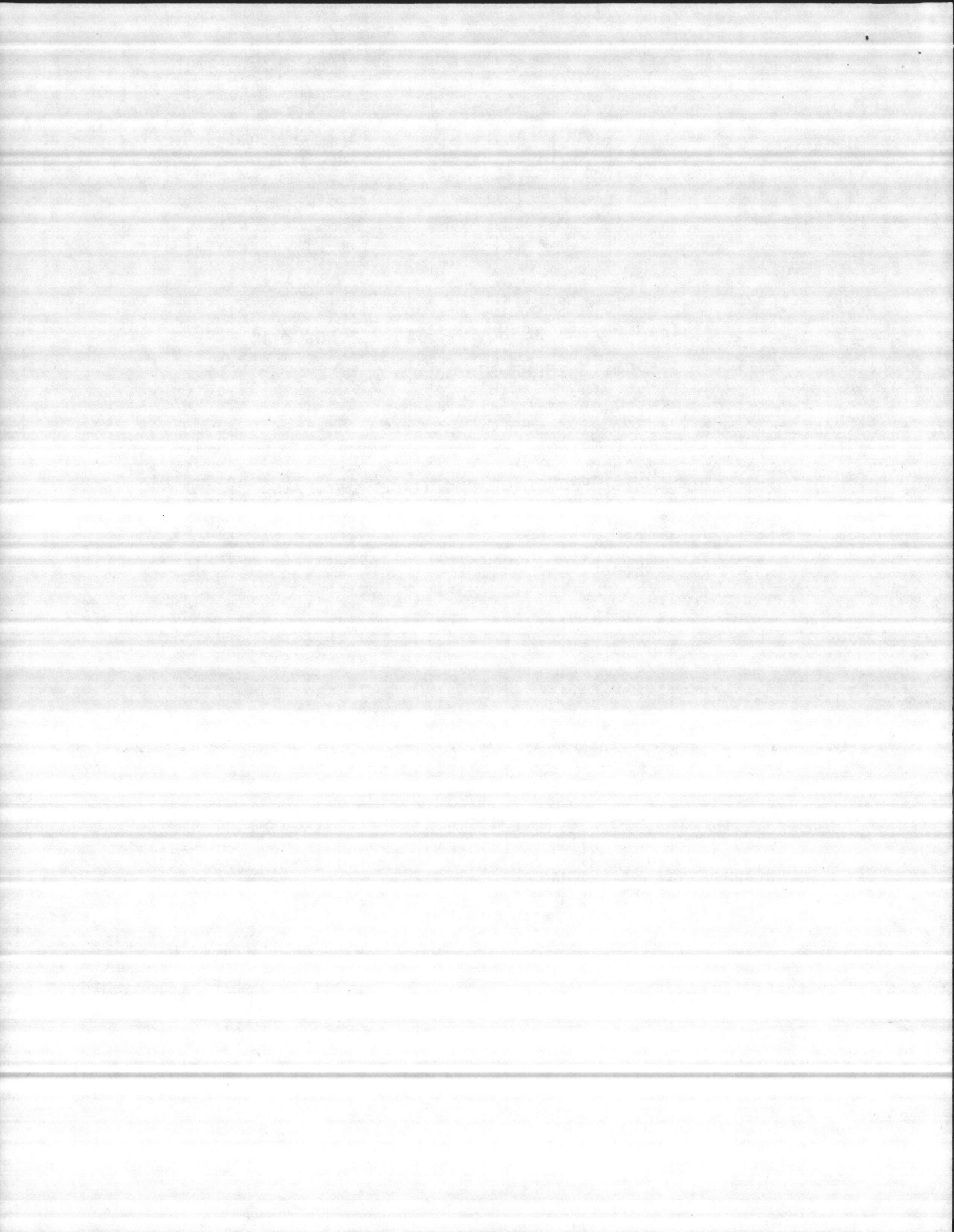
Subj: FSMAO Analysis Report 11003

- ✓ i. Recommendation #9. Concur. Base Maintenance is continuing to identify those items of shop overhead material not previously included in existing informal accounting records. Accomplishment is anticipated by 1 March 1981.
- ✓ j. Recommendation #10. Concur. Desk-top procedures and turn-over folders are presently being established for all key personnel in the Base Maintenance Department in accordance with MCO P4790.2A. Expected completion date 1 April 1981.
- k. Recommendation #11. Concur. The Department's maintenance management directive is being revised to include daily maintenance operations. Expected date of completion 1 April 1981.
- l. Recommendation #12. Concur. Maintenance and maintenance management training for civil service employees will be provided in accordance with BO P4790.1. Training personnel at the Civilian Personnel Office have been contacted regarding available training. Emphasis will be increased regarding operator training, training conducted by supervisors, and other employee development training. Action has begun and will receive continuing emphasis.
- m. Recommendation #13. Concur. Garrison Mobile Equipment records will be established and maintained in accordance with TM 4700-15/1D and MCO 11260.3C. Expected completion date 1 April 1981.
- n. Recommendation #14. Concur. Equipment utilization and maintenance man hours will be thoroughly checked for accuracy prior to being reported to higher headquarters in accordance with MCO 4440.27C and MCO 11260.3C. Effective immediately.
- o. Recommendation #15. Concur. Repair parts and equipment related supplies will be accounted for in accordance with the procedures outlined in MCO P4790.2A. Excess parts found to be unservicable have been properly disposed of with DPDO. Excess parts that can be utilized within one year will be retained and accounted for. Other excess parts will be turned in. Expected completion date is 28 February 1981.
- ✓ p. Recommendation #16. Concur. Tool control procedures will be established in accordance with MCO P4790.2A and MCO P4400.15H. Applicable extracts of chests, kits, and sets noted on CMR's will be identified and inventoried per established procedures. Estimated completion date is 1 April 1981.
- q. Recommendation #17. Concur. TMDE on hand is being identified. Calibration control system will be established in conjunction with other required maintenance management procedures. Written procedures will be promulgated by 1 April 1981. Coordination has been effected with FSSG for immediate calibration of selected equipment items.



COPY

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PERSONNEL EXTERNAL TO THE
DEPARTMENT OF THE NAVY WITHOUT
PRIOR APPROVAL OF CMC (CODE LMM-1/44)





UNITED STATES MARINE CORPS
FIELD SUPPLY AND MAINTENANCE ANALYSIS OFFICE ONE
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO

GAT:CCM:pam
5041/1
93182
NOV 20 1980

COPY

From: Officer in Charge

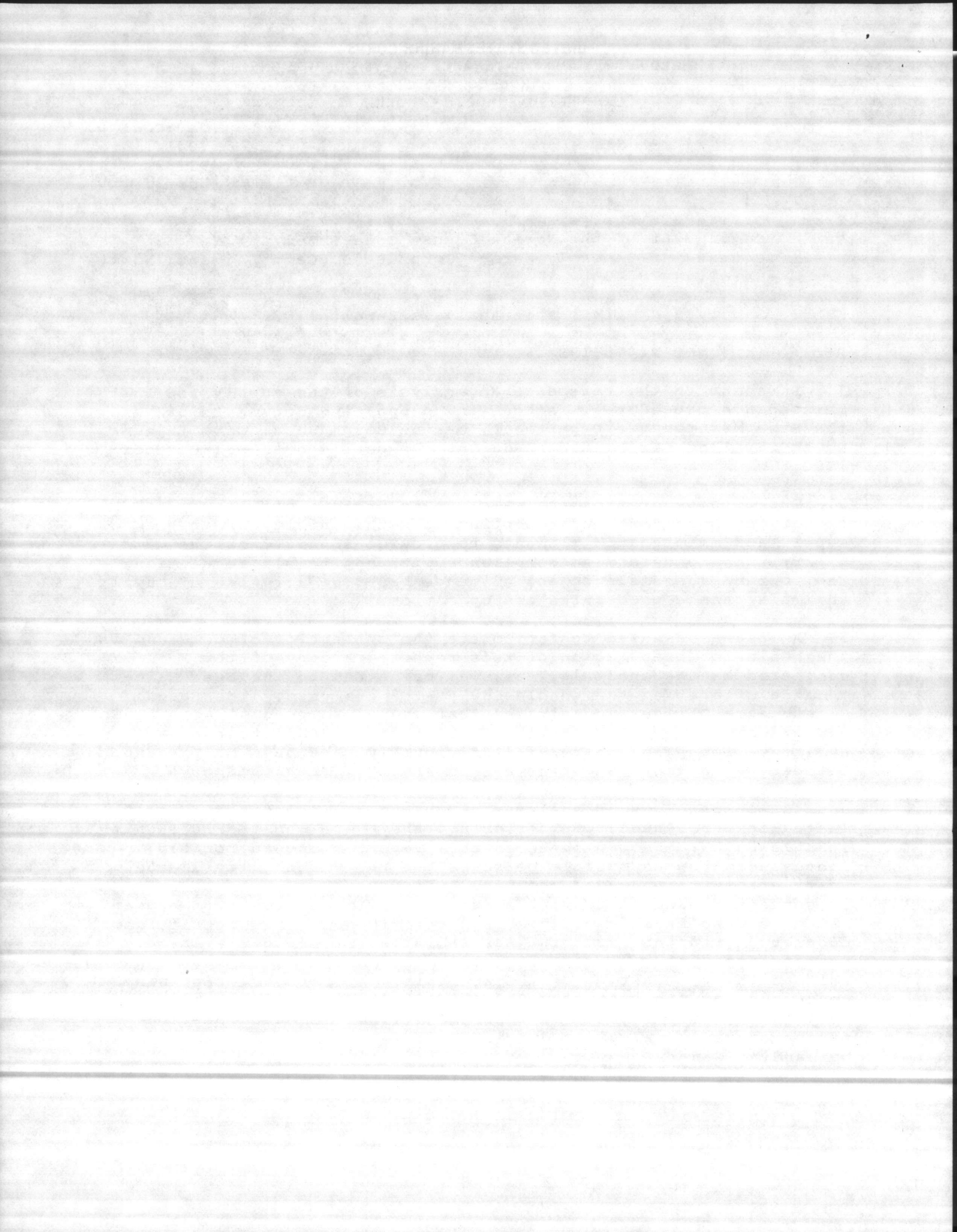
To: Commandant of the Marine Corps (Code LMM-1/44)

Via: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542

Subj: Supply and Maintenance Analysis Report 11003

Ref: (a) MCO P4400.19B

1. Pursuant to the reference an analysis of the supply and maintenance procedures, methods and supporting documents of the Base Maintenance Department, Marine Corps Base, Camp Lejeune, North Carolina was conducted during the period of 20-31 October 1980.
2. The purpose of this analysis was to promote efficiency and economy by observing and reporting upon the ability of the supply and maintenance elements to provide support for the Department, to determine compliance with applicable regulations and to render assistance and guidance based on a review of supply and maintenance procedures and operations.
3. A résumé was used to facilitate the collection of data and is the basis for preparation of this report. A copy of the résumé completed by the analysis team, was presented to the Base Maintenance Officer at the conclusion of the analysis. The Base Maintenance Officer was advised that use of the résumé as a training aid and/or inspection checklist will assist in maintaining an effective logistics posture. Additionally, the Base Maintenance Officer was advised that the résumé should be retained as a source of information for other agencies that might conduct audits, inspections or analyses of the unit. All discrepancies listed in the résumé, whether or not they were considered significant enough to be mentioned in this report, were thoroughly discussed with responsible personnel at the working level, and instruction/training was provided, where necessary, to assist in correction and to prevent recurrence. Items requiring command attention, to include all findings described in this report, were discussed in detail with the Base Maintenance Officer. There was no apparent disagreement between the analysis team and the unit at the termination of the analysis. An exit briefing was conducted for the Assistant Chief of Staff Facilities, Marine Corps Base, Camp Lejeune on 4 November 1980. Upon completion of the overall analysis a debrief will be provided for the Commanding General.



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5041/1
93182
NOV 26 1980

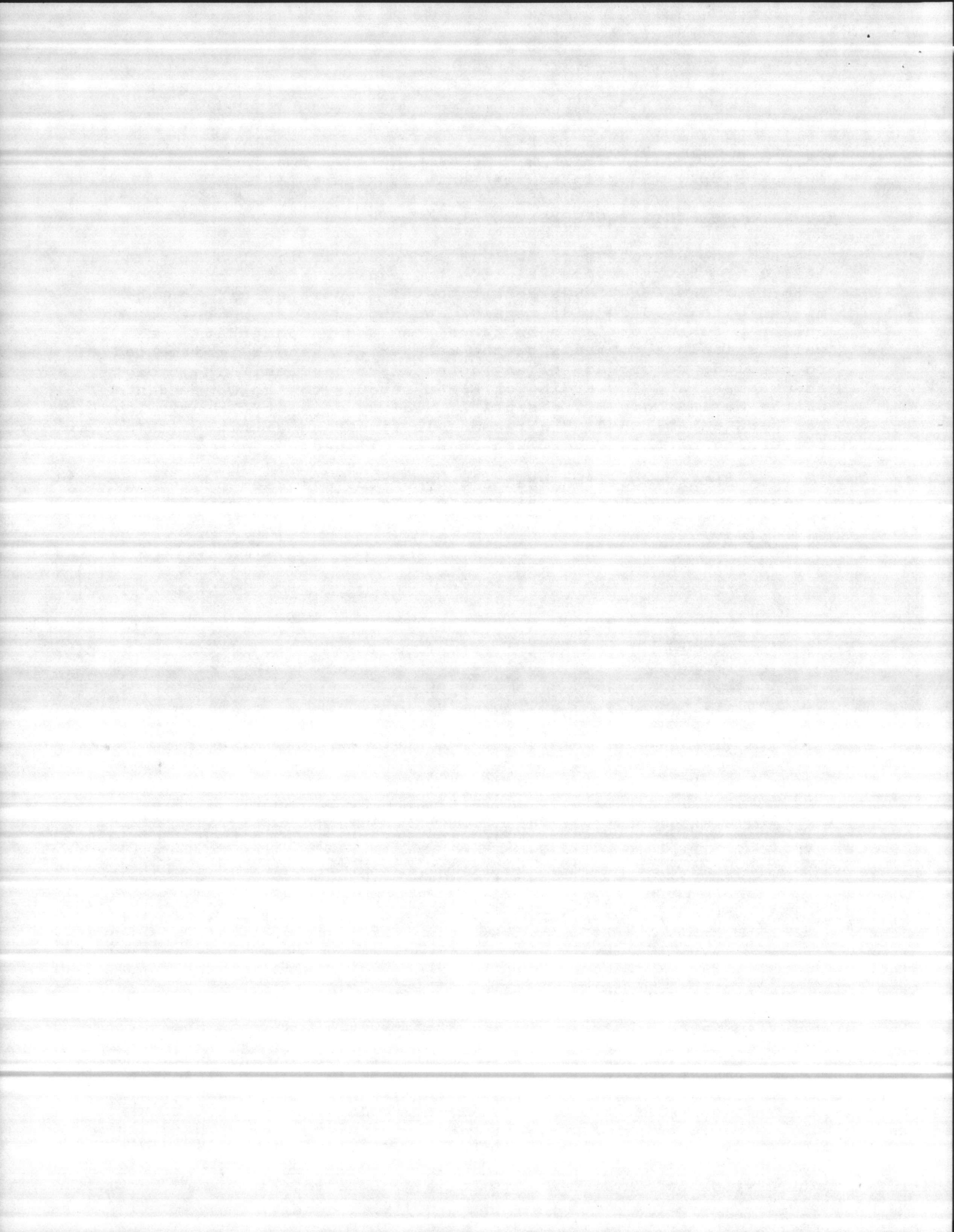
Subj: Supply and Maintenance Analysis Report 11003

4. ENDORSEMENT REQUIREMENTS

a. The attention of the via addressee is invited to paragraph 1060.1 of the reference relative to required action on FSMAO reports. The first endorsement to this report should be submitted within 30 days of receipt and should address what action has been taken, or is to be taken, on each recommendation as well as include comments on the managerial changes implemented to preclude recurrence of any noted discrepancies. The prompt endorsement and forwarding of FSMAO reports to the Commandant of the Marine Corps is essential. Thirty days at the unit level has been established as a reasonable timeframe within which proper processing of this report can be accomplished.

b. It is requested that a copy of the endorsement and any other correspondence pertaining to this report be forwarded to this office.

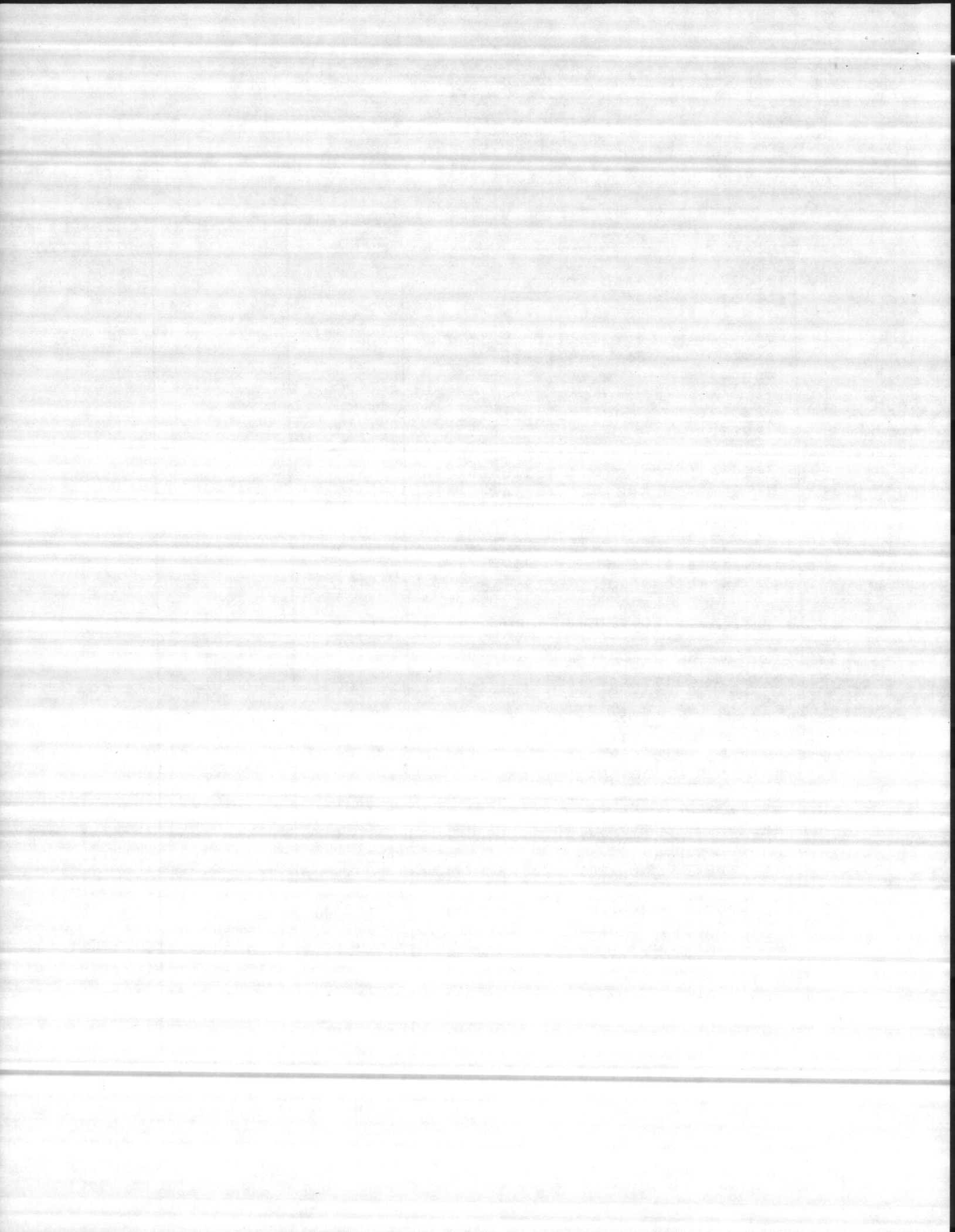
P. F. O'KEEFE



SECTION A

SUMMARY OF FINDINGS

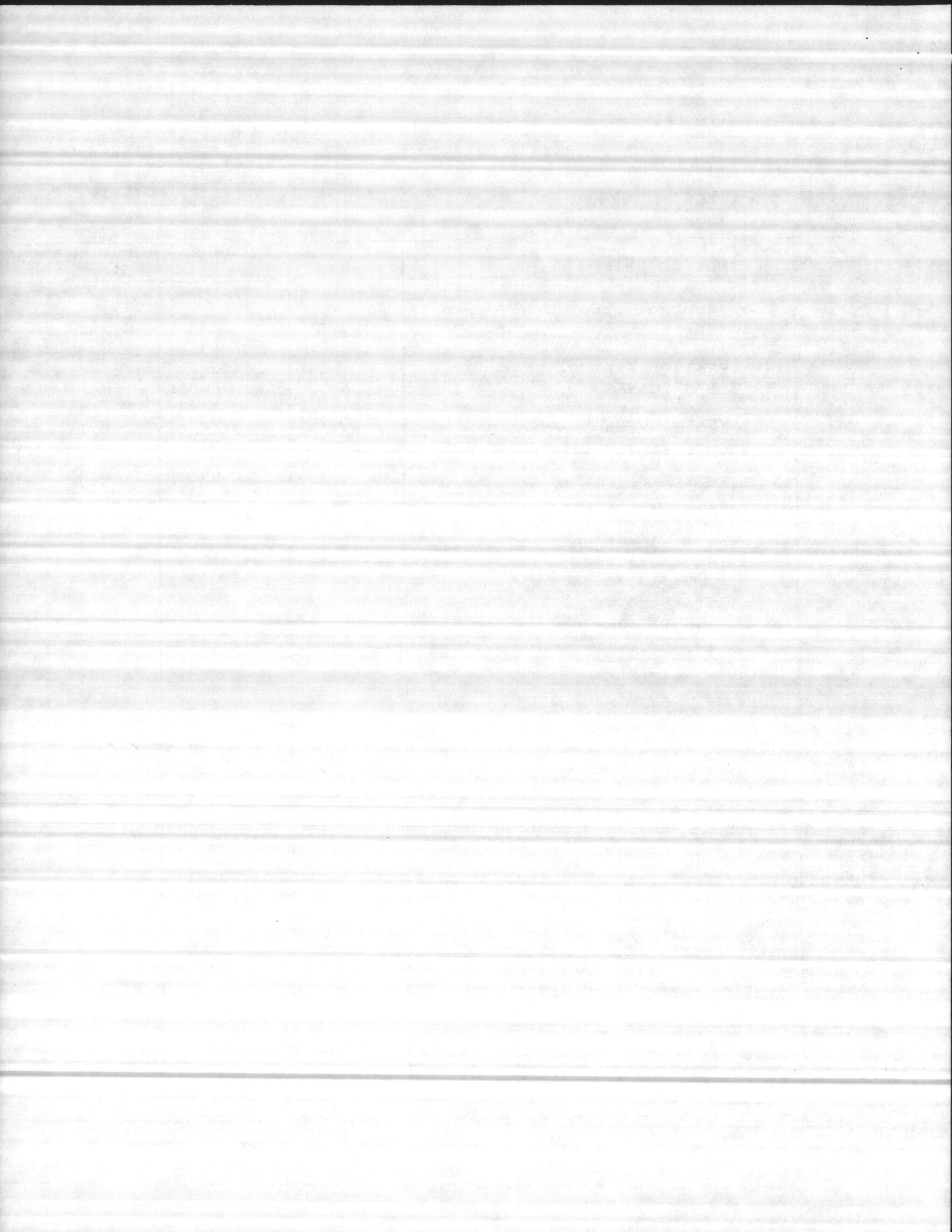
		SERIAL NUMBER	ACTIVITY CODE
		11003	93182
PARA	FINDINGS BRIEF	REPEAT FINDING	CMDR RESPON FOR ACTION
	<u>COLLECTING AND ACCOUNTING FOR PUBLIC FUNDS</u>		
1.	Procedures for collecting and accounting for public funds required review.	No	1 CG
	<u>REQUISITIONING AND FOLLOW-UP ACTION</u>		
2.	Requisitioning and follow-up procedures require review.	No	2 CG
	<u>DIRECTIVES AND PUBLICATIONS</u>		
3.	Management of directives and publications was inadequate.	No	3, 4 CG
	<u>PROPERTY CONTROL PROCEDURES</u>		
4.	Property control procedures were inadequate.	No	5, 6, 7, 8 CG
5.	Control and accountability of excess material was inadequate.	No	9 CG
	<u>MAINTENANCE MANAGEMENT</u>		
6.	Maintenance management procedures require review.	No	10, 11, 12 CG
	<u>EQUIPMENT SUPPORT AND RECORDS</u>		
7.	Equipment support records were improperly prepared/maintained or not established.	No	13, 14 CG
8.	Excess repair parts/secondary reparable were on hand.	No	15 CG



SECTION A

SUMMARY OF FINDINGS

		SERIAL NUMBER	ACTIVITY CODE	
		11003	93182	
PARA	FINDINGS BRIEF	REPEAT FINDING	RECOMMEN- DATION #	CMDR RESPON FOR ACTION
9.	Tool control procedures were inadequate.	No	16	CG
10.	Calibration control procedures were inadequate.	No	17	CG
11.	Analytical Conclusion	N/A	N/A	N/A



SECTION B

ANALYSIS FINDINGS AND RECOMMENDATIONS

COLLECTING AND ACCOUNTING FOR PUBLIC FUNDS

1. Procedures for collecting and accounting for public funds required review.

a. A review of 36 of 36 Cash Collection Vouchers (DD-1131s) and the supporting documents disclosed that funds collected were not always turned in when required.

(1) In three instances, funds were on hand at the close of business at the end of the month and were not turned in until the following month.

(2) In nine instances, funds collected exceeded \$200.00 and they were not turned in to the disbursing officer the day on which the \$200.00 limitation was exceeded or at least twice weekly when daily deposit was impractical.

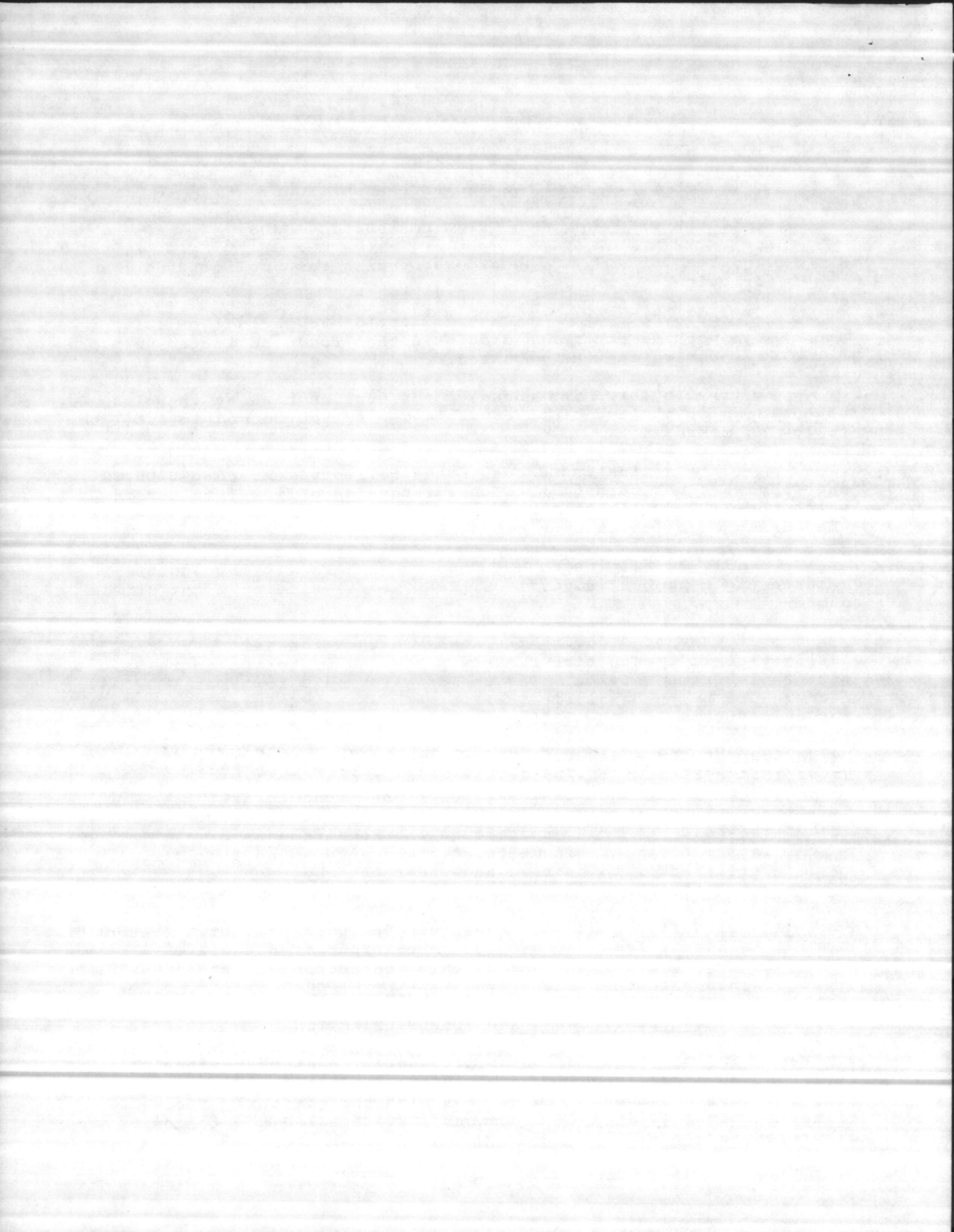
(3) In all instances, voucher numbers were assigned a three digit number (e.g., 1-80, 2-80, etc.) vice an eight digit number.

b. It was noted during the analysis that the unit was preparing a DD-1131 each time funds were turned in to the appropriate disbursing office. The use of NAVSUP 470 form was recommended by the analysis team to reduce the administrative burden of preparing DD-1131s each time funds were turned-in. In this manner only one DD-1131 would be prepared each month, supported by NAVSUP 470 forms and other supporting documents. It was also noted that personnel currently assigned as Cash Collection Agents acknowledged acceptance of their positions without first becoming familiar with the required references. Responsible personnel stated they did not truly understand the requirements or regulations pertaining to their appointments. It was also noted that the required references to be read and understood by cash collection agents were not on hand.

RECOMMENDATION #1: That personnel assigned cash collection responsibilities become familiar with the provisions of paragraph 043003.1, Volume IV of the NavComptMan and accomplish their duties in accordance with that directive.

REQUISITIONING AND FOLLOW-UP ACTION

2. Requisitioning and follow-up procedures required review. A review of 60 of 277 pending requisitions on file for Fiscal Year 1980 and 1981 and comparison of them with the quarterly reconciliation listing dated 28 September 1980 revealed the following discrepancies.



a. In eight instances, requisitions retained in the pending requisition file were not on the ~~quantity~~ ^{quarterly} reconciliation listing.

b. In three instances, pending requisitions were listed on the reconciliation listing indicating open purchase was utilized; however, the procurement instrument (DD-1155) was not on file.

c. In one case, a requisition was in the pending file with a supply status card (AEL) indicating BF status (no record of the document at the supply source); however, no further action was taken.

d. In one instance, lost shipment and tracer action was not initiated for a requisition with aged status.

RECOMMENDATION #2: That follow-up and lost shipment/tracer actions be accomplished in accordance with MCO P4400.15E.

DIRECTIVES AND PUBLICATIONS

3. Management of Directives and Publications was inadequate.

a. A review of the MCB, Camp Lejeune Table of Allowance for Publications (TAP) and the Internal Distribution Lists (NAVMC 10975s) maintained by the MCB, Adjutant Section was conducted to determine if allowances for directives and publications were established in sufficient quantities to support the Base Maintenance supply and maintenance efforts. This review disclosed the following discrepancies.

(1) Distribution code allowances were not established on the NAVMC 10975s for all required need-to-know publications (e.g., distribution codes/lists E, GJ, ZB5, E15, CT, JA, JB and AB).

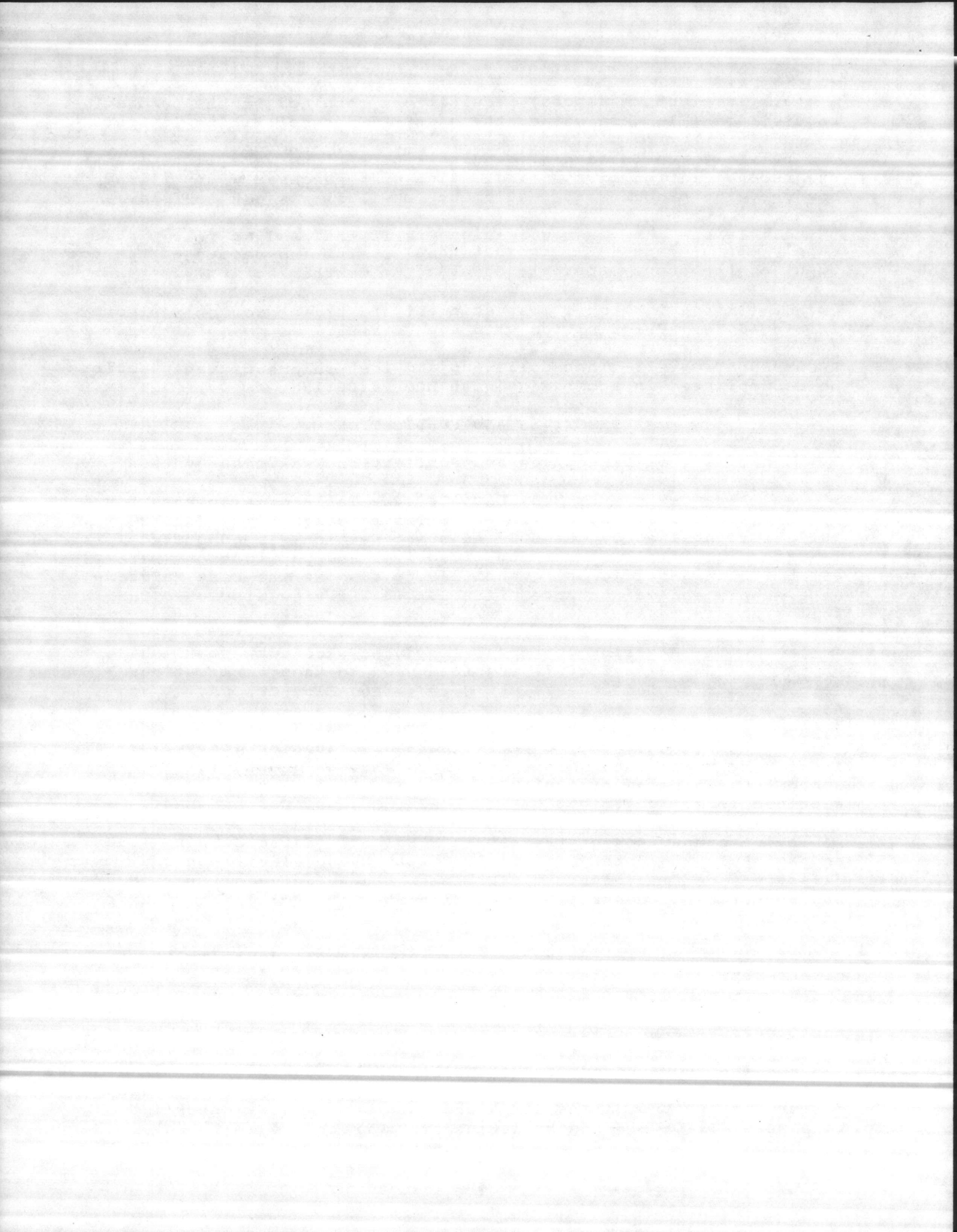
(2) In other instances where distribution code allowances were established, there were insufficient quantities to support the mission of the supply and maintenance commodity sections (e.g., distribution codes A38, CM, ZB, ZB3 and ZB4).

b. A comparison of the latest MCBul 5215 dated 30 June 1980 and MCB Bul 5215 dated 30 June 1980 with the publications and directives on file within the Engineer Heavy Equipment Section and the Property Control Section disclosed the following discrepancies:

(1) In six instances, obsolete/cancelled Marine Corps directives were on file.

(2) In ten instances, cancelled/obsolete Base Bulletins and Orders were on file.

c. The above noted discrepancies can be attributed to inadequate internal distribution of publications based on need-to-know and failure to use the Marine Corps and Base semi-annual checklists to ensure all Orders and Bulletins are current and up-to-date.



RECOMMENDATION # 3: That adequate allowances and internal publications control be established within the Base Maintenance Department in accordance with MCOs P5600.31E, P5215.1E and Appendix B of MCO P4790.2A.

RECOMMENDATION # 4: That procedures be established for directives, files and need-to-know internal files to be reviewed to determine if all required directives/changes to directives have been received and if all cancelled directives have been removed. This review should be accomplished within 20 days from receipt of MCBul 5215 in accordance with paragraph 11 of the same bulletin.

PROPERTY CONTROL PROCEDURES

4. Property control procedures were inadequate.

a. A review of procedures in effect to control and account for Government property disclosed the following.

(1) A voucher file was not established where required. Responsible personnel were not aware of the requirement to maintain a voucher file.

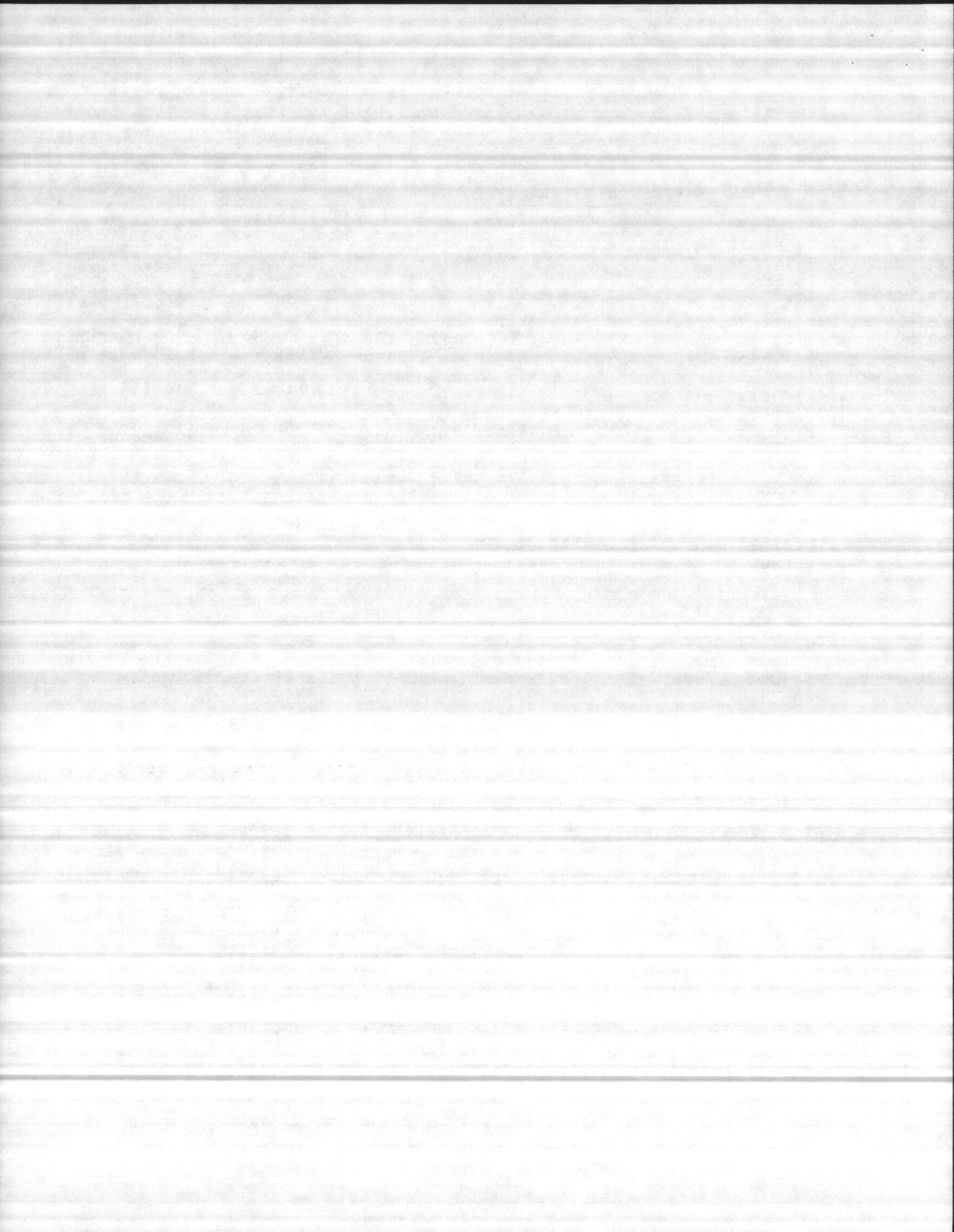
(2) Adjustment documents were not prepared for controlled nonexpendable items appearing on the Officer-in-Charge's non-T/E allowance list. Responsible personnel stated that adjustments were made, based on a request for an allowance change to the non-T/E allowance list.

(3) In two instances, Missing, Lost, Stolen, Recovered (M-L-S-R) reports were not prepared for highly negotiable, serialized items appearing on the non-T/E allowance list that were discovered missing. Examples were provided in the unit's resumé.

(4) Items appeared on the non-T/E allowance list that qualified for control by the Base Property Control Office.

b. A review of the procedures in effect for managing investigations of controlled nonexpendable items appearing on the Officer-in-Charge's non-T/E allowance list and the Consolidated Memorandum Receipt (CMR) provided by the Base Property Control Office (BPCO) disclosed that no written guidelines were provided for the management of investigations. Guidance in the following areas is required.

- (a) Submission of M-L-S-R reports.
- (b) Procedures for requesting an investigation.
- (c) Required file maintenance procedures upon completion of the investigation.



c. Although most of the guidance required to properly administer property should be provided by internal Base Maintenance directives, some of it will be dependent on the policy contained in other Marine Corps Base orders, such as those presently being prepared by the AC/S, Logistics which will cover the control of Base Property and other supply/logistics matters. In the interim, the Base Maintenance Officer should seek guidance from the AC/S, Logistics for the unresolved policy questions.

RECOMMENDATION # 5: That a voucher file be established where appropriate in accordance with MCO P4400.15H.

RECOMMENDATION # 6: That adjustment documents be prepared to adjust the non-T/E allowance items as required by MCO P4400.15H.

RECOMMENDATION # 7: That M-L-S-R reports be submitted for highly negotiable serialized items as required by MCO P4400.15H.

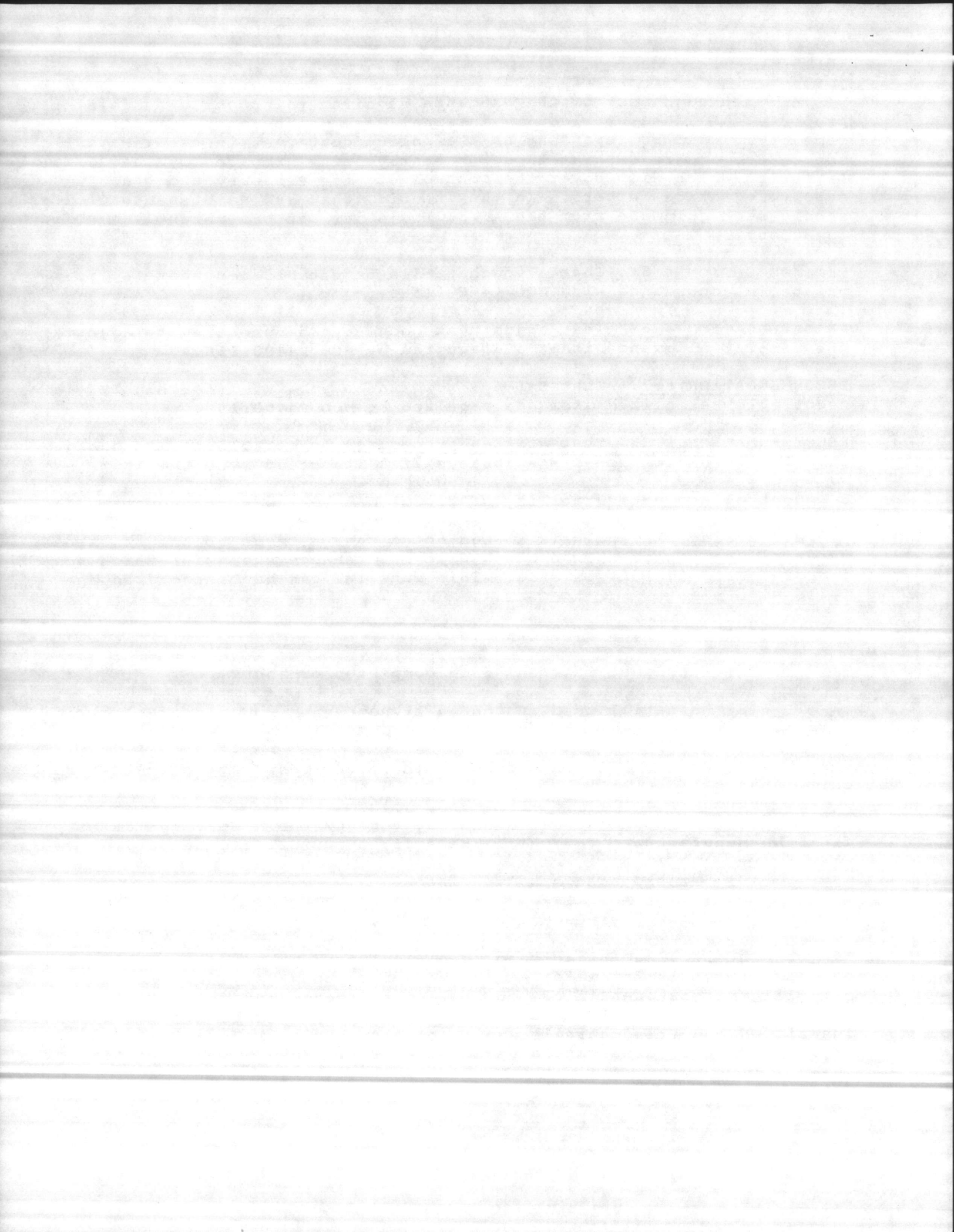
RECOMMENDATION # 8: That written procedures be established to manage investigations for non-T/E allowance list items and BPCO CMR items.

5. Control and accountability of excess material was inadequate.

a. During the analysis it was noted that a large volume of excess material and equipment was stocked in maintenance shops for which no immediate requirement existed. This material can be categorized as follows:

- (1) Seasonal-type items.
- (2) Residual material from completed projects.
- (3) Material used in the maintenance and rebuild of electric motors.
- (4) Items held in stock for insurance/destructive weather requirements.
- (5) Items no longer available through the supply system or from the manufacturer for which there is an anticipated need.
- (6) Preexpended bin type items.
- (7) Shop/overhead material.

b. The requirement to keep usable salvaged material, broken units of issue and bulk lot material is recognized; however, all excess material must be identified, controlled and accounted for. At the present time, an undetermined percentage of these excesses have been identified and are controlled and accounted for on informal records in a centralized area within each trade area. However, at the time of



the analysis, the maintenance trade shops had not identified all excesses and turned them in to the centralized control point.

c. Additional comment/recommendations relative to accounting for Base Maintenance excesses are presented in the analysis report for the DSSC, Camp Lejeune (FSMAO-1 report #11001 applies).

RECOMMENDATION # 9: That all material excesses be identified and accounted for on an informal basis.

MAINTENANCE MANAGEMENT

6. Maintenance management procedures require review.

a. A review of the Department's maintenance management directive, Base Maintenance Order 4400 dated 22 February 1978, disclosed that the instructions contained therein were general in nature and did not contain sufficient specific guidance for a viable maintenance management program. The directive did not address the following areas.

(1) Desk-top procedures and turn over folders. During the analysis it was noted that desk-top procedures and turn over folders were not established for key personnel in the Heavy Equipment, Electrical, Refrigeration, Metalworking, Plumbing and Telephone sections.

(2) Procedures for the control and maintenance of support and test equipment

(3) Repair parts request procedures to include repair parts control and validation/reconciliation

(4) Procedures for control and maintenance of tool sets, chests and kits

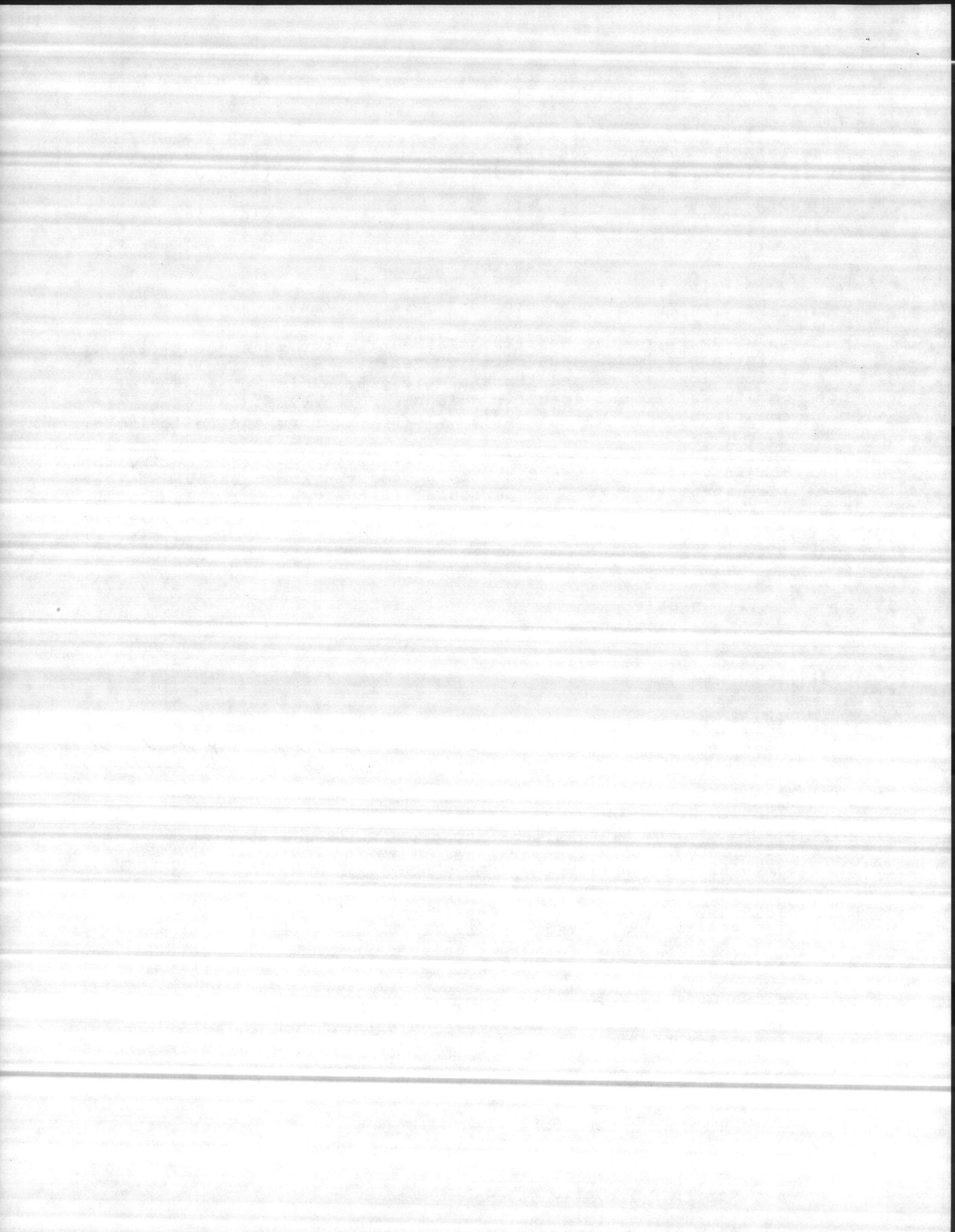
(5) Calibration control

b. A maintenance and maintenance management training program for civil service employees was not implemented in accordance with paragraph 505 of Base Order P4790.1.

RECOMMENDATION # 10: That desk-top procedures and turn over files be established for all key personnel within the Department in accordance with MCO P4790.2A.

RECOMMENDATION # 11: That the Department's maintenance management directive be revised to include, in sufficient detail, necessary instructions for the performance of daily maintenance operations using applicable portions of Appendix A of MCO P4790.2A for guidance.

RECOMMENDATION # 12: That maintenance and maintenance management training for civil service employees be established in accordance with Base Order P4790.1 and paragraph 0203.2 of MCO P4790.2A.



EQUIPMENT SUPPORT AND RECORDS

7. Equipment records were improperly prepared/maintained or not established.

a. A review of 20 of 207 garrison mobile engineer equipment records and associated support documents disclosed the following discrepancies.

(1) NAVMC 10524 (Consolidated Engineer Equipment Operation Log and Service Record). In all instances the "Started and Stopped" hour meter columns were not being utilized. Additionally, entries recorded in the "Total Hours/Miles Operated" block were estimated vice the actual hours/miles operated as recorded on the equipment hour meter and, the "Hour/Mileage Preventive Maintenance (PM) Completed" column was not annotated with the appropriate hours that PM services were conducted/completed.

(2) NAVMC 10523 (Engineer Equipment Operational Record). A review of 25 associated NAVMC 10523s disclosed that in 22 instances hour meter readings and a "Released By" signature were not annotated on the forms. Additionally, in 16 instances, operator initials were not annotated on the reverse side of the forms to indicate that before, during and after PM services were performed.

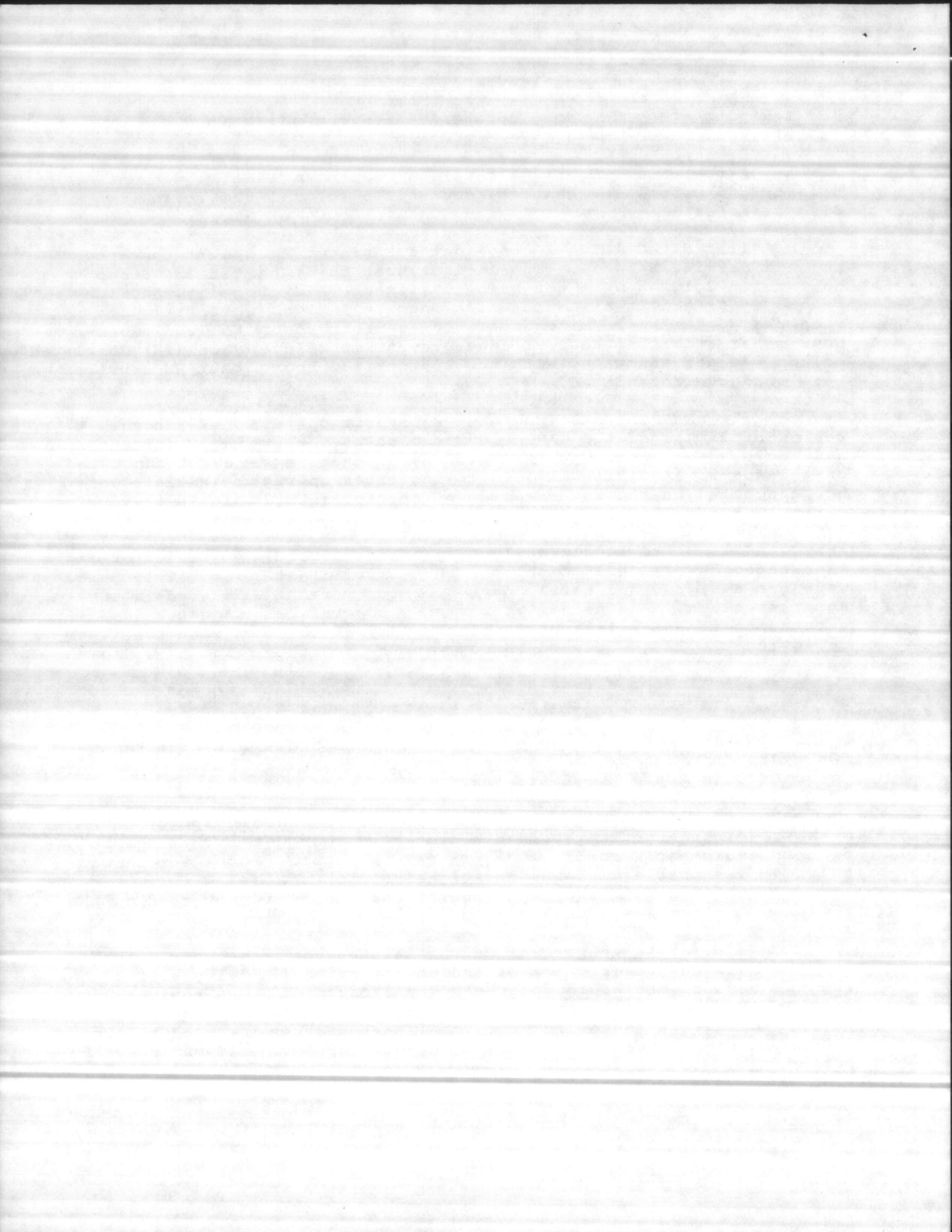
(3) NAVMC 10031 (Daily Dispatching Record). A review of eight associated NAVMC 10031s disclosed that in all instances, "Trip Numbers" were not assigned and total hours operated were not entered in the remarks column. Additionally, the shop supervisor's signature was entered on the same line of the last entry of the day vice the line following the last entry of the day in the remarks column.

(4) In three instances, engineer equipment records had not been established for three mobile electric power generators.

b. A review of the equipment utilization hours and maintenance man hours documented/reported to higher headquarters for 20 items of equipment disclosed the following.

(1) There were imbalances between the equipment hour meter readings and the recorded accumulated hour meter readings on file in equipment records. The primary causative factor for the imbalances was that equipment operational hours were being estimated in lieu of utilizing the equipment operational hours as recorded on the equipment hour/mileage meter.

(2) A comparison of the maintenance man hours reported for the maintenance (repair) of equipment during fiscal year 1980 and the maintenance man hours documented by SROs on file in equipment records disclosed that, in 18 instances, imbalances existed. The primary causative factor for the imbalances was the lack of effective reconciliation between man hours documented on SROs and man hours reported.



c. A review of 80 completed and 37 pending Shop Repair Orders (SROs) disclosed the following.

(1) In all instances the "Accumulated Miles/Hours" block of the SROs were annotated with estimated hours vice the actual accumulated meter reading of equipment and, the "Present Meter Reading" block of SROs were not annotated with the present meter reading of associated equipment.

(2) In 30 instances, the "Work Authorized and Date" blocks of pending SROs were not annotated with an authorizing signature and date for equipment repairs in progress or for repair parts requisitioned.

d. Effective maintenance management depends on the establishment and maintenance of required records in order to ensure that operational and required maintenance has been identified recorded and properly performed. The recorded information provides valuable historical data used to determine life cycle costing, inherent design deficiencies and candidacy for retirement programs based on age, total operational hours/miles and/or cost of repairs. Failure to accurately record operational and maintenance data distorts actual equipment utilization and accumulated repair costs when reported to higher headquarters.

RECOMMENDATION # 13: That garrison mobile engineer equipment records be established and maintained in accordance with TM 4700-15/1D and, as modified by MCO 11260.3C.

RECOMMENDATION # 14: That equipment utilization and maintenance man hours be reconciled for accuracy prior to being reported to higher headquarters in accordance with MCO 4440.27C and MCO 11260.3C.

8. Excess repair parts/secondary reparable were on hand.

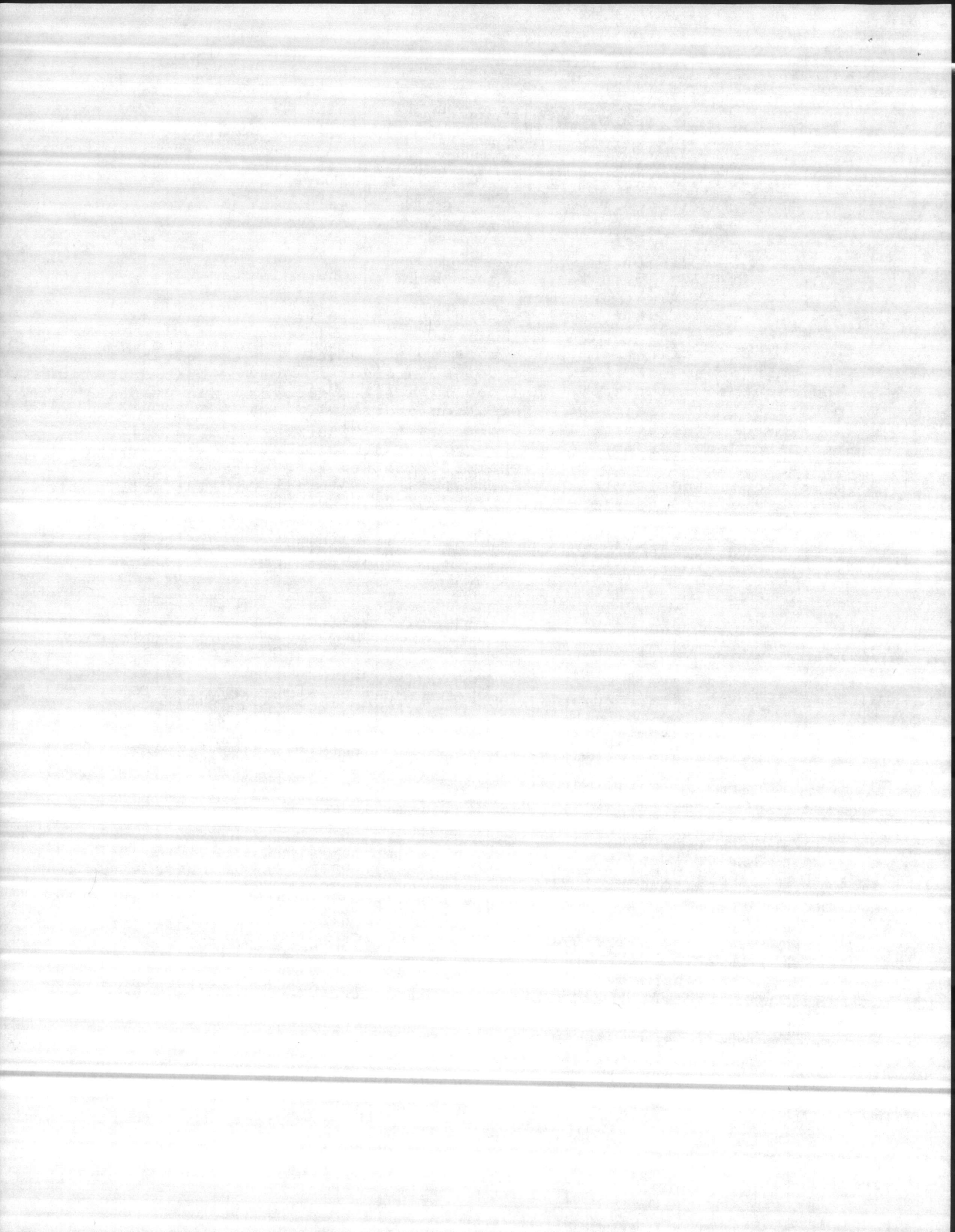
a. An examination of the Heavy Equipment Section's Shop Repair Order (SRO) repair parts bins disclosed the following discrepancies.

(1) In 18 instances SRO bins contained secondary reparable/repair parts that were not identified to an SRO.

(2) In 24 instances, repair parts were on hand that were identified to a pending SRO; however, the repair parts were not required by the equipment identified by the associated SRO.

b. A review of the Heavy Equipment Section's preexpended bins (PEBs) disclosed the following discrepancies.

(1) There was no letter of authorization signed by the commander on file which approved the 190 line items maintained as PEB stocks.



(2) A comparison of 22 line items in the PEB to the current PEB stockage criteria disclosed that, in five instances, the price criteria had been exceeded.

c. A review of the lawn mower repair section disclosed that no letter of authorization was on hand authorizing the items maintained as PEB stocks.

RECOMMENDATION # 15: That repair parts and equipment related supplies be accounted for in accordance with the procedures identified in paragraph 0204 of MCO P4790.2A.

9. Tool control procedures were inadequate.

a. A review of tool control procedures in the Base Maintenance trade areas, i.e., Heavy Equipment, Electrical Shop, Metalworking Shop, Refrigeration Shop and the Telephone Division, disclosed the following.

(1) Monthly inventories were not being conducted for tool kits held in the tool rooms or on repair trucks.

(2) No SL-3s, SL-3 extracts, or inventory listings were being used for the inventory of tool kits, sets or chests (e.g., socket sets, tap and die sets, etc.).

(3) Annual inventories were being conducted by supply personnel with maintenance personnel; however, this inventory consisted only of a comparison of the tool set, chest or kit with the CMR/special allowance list. A components inventory was not conducted.

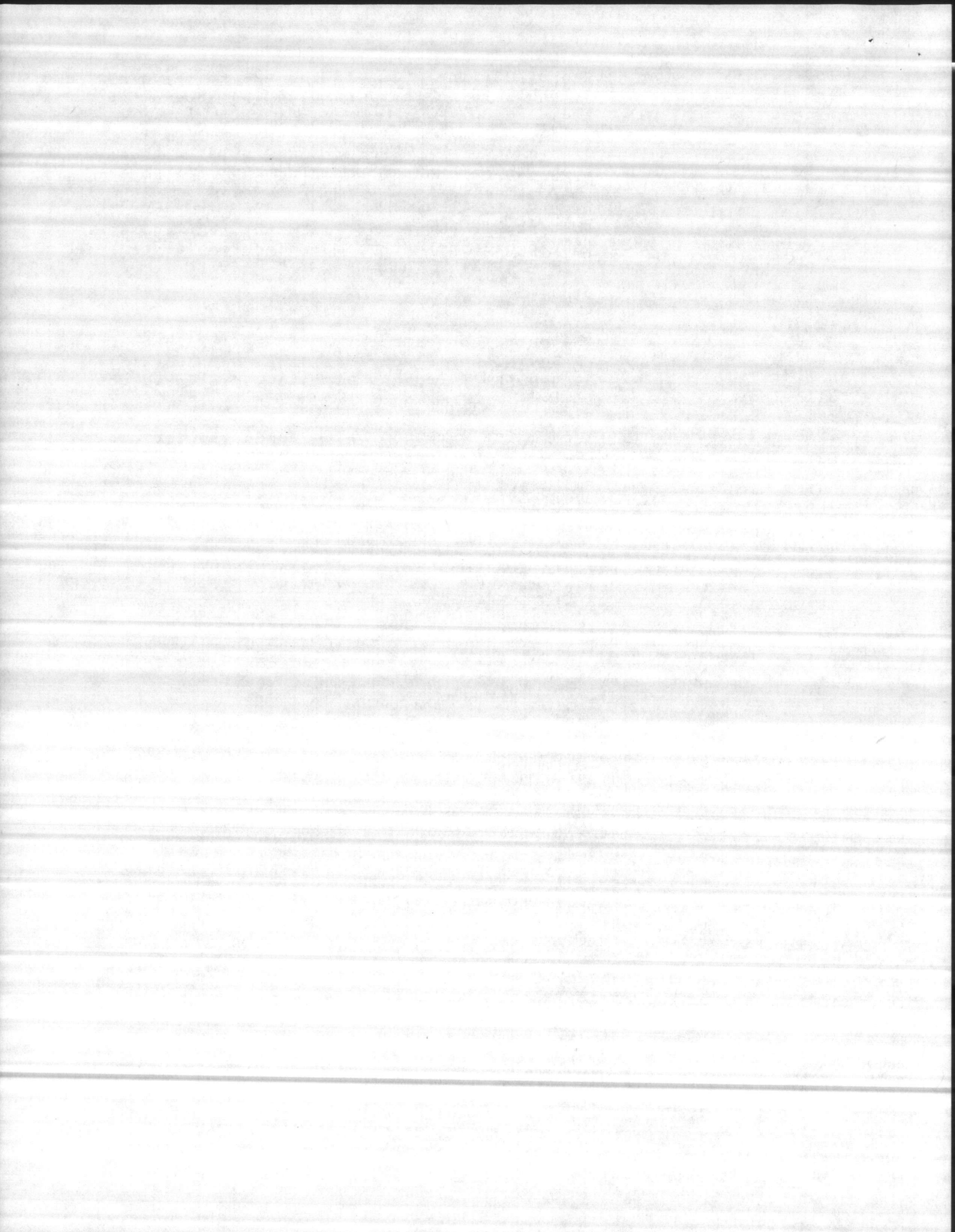
(4) Quarterly inventories were not being conducted for special tool kits assigned to telephone equipment repairmen.

b. During the analysis it was noted that a tool log book was being used for the checkout of individual tools; however, when tool kits, sets or chests are checked out or returned to the tool room inventories are not conducted to verify components.

RECOMMENDATION # 16: That tool control procedures be established in accordance with Appendix D of MCO P4790.2A and MCO P4400.15H.

10. Calibration control procedures were inadequate. A review of calibration control procedures and an examination of 27 items of Test, Measurement and Diagnostic Equipment (TMDE) in the trade areas of Heavy Equipment, Electrical, Refrigeration, Metalworking and Plumbing within Base Maintenance disclosed the following.

a. No calibration control system either card index or chart, had been established for the recording, auditing and accounting for TMDE.



b. No inventory had been conducted by maintenance personnel to determine the total number of TMDE on hand requiring calibration.

c. The analysis team located 15 items of TMDE in the Heavy Equipment shop that were overdue for calibration. Nine of the items had been previously calibrated. Six items of TMDE had no supporting records to show calibration had ever been conducted.

d. The analysis team located 12 items of TMDE in the Electrical, Refrigeration, Metalworking and Plumbing shops for which no record of calibration could be located.

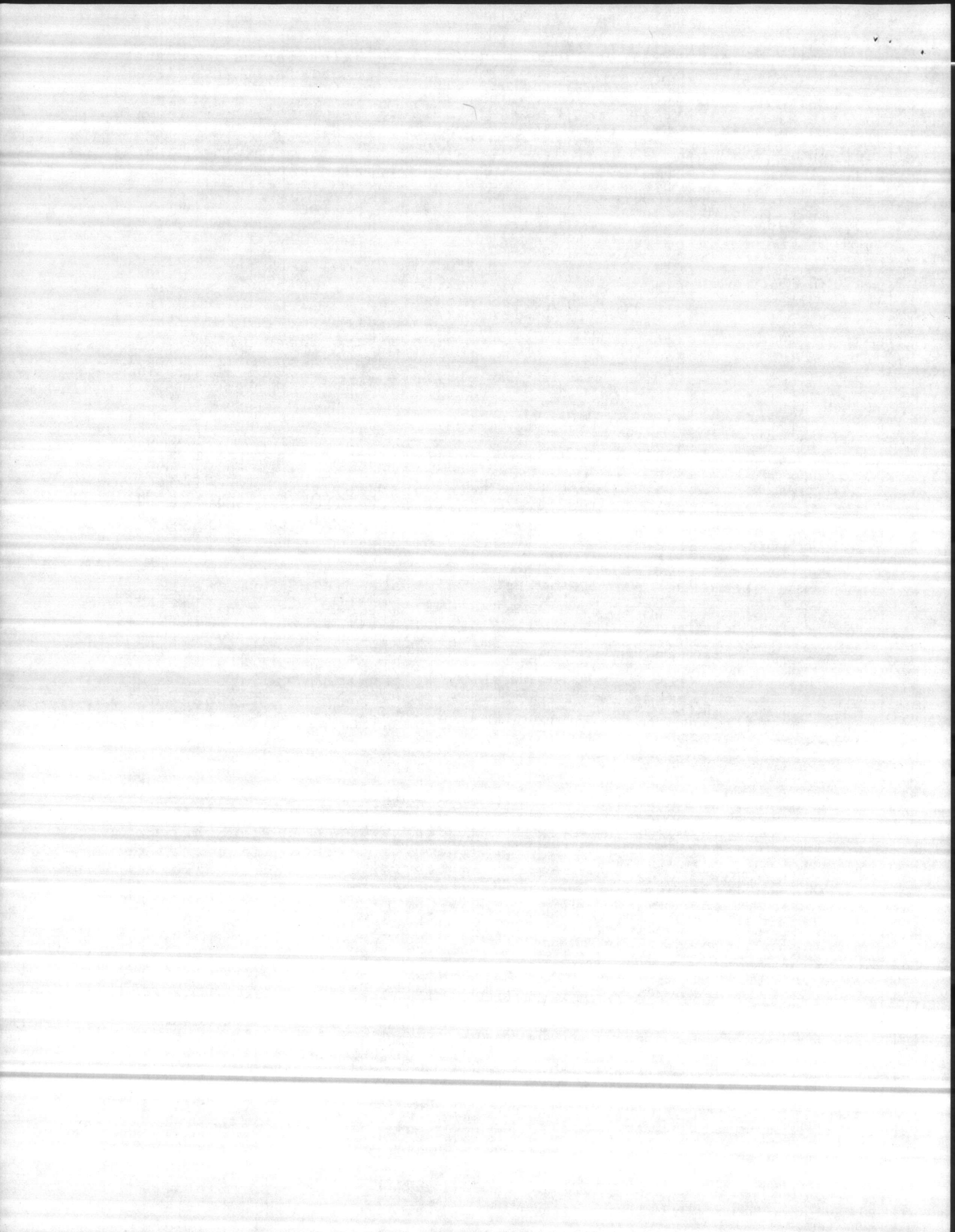
RECOMMENDATION # 17: That an annual inventory be conducted to determine all TMDE on hand, that those items of TMDE identified as requiring calibration be promptly submitted for calibration and that a calibration control system, either card index file or chart, be established and maintained in accordance with Appendix D of MCO P4790.2A and Chapter 2 of TM 4700-15/1D.

11. Analytical Conclusion

a. The primary causative factor for the maintenance management discrepancies noted in this report was the lack of effective managerial procedures that would have identified and amplified the provisions of current higher headquarters maintenance management directives (i.e., MCO P4790.1 and MCO P4790.2). Secondary factors were lack of publications and maintenance management training.

b. The number of key billets which are filled on a temporary basis also contributed to the problem. The T/O lists billets for two supply clerks. One is filled permanently; however, the other has been filled only temporarily, placing an overload on the one clerk assigned. The overload is the primary cause for most of the supply discrepancies noted in this report. Additionally, as a vacancy occurs in a managerial billet it is filled by taking a member from the shop or department and placing him/her in the billet on temporary assignment. The Maintenance and Repair Division had had three supervisors this calendar year.

c. Maintenance Management Standing Operating Procedures, coupled with Desk Top Procedures/Turn Over Folders would have eliminated many of the discrepancies noted. The discrepancies noted in this report, were susceptible to instant recognition by trained managerial personnel. Proper use of this report and the references listed within will enable the personnel on hand to correct the discrepancies in a reasonable period of time and prevent their recurrence.



INSPECTORS (FIELD) REPORT
(CIRCLE ONE)
(SEE REVERSE FOR INSTRUCTIONS)

1. INSPECTOR: LTCOL MURPHY MAJ RINEHART	2. AREA INSPECTED: GARRISON MOBILE EQUIPMENT ENGINEER	3. TAB NUMBER: 70										
4. MAJOR COMMAND: MCB CAMLEJ	5. UNIT INSPECTED: BASE MAINTENANCE	6. DATE INSPECTED: 3 DEC 1960										
7. RECOMMENDED FUNCTIONAL AREA GRADE: (CIRCLE ONE) <table style="width: 100%; text-align: center;"> <tr> <td>OUTSTANDING</td> <td>EXCELLENT</td> <td>ABOVE AVERAGE</td> <td>AVERAGE</td> <td>SOME AVERAGE</td> </tr> <tr> <td></td> <td>UNSATISFACTORY</td> <td></td> <td>NO BASIS</td> <td></td> </tr> </table>			OUTSTANDING	EXCELLENT	ABOVE AVERAGE	AVERAGE	SOME AVERAGE		UNSATISFACTORY		NO BASIS	
OUTSTANDING	EXCELLENT	ABOVE AVERAGE	AVERAGE	SOME AVERAGE								
	UNSATISFACTORY		NO BASIS									

8. DISCREPANCIES, COMMENTS, AND SUGGESTIONS. ATTACH ADDITIONAL PAGES AS NECESSARY. IDENTIFY ADDITIONAL PAGES WITH INSPECTOR, TAB NUMBER, AND UNIT INSPECTED.

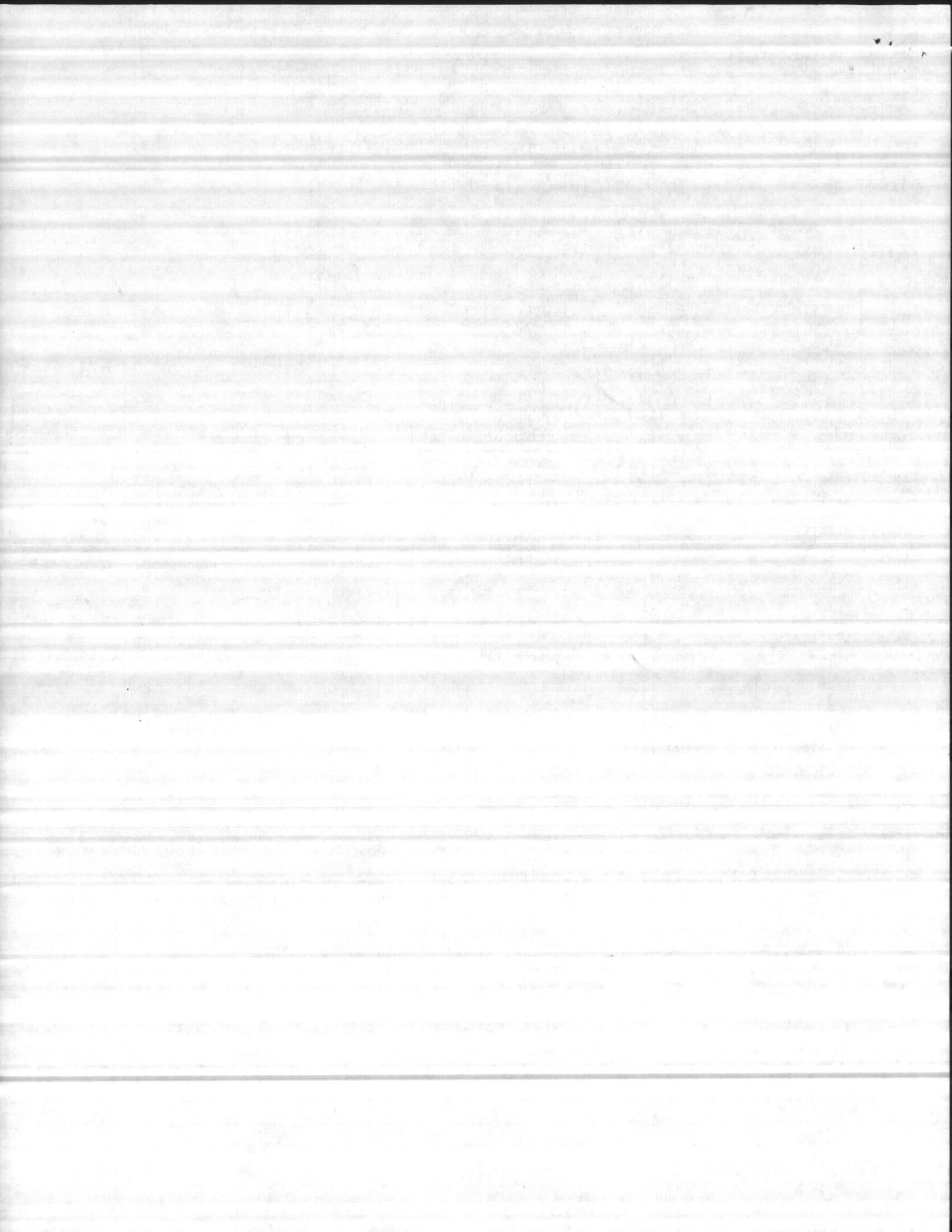
DISCREPANCIES:

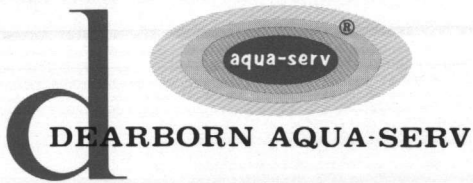
A. There was no effective operators maintenance program. (MCO 11260.3c (encl (2))). Limited technical inspections were conducted on 14 items of equipment, and revealed sufficient discrepancies to support the finding.

B. There was no calibration program (TM 4700-15/1D par 2-2g and MCO P4790.2A Appendix D). 6 out of 6 items inspected had no "calibration due date."

COMMENTS:

A. The overall results of the inspection were consistent with the findings of the field Supply Analysis and Maintenance Office Inspection of NOV 1960. Which will be incorporated in the IGMC report in support of the Marine Corps Total Inspection Program.





scientific water treatment practically applied

C-319 COOLING, POTABLE, AND PROCESS WATER TREATMENT

A HIGHLY EFFECTIVE SEQUESTANT, STABILIZER, AND SCALE RETARDANT

FEATURES:

PREVENTS HARDNESS DEPOSITS—Contains polyphosphates for sequestering calcium and magnesium.

PREVENTS IRON STAINING—Stabilizes dissolved iron to keep it in solution.

CORROSION CONTROL—Forms a protective film on the metal surfaces.

APPLICATION:

For use in potable and process water systems for control of calcium and magnesium deposits, iron staining and corrosion. Polyphosphates are accepted by the U.S. Public Health Service for use in potable water treatment at concentrations up to 10 ppm.

DOSAGE:

Recommended dosage range is one-half to one pint for each 5,000 gallons of water to be treated. If severe conditions exist, higher dosages may be required. Your Dearborn Aqua-Serv representative will make specific recommendations based on the water analysis and system condition.

HANDLING:

No special precautions necessary.

PACKAGING:

C-319 is packaged in 30 gallon drums; net weight 275 pounds.

FEEDING:

C-319 can be fed directly from the shipping container by means of a precision volume chemical feed pump. This pump can be placed on top of the shipping container or wall mounted over the desired container location. C-319 can be slug fed to open and open recirculating systems if feed equipment is not practical.

BLEED-OFF:

The most desirable number of concentrations will vary with the size of the cooling system and with the mineral characteristics of the make-up water. Your Dearborn Aqua-Serv representative will recommend the bleed-off best suited for your installation.

SERVICE:

Regular service calls will be made by your Dearborn Aqua-Serv representative. All recommendations and adjustments for correct treatment will be discussed with operating personnel at this time.



CONFIDENTIAL**MATERIAL SAFETY DATA SHEET**

● Section 1 – PRODUCT IDENTIFICATION

MANUFACTURER'S NAME DEARBORN CHEMICAL (U.S.), CHEMED CORPORATION		EMERGENCY PHONE NO. 312/438-8241
ADDRESS 300 Genesee St., Lake Zurich, IL 60047		
CHEMICAL NAME AND SYNONYMS Cooling water treatment		TRADE NAME OR CODE IDENT. DEARBORN AQUA-SERV® C-319

● Section 2 – INGREDIENTS

CAS No.

%

EXPOSURE CRITERIA

NON - HAZARDOUS MATERIAL

The product identified in this Data Sheet is NOT a hazardous material within the meaning of Title 29, Code of Federal Regulations 1915, 1916, 1917.

● Section 3 – PHYSICAL DATA

BOILING POINT, 760mm Hg	approx.	212° F.	MELTING POINT	
SPECIFIC GRAVITY (H ₂ O = 1)		1.09	VAPOR PRESSURE	
VAPOR DENSITY (AIR = 1)			SOLUBILITY IN H ₂ O, % BY WT.	Appreciable
% VOLATILES BY VOLUME		None	EVAPORATION RATE, _____ = 1	
APPEARANCE AND ODOR	Blue liquid, no specific odor		pH	

● Section 4 – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (and Method Used) None	FLAMMABLE LIMITS in AIR, % by VOLUME LOWER UPPER	AUTO IGNITION TEMPERATURE
---------------------------------------	--	---------------------------

EXTINGUISHING MEDIA Water Fog Foam CO₂ Dry Chemical Other

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARD

● Section 5 – REACTIVITY DATA

STABILITY (Normal Conditions) <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	CONDITIONS TO AVOID
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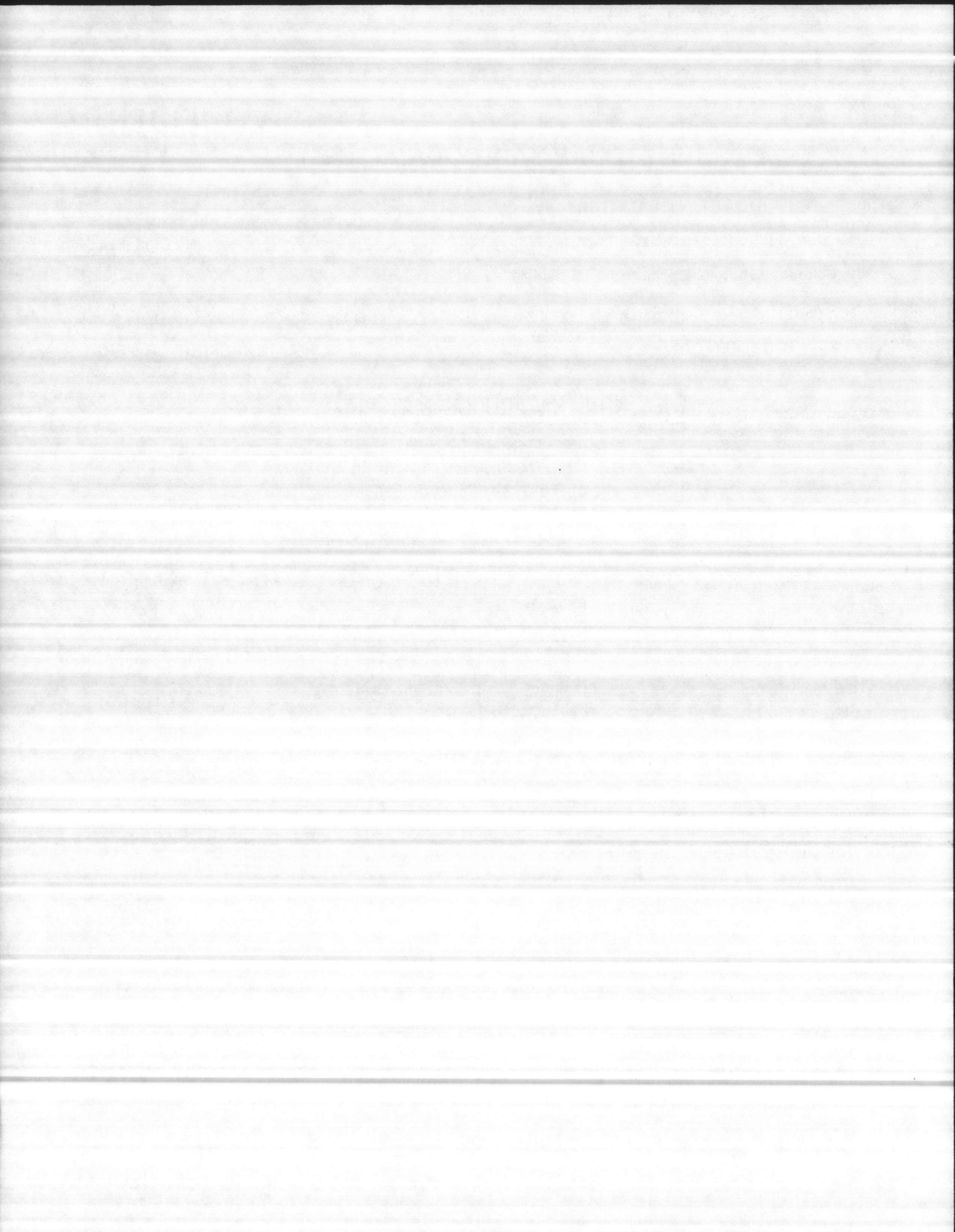
INCOMPATIBILITY (Materials to Avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

None

HAZARDOUS POLYMERIZATION <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	CONDITIONS TO AVOID
---	---------------------

(over)



● Section 6 - HEALTH HAZARD INFORMATION

EXPOSURE LIMIT

TLV: Not established

EFFECTS OF OVEREXPOSURE

INHALATION

INGESTION If ingested, may cause nausea and vomiting. If ingested, give 2 -3 glasses of milk and if discomfort continues, consult a physician.

SKIN OR EYE CONTACT Could cause mild eye irritation on contact as would be evidenced by conjunctivitis. Wash eyes with plenty of water and if irritation persists, get medical attention.

EMERGENCY AND FIRST AID PROCEDURES

● Section 7 - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS Local exhaust is adequate

RESPIRATORY PROTECTION (Specify Type)

EYE PROTECTION Goggles or face shield

GLOVES (Specify Type) None required

OTHER PROTECTIVE CLOTHING AND EQUIPMENT (Specify Type)

● Section 8 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED Product is approved for potable application. Material can be flushed to drain without upsetting waste treatment plant operation.

WASTE DISPOSAL METHOD A chemical scavenger service should be utilized for disposal. Remove labels.

● Section 9 - SPECIAL PRECAUTIONS

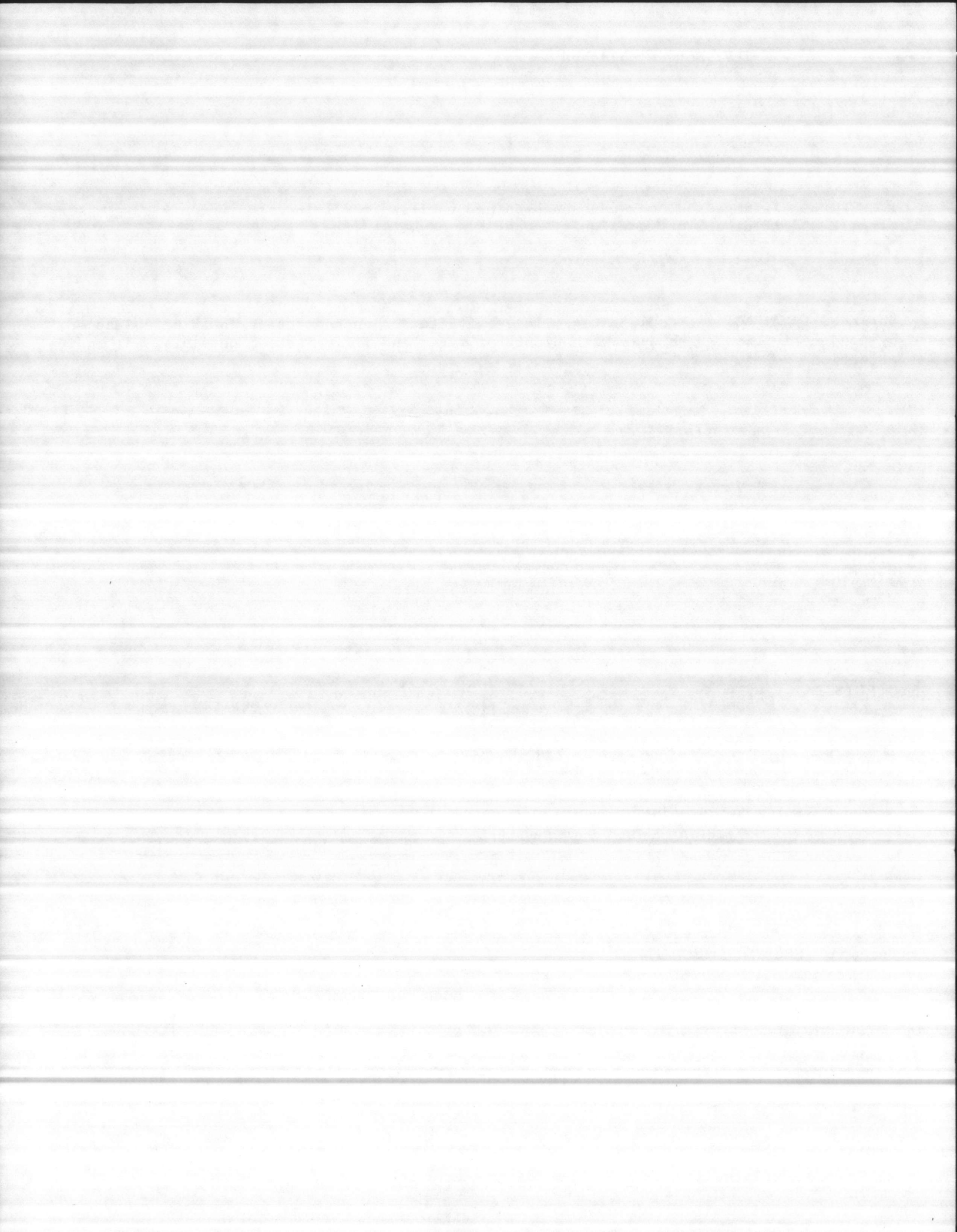
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Keep container closed when not in use and protect from physical damage. Keep from freezing.

OTHER PRECAUTIONS Freeze point, 10° F.

Shipping Name: DOT NOT RESTRICTED: Compound Industrial Process Water Treating, Liquid IATA

Prepared By W. M. Morris

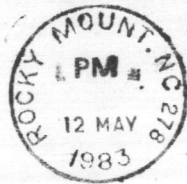
Date: 10/78



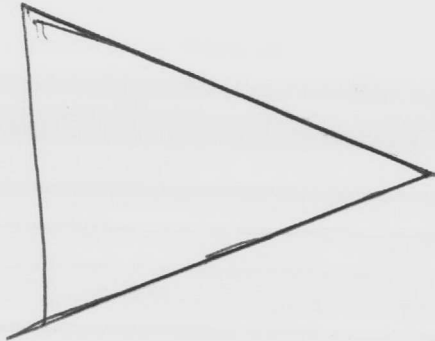
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Door
Seal