

MARINE CORPS BASE, CAMP LEJEUNE
ENVIRONMENTAL COMPLIANCE EVALUATION
CONDUCTED 21 May - 8 June 1990

01 August 1990

The ECE report consists of an Executive Summary, a narrative portion for each of the areas evaluated and a set of problem notification forms for those issues which merit immediate attention.

MCB CAMP LEJEUNE

ENVIRONMENTAL COMPLIANCE EVALUATION

EXECUTIVE SUMMARY

Wastewater Treatment Plant operations are at a barely acceptable level. Lack of routine and preventative maintenance will eventually result in serious violations of NCDEM regulations. Several facilities are currently operating in violation of regulations including the sewage pump stations and the Camp Geiger WWTP outfall and sludge disposal site.

Two large piles of contaminated soil have been stockpiled on base. One of these piles is considered hazardous waste while the other is petroleum contaminated. Plans to dispose of these wastes should be initiated immediately. Stockpiling of wastes, especially hazardous wastes, should be prohibited on the Base.

A back-up system for removal of grit from oil water separators is required to prevent unpermitted overflows and excessive accumulation of grit. The vacuum truck assigned for this purpose had been out of service for several weeks at the time of the evaluation.

Unpermitted wastewater discharges from various points around the activity should either be eliminated or permitted. These discharges could be considered serious violations by the NCDEM.

Air permits should be updated to reflect current operations. Some equipment has been eliminated while other new equipment has been installed without notifying the State.

In order to comply with Senate Bill 111, MCB Camp Lejeune must develop procedures to achieve and document a solid waste volume reduction of 25 percent.

Several POL and hazardous waste storage areas lack containment berms. The Base SPCC plan needs to be updated to comply with federal laws and provide a basis for containment and control projects.

The Base is out of compliance with UST leak detection, closure, notification, site characterization (for releases) and inventory control requirements. It is possible that the State will issue Notices of Violation for one or all of these deficiencies.

Doc No: CLEJ-00588-
12.04 - 08/01/90

The Base has been ranked on the National Priority List of hazardous waste disposal sites by EPA. As such, the activity has entered into a Federal Facilities Agreement with EPA Region IV and the State of North Carolina. Full support of the Installations Restoration efforts will require engineering, clerical, legal, and JPAO resources to comply with the technical, administrative and community relations aspects of the program.

194-dlm:NC ECE

MCB Camp Lejeune Environmental Compliance Evaluation

Air Quality

1. The cooling coil system that was to be installed on a 330 gallons capacity vapor degreaser tank in Building 1601 is not present.

Applicable regulations include:

North Carolina Air Permit No. 5790R2, Line Item No. 2.
Permit expiration date: January 1, 1991; specified conditions and limitations Number 6, 9.

Recommendation: Either update and revise the current air permit indicating that this particular source no longer exists or upon permit renewal application delete this source. (It could not be ascertained if this equipment was ever installed).

2. The filter type paint booth installed on the auto hobby body paint shop in Building No. 1103 is missing. (It has been dismantled and removed; the exhaust stack remains on the roof, but it is disconnected.)

Applicable regulations include:

State of North Carolina air permit No. 5790R2, Line Item No. 5. permit expiration date: January 1, 1991; specified conditions and limitations numbers 6 and 9.

Recommendation: Update and revise the current air permit indicating that this particular source no longer exists. Alternatively, upon permit renewal application, delete this source in its entirety.

3. A bag filter installed on woodworking equipment in the carpentry shop of building No. 915 also has a cyclone installed that is not listed on the applicable air permit.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 7. Permit expiration date: January 1991: specified conditions and limitations Numbers 6 and 9.

Recommendation: Update and revise the current air permit indicating the addition of the cyclone into the system for this particular source. Alternatively, upon permit renewal application add this pollution abatement equipment to the line item for this source.

4. A bag filter installed on two (2) lime storage silos at Building No. 670, wastewater treatment plant really consists of a separate bagfilter on each lime storage silo. Each silo has a capacity of 24 tons and is filled approximately every 3 weeks.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 9. Permit expiration date: specified conditions and limitations Numbers 6 and 9.

Recommendation: Update and revise the current air permit to indicate that two bagfilters (one bagfilter on each storage silo) exist. Alternatively, upon permit renewal application, include the other bagfilter, this correctly identifying the pollution abatement equipment that comprises this emission source.

5. A filter type paint spray booth installed at the ground support vehicle painting operations at Building No. AS-518 has been down for over six months, and in fact, has been dismantled. The booth is presently used for equipment storage.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 12. Permit expiration date: January 1, 1991; specified conditions and limitations Numbers 6 and 9.

Recommendation: Update and revise the current air permit to indicate that this particular source no longer exists. Alternatively, upon permit renewal application, delete this source from the permit in its entirety.

6. A water wash type paint spray booth installed on ground support vehicle painting operation at building. No. AS-4146 is inoperable due to air flow problems and lack of water use and disposal problems. The facility is currently being used for spot painting with aerosol cans.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 13. Permit expiration date: January 1, 1991; specified conditions and limitations numbers 6 and 9.

Recommendation: Update and revise the current air permit to delete this source if paint spraying operations are to be suspended at this facility. Repair the facility to the design parameters contained in the original permit application submittal, prior to permit renewal.

12.04 - 08/01/90

7. A filter type paint spray booth and a cleaning booth installed for general painting operations in Building No. AS-4106 no longer exists; it has been dismantled.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 14. Permit expiration date: January 1, 1991; specified conditions and limitations numbers 6 and 9.

Recommendation: Update and revise the current air permit to delete this source in its entirety. Alternatively, upon permit renewal application, delete this source from the permit in its entirety.

8. A water wash type paint spray booth installed on a furniture repair shop located in Building No. 609 no longer exists; it has been dismantled.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 18. Permit expiration date: January 1, 1991; specified conditions and limitations numbers 6 and 9.

Recommendation: Update and revise the current air permit to delete this source in its entirety. Alternatively, upon permit renewal application, delete this source from the permit renewal application in its entirety.

9. A water wash type paint spray booth installed at a vehicle maintenance shop is misidentified as being located at Building No. P-027. Additionally, there is no apparent drain for the waste water within the confines of the paint spray booth.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 19. permit expiration date: January 1, 1991; specified conditions and limitations numbers 4, 6, and 9.

Recommendation: Update and revise the current air permit to indicate the source's true location. (P-027 refers to the project number used for construction of this booth; the actual building location is FC-230). A design deficiency exists with respect to disposal of the waste water generated; there are no sanitary sewer drains located closeby.

10. A water wash type paint spray booth installed at a metal parts coating operation (ground support equipment facility on White Street) does not locate this source adequately. Additionally, the paint spray booth is inoperable due to

12.04 - 08/01/90

freeze problems this past winter. Also, designs deficiencies with respect to stack height.

Applicable regulations include:

State of North Carolina Air Permit No. 5790R2, line item No. 20. Permit expiration date: January 1, 1991; specified conditions and limitations numbers 4, 6, and 9.

Recommendation: Update and revise the current air permit to indicate this source's present location. The paint spray booth is located in Building AS-4135. Repair the water supply to the paint spray booth. Correct the air imbalance, the air flow intake is 2,000 ACFM, however, the exhaust is designed for 200 ACFM. Also, the exhaust stack is not located on the roof's peak. Wind direction can deposit/toxics into air intakes located on the roof for air conditioning/air handling.

General Stormwater Management

1. NC law requires stormwater management in Onslow County effective 1 January 1988. For all new construction which disturbs more than 1 acre of land, MCB needs to hold as part of the administrative record proof that construction projects are in compliance. Specifically, a system needs to be setup to document stormwater management compliance to include documentation of density approvals (required on non-federal lands as deed restrictions) and copies of the stormwater disposal system Operation and Maintenance Plans and records for assessing maintenance (i.e., clean out/operations of ponds).

Applicable regulations are:

North Carolina Administrative Code 15 NCAC 2H.1000 Stormwater Runoff Disposal

Infectious Waste

1. During the evaluation of infectious waste management, the Naval Hospital, outlying medical and dental clinics and aid stations were visited. No significant violations of state or Navy regulations were noted. The disposal, logging, transport and incineration of medical wastes is well managed. Individuals working with or around infectious wastes are aware of the risks and understand disposal procedures. Although there are variations in the disposal and handling of waste between the hospital, clinics and aid stations these tend to be minor in nature.
2. In some locations all disposable items which have been in contact with blood or body fluids are treated as infectious and disposed accordingly. Examination of sharps containers revealed that some syringes are recapped in violation of written policy. Pharmaceuticals in some locations are disposed as infectious waste. Some personnel were not aware of appropriate procedures for accidental sticks from sharps. Although these were minor infractions, a consistent, base wide policy would alleviate most of them. Furthermore, if some wastes will no longer be incinerated it will become more critical that infectious wastes are properly segregated, packaged labeled, tracked, transported and treated prior to disposal.
3. The Naval Hospital has an autoclave not currently in use. All infectious wastes are transported to the incinerator at the hospital for disposal. MCB and the Naval Hospital should develop a policy for managing infectious waste using a combination of incineration and autoclaving/landfilling.

Installation Restoration Program

1. The IR program at Camp Lejeune is staffed by one full-time environmental specialist funded by DERA. Additional support is provided by EMD. Additional DERA salary and support funds are recommended for clerical, legal and JPAO support.
2. The program at Camp Lejeune is well coordinated with the Atlantic Division and no discrepancies were apparent. Of particular note are the community relations and administrative record aspects of the program. Camp Lejeune is clearly a leader in developing and implementing a pro-active program. These two areas are critical to maintaining good working relationships with regulators and the public.

3. It is recommended that MCB Camp Lejeune consider staffing the IR program directly under the Assistant Chief of Staff for Environment due to the nature of the program. Legal, JPAO, PW, Maintenance, State and Federal regulators, and the public are intimately involved in the program as a result of listing on the NPL. It is important that the command be acutely aware of the many IR activities due to the public and regulatory scrutiny required by CERCLA and SARA.

NPDES

1. Large Old Hanger - oil/water separator at Helicopter Washrack. Needs cleaning out. Emergency overflow to storm drain is not permitted.

Applicable regulations include:

Section 301.A of Clean Water Act - Prohibition of unpermitted discharges NC Administrative Code 15 NCAC 24.0100.0127
Wastewater Discharges to State Waters - Certificate of coverage.

Recommendation: Clean grit and oil out of separator. Obtain permit for overflow pipe under a Certificate of Coverage obtained from NC DEM.

One Certificate of Coverage can cover all similar discharges on the Base.

2. POV Car Wash. Drain line from new POV Car Wash tied into old oil/water separator. Inlet point is into second chamber of separator. Drain line should be moved to divert flow to first separator chamber.

Industrial Discharge at Steam Plant Fuel Storage Area (Berms) is not permitted.

Applicable regulations include:

Section 301.A of Clean Water Act - Prohibition of Unpermitted Discharges North Carolina Administrative Code 15 NCAC 2.H.0100 Wastewater Discharge to State Waters (Specifically 2.H.0100.0127)

A Certificate of Coverage as described in referenced regulation should be obtained for this outfall.

3. HP1775 - Heavy Equipment Maintenance Complex
Steam Manhole (STM57) outside of gate appears to be discharging steam condensate to adjacent storm drain.

Applicable regulations include:

Section 301.A of Clean Water Act - Prohibition of unpermitted discharges.

Recommendation: Repair leak or divert condensate to sanitary sewer.

4. Industrial discharge at Hadnot Point Ash Street Fuel Storage Area (Berms) is not permitted.

Applicable regulations include:

Section 301.A of Clean Water Act - Prohibition of unpermitted discharges. North Carolina Administrative Code 15 NCAC 2H.0100 Wastewater Discharges to Surface Waters. (Specifically 2H.0100.0127)

A Certificate of Coverage as described in referenced regulation should be contained for #1 outfalls and any others like these (i.e., industrial areas with discharge to storm drains).

5. Building HP250 Electrical/Com Shop. Washrack grit pit emergency overflow line to storm ditch - invert of pipe is 6" from bottom of pit. Grit accumulates too quickly, causing overflows to storm ditch as well as grit carryover into oil/water separator.

Applicable regulations include:

Section 301.A of Clean Water Act - Prohibition of unpermitted discharges.

Request LANTDIV funding to replace overflow line in grit pit. Based on design deficiency (LANTDIV designed facility) customer developed design deficiency.

If MCON funding is available then submit PCR to CMC and initiate special project to correct the problem.

6. Creek between "I" street and Holcomb Blvd. Temperatures elevated due to leaking condensate return pipe which runs across Creek. Past discharges of line from HP.20 in conjunction with the elevated temperatures creating ideal environment for algae-growth all along Creek.

Applicable regulations include:

Section 301.A of Clean Water Act - Prohibition of unpermitted discharges.

Recommendation: Repair pipe leak.

Activity aware of lime pond overflow problem. Problem has been corrected.

NPDES/HAZWASTE

1. Grit and contaminated soil disposal. Activities stockpiling grit/soil. Contract to dispose of as Solid Waste has expired. Conduct study to determine: (1) inventory sources; (2) characterize soil from various sources (TPH, TOX, etc), (3) determine disposal alternatives as well as beneficial uses (i.e., land farming, fill, road application). Study would recommend if segregation of sources necessary to separate soils suitable to beneficial use from soils which must be landfilled. Recommend submittal of PCR to LANTDIV to conduct such study.

Potable Water

1. Lead in drinking water Program - May not comply with the deadline required by OPNAVNOTE 5090.2.

Camp Lejeune did not finish all water coolers sampling test, the deadline required by OPNAVNOTE 5090.2 was:

- a. Initial screening samples of all drinking water coolers shall be completed by 1 September 1990.
- b. Full protocol sampling is required by 1 January 1991, for drinking water coolers where initial screening results exceed 20 ppb.

Applicable regulations include:

CNO OPNAV Notice 5090.2 (27 April 1990)

EPA draft suggested sampling procedures to determine Lead in Drinking Water in Buildings other than single Family Homes (June 1988).

Recommendation: Take initial screening samples for all drinking water coolers, not only for Hospital, Day Care Center and Schools. If the lead concentration exceeds 20 ppb, full protocol sampling is required.

2. BOQ located in MCB Camp Lejeune has found cross-connection problems in the drinking water system, therefore, this problem may exist in other places.

Applicable regulations include:

MCO P11000.B.

NAVFAC MO-210

NCAD Title 10. Chapter 10. Subchapter 10D S1006 and S1090.

Recommendation: For the protection of the base drinking water, we recommend establishing a Base order cross-connection and backflow prevention program, which includes the following items:

- at least one person should be delegated the responsibility and authority for maintaining the program.
- initial building survey.
- installation of required devices
- scheduled periodic inspections of the building to ensure proper installation of backflow prevention

12.04 - 08/01/90

devices and identification of any new hazardous conditions

- schedule annual periodic testing of the backflow prevention devices

3. MCB Camp Lejeune 6 water treatment plant are in excellent maintenance and operation condition, (you do a very good job), except the following:

Holcomb Boulevard WTP: The painting of 3 spiractors was deteriorated.

Applicable regulations include:

Maintenance and operation of water supply, treatment, and distribution systems - NAVFAC NO-210

MCO P11000.8

Recommendation: Scrape and repaint these 3 spiractors.

4. Air Station (New River) WTP:

Algae growths on the wall of the sand filter tanks.

Plumbing system in hydrated lime feeding room was deteriorated.

Applicable regulations include:

NAVFAC MO-210

MCO P11000.8

Recommendation: Clean the wall of the sand filter tanks. Scrape and repaint the plumbing system

5. Hadnot Point WTP:
Elevated Tank #S5 - gate valve was leaking

Applicable regulations include:

MCO P11000.8

NAVFACNO-210

Recommendation: Repair the gate valve.

6. Onslow Beach:
Brine (or salt dissolving) tank rusted.

Applicable regulations include:

MCO P11000.8

NAVFAC MO-210

Recommendation: Change salt dissolving tank to be a plastic tank and shall be covered in order to prevent damage to equipment.

7. No monthly potable Water Treatment Operating report. Potable water supply and distribution operating report and water quality compliance report (except bacteriological report sending to EFD).

OPNAVINST 5090.1 (Environmental and Natural Resources Program Manual)

Sending water treatment plant monthly or annual compliance reports to EFD as well as sending the reports to North Carolina Department of Human Resources.

Recycling

1. MCB Camp Lejeune has not yet implemented a base wide SOD for recycling. Current efforts include limited recycling of high grade paper and metals. A survey and pilot recycling program are also underway. A facility for storing and processing recyclables is being acquired. Recommend that a comprehensive economic analysis and market determination covering residential, industrial and office wastes be undertaken to optimize recycling and aid in achievement of state mandated solid waste volume reduction. As a minimum waste reduction, source separation, on-base reutilization, and off-station recycling should be evaluated. The evaluation could be integrated with an evaluation of the landfill volume reduction alternatives.
2. DRMO, PW, Maintenance, and EMD personnel must coordinate efforts to achieve optimum recycling and assure compliance with environmental mandates.

Solid Waste

1. The landfill at Camp Lejeune appears to be operating properly under the requirements of the state of North Carolina. The landfill is well maintained and operated with particular attention to segregation of wastes and prevention of disposal of hazardous and recyclable wastes. Base maintenance should be commended for their well run landfill.
2. In 1994 Camp Lejeune will be required to open a new landfill with liners and leachate collection. A study has been requested to site a new landfill and close the existing fill.
3. By January 1, 1991, contingent on the passage of State Senate Bill 111, Camp Lejeune will be required to reduce the volume of waste entering the landfill by 25 percent. The base must undertake efforts to establish a baseline volume of waste generated correlating weights of various materials to volume. There are no scales currently located at the landfill although there are scales on the base.
4. Volume reduction goals must be closely coordinated with recycling and other waste management programs (infectious waste, hazardous waste, composting, WWTP sludge, ash disposal, etc.) to insure economical and environmentally sound management.

SPCC

1. TACAN Boom Area. Replace deteriorated Boom. Estimated cost \$15,000 installed.
2. Ordinance Area Boom. Replace deteriorated Boom. Estimated cost \$15,000 installed.
3. BB9 Steam Plant - Fuel Oil Storage Containment (New Construction). Appears to be insufficient containment for two storage tank.

Applicable regulations include: 40 CFR Part 112 Oil Pollution Prevention.

Determine if sufficient containment (volume equal to 100% of volume of both tanks) is provided.

4. Some maintenance shops do not have containment under/around POL storage areas.

Applicable regulations include: 40 CFR 112.7(c). Finalize SPCC Plan.

Install proper containment according to SPCC Plan. This will probably be a concrete pad w/concrete berms and controlled drainage. (Also roofs)

5. THE SPCC PLAN AT CAMP LEJEUNE HAS NOT BEEN UPDATED IN THREE YEARS. 40 CFR 112.5(b) requires that installations update their SPCC Plans every three years. Also, this update must be certified by a professional engineer. The last update of the Camp Lejeune SPCC Plan was completed in 1986. This is the major problem with SPCC at Camp Lejeune.

We recommend that Camp Lejeune and LANTDIV work together to have the SPCC Plan updated. LANTDIV has in place a contract to accomplish the required updates and certifications. Use of this contract to update the SPCC will bring Camp Lejeune into compliance with 40 CFR 112.5(b).

6. LACK OF CONTAINMENT FOR PETROLEUM, OIL, AND LUBRICANTS (POL) AT SOME MAINTENANCE SHOPS. Some of the vehicle maintenance shops at Camp Lejeune are lacking the required containment around their storage areas for POLs. Containment is required by 40 CFR 112.7(c).

We recommend a two phase approach to achieving compliance with 40 CFR 112.7(c). The first phase is to finalize the Camp Lejeune SPCC Plan. This plan will specify the appropriate type of containment to be used for maintenance shop POL Storage areas. After finalizing the SPCC Plan,

construct the appropriate containment structures called for in the SPCC Plan.

7. Camp Lejeune presently has only one vacuum truck. This truck is used to maintain the oil/water separators and catchment basins that are a major part of the spill prevention programs at Camp Lejeune. However, if this one truck is not operating, the separators and basins cannot be maintained and therefore do not operate properly. This can lead to spills of POLs reaching surface water bodies. Also, regular maintenance is required by 40 CFR 112.7(e)(1)(v) on equipment used to implement SPCC. With the one vacuum truck not operating, the regular maintenance cannot be completed and Camp Lejeune is out of compliance.

We recommend that Camp Lejeune pursue purchasing a backup vacuum truck. The presence of a backup truck will allow maintenance to continue uninterrupted, even if one truck is inoperable.

Underground Storage Tanks

1. LEAK DETECTION. 40 CFR 280.40(c) requires owners/operators to provide some method of leak detection for USTs installed before 1965 or if the date of installation is unknown by 22 December 1989. To date, Camp Lejeune has not accomplished the required leak detection. However, a contract should be awarded by Camp Lejeune some time in July to accomplish the required precision testing (an acceptable form of leak detection). The award of this contract should be completed as soon as possible so that compliance in this area can be achieved quickly.

For USTs installed between 1965 and 1969, a method of leak detection will be required by 22 December 1990. Also, all pressurized piping associated with USTs will have to have leak detection by 22 December 1990. The process to award a contract to accomplish this work should be started immediately. LANTDIV should have in place two separate contracts to accomplish leak detection (precision testing, an acceptable form of leak detection) by 23 September 1990. Camp Lejeune may want to consider using these contracts to achieve compliance. However, Camp Lejeune will have to provide funding for this work.

2. PROPER CLOSURE OF ABANDONED USTs. 40 CFR 280.70(c) requires USTs that have been temporarily closed (out of service) for more than 12 months to be permanently closed by the end of the 12 month period. Camp Lejeune has numerous tanks that have been out of service for longer than twelve months that have not been permanently closed. However, Camp Lejeune has in design one contract to remove approximately 20 USTs. Also, Camp Lejeune has submitted four different 1391s to permanently close approximately 140 USTs. Along with the 1391s, Camp Lejeune has asked for \$2M in funding to remove/close USTs. This demonstrates a desire to properly close abandoned USTs and to also properly close USTs which are not necessary for Camp Lejeune to accomplish its military mission. Compliance with 40 CFR 280 (UST Regulations) is expensive, and getting out of the business of USTs where it is not necessary to have a UST is a very positive step in the right direction.

3. NOTIFICATION OF USTs. 40 CFR 280.22(a) requires owners/operators of USTs to notify the appropriate state agency (in this case DEM) of all USTs in the ground. Final notification forms have not been sent to the DEM. However, draft notification forms have been sent to DEM, in the form of the Draft Geraghty and Miller UST Inventory Study for Camp Lejeune, which included draft completed notification forms. The finalized version of the Geraghty and Miller Study will include final notification forms.

12.04-08/01/90

This study should be finalized (LANTDIV and Camp Lejeune should work together on this) and then forwarded to DEM. This will achieve compliance with the notification requirements in 40 CFR 280.22(a).

4. COMPLETION OF INITIAL SITE CHARACTERIZATION STUDY FOR CONFIRMED RELEASES FROM USTs. 40 CFR 280.63(b) requires Camp Lejeune to submit an Initial Site Characterization Study for confirmed release from USTs. This is a study completed to identify how far the contamination has traveled and to identify any immediate threats to human health and the environment, such as explosion hazards. In the past, Camp Lejeune has taken a lot longer than 45 days to submit any reports whatsoever concerning releases from USTs. This is being mentioned in the ECE because state regulators have complained about the pace at which investigations/studies of releases from USTs have proceeded at Camp Lejeune in the past. The regulators now have a specific deadline which they will be able to enforce, if they so choose. Failure to submit reports on time could lead to Notices of Violation, and in some cases, Compliance Agreements.

Camp Lejeune has taken some steps to improve this situation. An in-house contract to conduct the required studies has been awarded. This may speed up the process of investigating the extent of contamination from UST releases. A necessary second step to improve this situation is to sensitize the Camp Lejeune contracting folks to the regulatory deadlines. It has been LANTDIV's experience that the time to award a change order to a contract to start work on the required studies (approximately 120 days) is greater than the time allowed in the regulations to complete the required studies (45 days). We suggest a meeting be held involving the Environmental Management Department and the Contracting Department at Public Works (or whoever is going to handle this contract) to discuss methods of accelerating the award of change orders to this in-house contract. There may be methods available to expedite the process of awarding change orders to conduct the required studies, which will facilitate completing the required reports on time.

5. TRANSITION FROM UST COMPLIANCE PROGRAM TO USE CLEANUP PROGRAM. This problem also has to do with Camp Lejeune not completing required studies for UST release in the past. The present regulatory deadline for completing the Initial Site Characterization Study is 45 Days. The 45th day clock starts ticking the day you confirm a release from a UST. Delays in starting the process to study that release will make compliance with the 45th day deadline tough to meet. At this time, Camp Lejeune has not set up criteria under which a release has been confirmed, and as such, when a problem is transferred from the UST Compliance Section to the UST Cleanup Section is still up in the air. Failure to handle this transition smoothly will cause excessive delays that will lead to non-compliance with the aforementioned regulatory deadline. LANTDIV's recommendation to remedy this problem is based on the definition of a confirmed

12.04-08/01/90

release. In 40 CFR 280, a release is suspected when an UST encounters unusual operating conditions or fails a precision test. A release is confirmed when the presence of contamination is discovered in the environment around the tank, either through discovering free product (such as in a monitoring well) or when samples (of soil or groundwater) are analyzed and come up positive for petroleum. The obtaining and analyzing of samples is called a site check. It is our recommendation that a release be turned over to the UST Cleanup Section after completing the site check (when the presence of contamination in the environment has been confirmed). This definite cutoff will help to expedite starting the investigation/cleanup process, but only when it is definitely needed. To assist activities in confirming the release of regulated substances from USTs, LANTDIV is in the process of awarding a contract specifically set up to complete site checks. This contract will be available for use no later than 23 July 1990. This contract will be set up for fast response in order to facilitate starting the investigation/cleanup process, where needed. We suggest Camp Lejeune consider using this contract for completing site checks. If a site check comes back positive for contamination, then the matter can be turned over immediately to your UST Cleanup Program.

6. INVENTORY CONTROL PROBLEMS. 40 CFR 280.43(a) states that inventory control, if accomplished correctly, can be used in connection with annual UST precision testing to fulfill the leak detection requirements outlined in 40 CFR 280.40(c). As stated in the regulations, the inventory of petroleum in each UST must be tracked in gallons. 40 CFR 280.43(a) states that the inventory control method used must be capable of detecting a release of 1 percent of the monthly throughput plus 130 gallons basis. At this time, the Camp Lejeune gas stations are tracking the inventory of their petroleum on a per tank, per dollar, basis. This is not acceptable according to current regulations.

This is not that big of a problem. Logistics at Camp Lejeune tracks monthly inventory of petroleum on a dollar basis to look for potential thefts of gasoline. It would not be difficult to track your inventories on a per gallon basis at the same time. The dollar to gallons conversion is simple mathematics.

Also, the method of inventory control is of importance here. Improper inventory control can lead to not recognizing releases. No later than 23 September 1990 LANTDIV will have in place two contracts which will be able to provide training in proper inventory control to the Camp Lejeune personnel. We suggest Camp Lejeune take advantage of these contracts to have the personnel involved in inventory control at Camp Lejeune properly trained. This will assist in achieving compliance with 40 CFR 280 and will also assist in the early detection of release of petroleum. This early detection will lead to a great reduction in cleanup costs.

12.09-08/01/90

WasteWater

1. There is no formalized training program established for the WWTP operators.

Recommendation: Formalized training program needs to be established in-house for the WWTPS operators as a regular refresher and for continuing education to enhance their skills.

2. Process control tests are not being performed at any of the wastewater treatment plants (WWTPs).

Recommendation: Optimum performance can be maintained at the WWTPs only if the operators can diagnose the process, identify operational problems in advance and take corrective actions. Therefore, the implementation of process control testing by the operators is imperative. It will assist them in selecting and utilizing proper control parameters to insure that the performance of the facilities is maintained at or near the optimum levels.

3. The Operations and Maintenance (O&M) manuals for each of the wastewater collection and treatment systems were not provided on-site at the WWTPs. These documents are being filed at Building Number 670 which is the Holcomb Boulevard Water Treatment Plant.

Recommendation: A copy of the O&M manual needs to be kept on file at each of the WWTPs for the operators. These documents also need to be reviewed/updated on a periodic basis to reflect modification to wastewater collection and treatment facilities.

4. A scheduled preventative maintenance program is not enforced for the wastewater collection and treatment facilities.

Recommendation: A scheduled preventive maintenance program should be initiated in order to reduce equipment malfunctions and to extend the equipment service life as well as to optimize operational efficiency.

5. The sludge drying beds are not being maintained properly at the various WWTPs.

Recommendation: The sludge drying beds need to be kept free of grass and weed growth.

6. The flow meters utilized by the WWTPs for compliance reporting are routinely being calibrated by personnel from the Utilities Branch, Water and Wastewater Section.

Recommendation: The individual(s) who is being tasked to perform flow meters calibration for compliance monitoring needs to receive some type of structured classroom/hands-on training. Training and calibration records should be maintained on file. The training record should contain information on who received training and the source. The calibration record should depict how frequent and by whom these flow meters calibrations are being performed. In the case of close scrutiny by the state regulatory agencies, this documentation will prove that the flow monitoring program is being implemented at a high level of consciousness while establishing validity to the flow monitoring data.

7. All of the WWTPs are experiencing Infiltration/Inflow problems due to the age and deteriorating condition of the wastewater collection system. There may also be significant stormwater entering the collection system through roof leaders, manhole covers, washracks, and etc. Modification of the existing treatment facilities with extra capacity to handle these excessive flows may not be the best solution to the problem. This approach may result in unnecessary capital and operating costs and inefficient treatment.

Recommendation: An analysis of the wastewater collection systems must be made to determine the causes for excessive infiltration. Where economically feasible, an acceptable remedial plan of action should be implemented to correct the situation.

8. Organic matter was settling out in the grit chamber servicing the Rifle Range WWTP due to low flow velocity. The chlorination room has only one chlorinator.

Recommendation: Should it be determined that the organic matter settling out in the grit chamber is more than just a temporary condition, consideration needs to be given toward reducing the cross sectional area of the grit chamber. An extra chlorinator needs to be installed in the chlorination room as backup in order to perform routine maintenance service or in the case of equipment failure.

9. Neither of the secondary clarifiers at the Tarawa Terrace WWTP do not have scum troughs and effluent baffles.

Recommendation: In order for the secondary clarifiers to operate at their peak design efficiency, these units need to be equipped with scum troughs and effluent baffles.

08/01/90

10. The primary and secondary effluent weirs at the Courthouse Bay WWTP were leaking. Very little growth was observed on the media of the Trickling Filters which are being operated in series. These filters were currently receiving low flows. The filter flies population was also significant. The plant final effluent was turbid. A previously abandoned chlorine contact tank had not been filled in or made secure.

Recommendation: The leaking effluent weirs to the primary and secondary clarifiers need to be corrected as soon as possible. The overflow weirs are designed for the uniform distribution of effluent from the surface of these tanks. If this condition is not corrected, the continued short-circuiting of flow under the weirs can compromise the clarifiers' efficiency. Consideration should be given to increasing the recirculation rate in order to apply more flow onto the filters. This action will also increase the efficiency of the Trickling Filters. In this particular case, the filter flies population may be controlled by (a) increasing the recirculation rate, (b) flushing the side walls of the filters by opening the flap valve at the end of the distributor arms, (c) flooding the filters intermittently to prevent completion of the flies life cycle, or (d) the addition of chlorine which is toxic to the flies and larvae.

11. The Camp Johnson WWTP is experiencing an organic overload due to the disposal of pulp wastes from the mess hall into the wastewater collection system. There is also a design problem located between the Trickling Filter and the Secondary Clarifier. This condition contributes to the flooding of the trickling filter underdrain system and causes the plant to experience hydraulic overloads during periods of high flow. The chlorine contact tank has a single chamber. It exhibited an unusual background color. The final effluent was turbid and contained solids.

Recommendation: The mess hall pulp wastes must be pretreated to reduce the organic load on the Camp Johnson WWTP or disposed of by commercial contract off-site. An engineering Service Request should be submitted to LANTDIV Code 405 to evaluate and correct the hydraulic problem between the Trickling Filter and the Secondary Clarifier which is contributing to the hydraulic overload associated with the flooding of the Trickling Filter underdrain system. The chlorine contact tank needs to be cleaned more frequently. Initially, a monthly housekeeping cleaning schedule should be implemented until a less frequent routine can be justified.

12.04 - 08/01/90

12. The Camp Geiger WWTP is experiencing grease problems from the Wendy's Fast Food operation. The primary clarifier effluent weir was leaking. One of the Trickling Filters has a badly leaking seal. The secondary clarifiers have bulking sludge floating on the surface and solids discharging over the weirs. The final effluent being discharged out of the chlorination tank contained high concentration of solids, turbidity and foam. It was also indicated that some of the sludge placed on the drying beds dried very slowly. Noteworthy, the tertiary system of the WWTP is off line for repairs and will not be placed back into operation until January or February 1991.

Recommendation: The grease problem resulting from the Wendy Fast Food operation can be attributed to either a maintenance or design problem. Should it be determined that the grease trap is being adequately serviced, then this facility will need to be evaluated for proper sizing. The primary effluent weir and the leaking trickling filter seal must be repaired as soon as possible. Unless these corrections are made, the WWTP will not be able to operate at optimum efficiency. Manpower requirement to perform the duties at this treatment facility should be appraised. An established in-house continuing educational training program may also prove to be very beneficial toward upgrading the poor quality effluent being discharged from this plant, even though it may not be violating the NPDES permit.

13. Solids and scum were observed floating on the surface of all eight primary clarifiers at the Hadnot Point WWTP. The effluent weir to one of the secondary clarifiers was leaking.

Recommendation: Manpower requirement to perform the duties at this treatment facility should be appraised. Solids and scum floating on the surface of primary clarifiers require much operator attention to insure peak performance. The quantity of floatables appeared more indicative of a lack of attention than an actual process upset. The leaking effluent weir to the secondary clarifier needs to be corrected as soon as possible. The overflow weir is designed for the uniform distribution of effluent from the surface of this tank. Furthermore, the efficiency of the unit will be compromised because of an elevated overflow rate.

14. Most of the sewage pump stations need to be upgraded to current standards to meet OSHA requirements.

Recommendation: The wet wells and dry wells must be provided with positive means of ventilation. Protective railing must be installed around open tanks and other areas contributing to a safety hazard. Explosion-proof motors, controls, and

electrical wiring/lights are to be provided in all hazardous areas (e.g., digester control building, enclosed wet wells, and etc.). Eliminate the possibility of potable water supplies contamination by cross connection with sewage or sludge piping. Flood lights should be provided for nighttime inspection and maintenance.

15. Within the wastewater collection system, there are a total of 96 sewage pump stations. These facilities are being visited once per 24 hours shift. The two patrol trucks personnel consists of a one man crew. They are responsible for performing all the operational, perventive maintenance, and housekeeping duties. In a number of cases, these individuals must go below grade to perform their work in a dry well or a wet well. Eventhough they are required to carry a monitoring device to check for explosive gases and oxygen deficiency before entering the pits, the following circumstances exist: (a) In view of the numbers of pump stations that must be attended during their shift, safety is being sacrificed for speed. It would be extremely difficult for one person to constantly monitor for, any type of unpredictable changes which could occur in the wells atmospheric environment below ground while attempting to perform all his duties during that particular shift. (b) Many of the dry wells and wet wells do not have mechanical forced air ventilation or the equipment is not functioning. (c) These pits should not be taken for granted as safe for they are potential death traps:

Recommendation: No one should enter pits, sumps, wet wells, tanks, and below ground pump rooms alone. There should always be at least one person above grade to observe the individual as he enters, works and leaves. Prior to entrance, be certain that adequate mechanical ventilation is provided and the fan is on to remove gases and supply oxygen. A harness with a safety line should be worn when entering manholes. A self-contained breathing apparatus should be carried on the truck for the above grade person to use in case of an emergency.

COMMENTS

1. Despite budget cuts, personnel shortages, potable water/wastewater systems expansion and certain design deficiencies, the WWTPs are still meeting effluent discharge limits.

2. Routine and preventative maintenance is not being performed and operations are barely meeting state requirements. Costly repairs and replacements will result if maintenance is not performed. Future violations of permits and safety regulations will become more frequent and costly. In order to avoid adverse impact to navigable waters and noncompliance with permit effluent limitations, you must continue to maintain all the wastewater treatment facilities in good working order and operate as efficiently as possible. To assure this continues, it is suggested that a thorough analysis be made of the manpower requirements of the Utilities Branch, Wastewater Section to perform their operation and maintenance tasks.

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>Marine Corps Base Camp Lejeune</p>	<p>PROBLEM #1 Wastewater SURVEY DATES: 5-8 Jun 1990 LANTDIV Contact for Questions and Assistance: <u>Wallace Carter</u> Telephone: <u>(804)445-2933 (AV 565)</u></p>
<p>2. PROBLEM DESCRIPTION: The NCDEM continues to collect water quality data on discharges into State waters of exceptionally high quality. Monitoring of effluent from the Base's seven WWTPs is currently being performed for nutrient (Total Nitrogen and Total Phosphorus) and toxicity. NPDES permits for the WWTPs are scheduled to expire during Calendar Year 1992 and 1993. The State has already indicated that discharges from several of these treatment facilities are in conflict with its goal to upgrade water quality in New River and its tributaries, as well as the Intercoastal Waterway. As future ambient water quality designations and effluent limitations for phosphorus, nitrogen heavy metals, chlorine residual, etc. become more stringent, permit renewal will become increasingly difficult.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc: 15 NCAC 2B .0101 (e) (5); 15 NCAC 2B .0212 (c) (3) (b); 15 NCAC 2H .0100; 15 NCAC 2H .0404 (a) (c); NCDEM ltr dated on 29 December 1989; NPDES No. NCO062995 (Camp Geiger); NPDES No. NC0063011 (Camp Jonhson); NPDES No. NCO063002 (Tarawa Terrace); NPDES No. NCO063053 (Onslow Beach); NPDES No. NC0063045 (Courthouse Bay); NPDES No. NC0063037 (Rifle Range); and NPDES No. NC0063029 (Hadnot Point).</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS: The Environmental Planning and Land Use Division needs to immediately initiate a Base-wide Wastewater Management Study. This study must take into account the ever changing regulatory scenario and evaluate various wastewater collection/treatment/disposal alternatives based upon technological feasibility. Such a study may be undertaken contacturally through the combined efforts of LANTNAVFACENGCOM Codes 16, 18 and 405.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p>	

DocNO: CLEJ - 00588-

12.04.08/01/90

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>Marine Corps Base Camp Lejeune</p>	<p>PROBLEM #2 Wastewater SURVEY DATES: 5-8 Jun 1990 LANTDIV Contact for Questions and Assistance: <u>Wallace Carter</u> Telephone: <u>(804)445-2933 (AV 565)</u></p>
<p>2. PROBLEM DESCRIPTION: With the exception of the Hadnot Point WWTP and SFC-315 Pump Station, none of the WWTPS and sewage pump stations have a backflow prevention on the incoming potable water mains and service connections.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc.) CO P11000.8B; Title 10, Chapter 10, Subchapter 10.D, Section 1006.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS: Backflow prevention devices must be installed at the WWTPs and sewage pump stations since there is always a potential threat to the public health arising from a backflow condition.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p>	

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>Marine Corps Base Camp Lejeune</p>	<p>PROBLEM #4 Wastewater SURVEY DATES: 5-8 Jun 1990 LANTDIV Contact for Questions and Assistance: <u>Wallace Carter</u> Telephone: <u>(804)445-2933 (AV 565)</u></p>
<p>2. PROBLEM DESCRIPTION: The treated effluent from the Onslow Beach WWTP discharges into the Intercoastal Waterway. The discharge of WWTP effluent into "SA" waters will be prohibited regardless of treatment (see problem #1). This treatment facility is manned 8 hours per day on Tuesday and Thursday, and 2 hours per day the rest of the week. However, it is not receiving proper operation and maintenance. Organic matter was observed settling out in the grit chamber. Sludge solids were observed floating on the surface of the secondary clarifiers. The exhaust fan for the chlorination room is not working.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc. 15 NCAC 2B .0212 (c) (3) (b); NPDES No. NC0063053; NCDEM ltr dated 29 December 1989.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS: It is most urgent that plans be initiated as soon as possible to address the elimination of this WWTP discharge from the Intercoastal Waterway. During the interim, a full time operator (i.e., 8 hours/day, 7 days/week) needs to be stationed at this plant. The exhaust fan for the chlorination room must also be repaired.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p>	

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>Marine Corps Base Camp Lejeune</p>	<p>PROBLEM #5 Wastewater SURVEY DATES: 5-8 Jun 1990 LANTDIV Contact for Questions and Assistance: <u>Wallace Carter</u> Telephone: (804)445-2933 (AV 565)</p>
<p>2. PROBLEM DESCRIPTION: There is a leak in the outfall pipe from the Camp Geiger WWTP.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc.)</p> <p>NPDES No. NC0062995</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS: The WWTP outfall pipe must be repaired immediately. Technically, this is a bypass or unpermitted discharge which violates the NPDES permit for this facility. The WWTP effluent is permitted for end of the pipe discharge to be disposed of an adequate distance off-shore and at a point of adequate in-stream mixing.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p>	

LANTNAVFACENCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>Marine Corps Base Camp Lejeune</p>	<p>PROBLEM #6 Wastewater SURVEY DATES: 5-8 Jun 1990 LANTDIV Contact for Questions and Assistance: <u>Wallace Carter</u> Telephone: <u>(804)445-2933 (AV 565)</u></p>
<p>2. PROBLEM DESCRIPTION: Sewage sludge from the Camp Geiger WWTP is being stockpiled at an unpermitted site located down a road not far from the treatment facility. In addition, the method of final disposal for the WWTPs sludges/solids needs to be described and submitted to the NCDEM in the form of a Sludge Management Plan.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc.)</p> <p>NCGS 143-215.1; 40 CFR 501.15; NPDES No. NC0062995 (Camp Geiger); NPDES No. NC0063011 (Camp Johnson); NPDES No. NC0063002 (Tarawa Terrace); NPDES No. NC0063053 (Onslow Beach); NPDES No. NC0063045 (Courthouse Bay); NPDES No. NC0063037 (Rifle Range); and NPDES No. NC0063029 (Hadnot Point); 15 NCAC 2H .0200.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS: The stockpiling of sewage sludge at Camp Geiger must be discontinued. Remove the current stockpiled sludge and dispose of material at the Base permitted sanitary landfill. A Sludge Management Plan should be prepared and submitted as a single document for all seven (7) WWTPs. This Plan should identify the method of sludge stabilization, quantity/quality of sludge, removal, transportation and disposal. Disposal needs to be addressed in accordance with the sanitary landfill permit requirements. The appropriate sections of the permit for landfilling of the sludge may be attached as part of this Plan.</p>	
<p>5. OTHER INFORMATION (Associated cost estimates, etc.)</p>	

LANTNAVFACENCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY: MCB Camp Lejeune</p>	<p>PROBLEM #1 SURVEY DATES: 21-24 May 90 LANTDIV Contact for Questions and Assistance: <u>S.G. Martin</u> Telephone: <u>445-4719</u></p>
<p>2. PROBLEM DESCRIPTION:</p> <p>The training records for the personnel maintaining the 90 day HW storage sites do not clearly indicate that the facility personnel were trained in emergency procedures and hazardous waste management procedures relevant to their positions.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>40 CFR 262.34(a)(4) (which refers to 40 CFR 265.16), this reference requires certain elements in the hazardous waste training with an emphasis on emergency procedures and hazardous waste management.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>Institute a consistent hazardous waste training program for all personnel involved in hazardous waste operations. Clearly document what the training consisted of with regard to the requirements in the personnel folders.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>Eleven 90 day hazardous waste storage sites were visited out of more than 100 that exist. Overall level of compliance with training requirements by RCRA was excellent.</p>	

2

1. The weekly inspections of the 90 day storage areas were not complete or up to date at the following locations; Naval Hospital; SRIG (Building FC-365); 2D FSSG (Building FC-100); 20 MARDIV (Building HP-250).
2. 40 CFR 264.15 (refers to 264.174 for containers). This reference requires weekly inspections of areas managing hazardous waste containers.
3. Elevate the importance of the weekly inspection requirement within the 4 commands cited.
4. Note: The Naval Hospital and SRIG had container management deficiencies that could possibly be tied to lack of weekly inspections.

3

1. Hazardous waste container management deficiencies were noted at the following 90 day storage areas: (1) Naval Hospital (container of solid HW with HW spilled on top); SRIG, Building FC-365 (HW Lithium batteries unlabeled and without accumulation start dates); 2D MARDIV, Building HP-100 (3 drums of HW exceeded 90 day limit); MCB Training Support Division, Building 7 (one drum of HW with no label and no date).
2. 40 CFR 262.34 requires hazardous waste containers at 90 day storage areas to meet certain requirements.
3. The problems at two of the sites may have been avoided had the weekly inspections been performed (SRIG, Building FC-365 and Naval Hospital).

Elevate the importance of the requirements to each command.

4. Note: Eleven 90 day storage site were visited out of over one hundred. Overall container management was good.

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCB Camp Lejeune</p>	<p>PROBLEM # 1 SURVEY DATES: 5-29/6-1-90 LANTDIV Contact for Questions and Assistance: <u>S. G. Martin</u> Telephone: <u>A/V 565-4719</u></p>
<p>2. PROBLEM DESCRIPTION:</p> <p>MCB Camp Lejeune has lead contaminated washrack grit stored at 946 washrack area. This material has failed the EP toxic level for lead. The storage qualifies as a hazardous waste pile in violation of Camp Lejeune's Part B permit for storage of hazardous waste.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>The following apply 40 CFR 264: subpart L (Hazardous Waste Piles); Subpart F (Releases from Solid Waste Management Units); Subpart G (Closure and Post Closure)</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <ol style="list-style-type: none">1) Notify the NC Department of Environment, Health and Natural Resources that the waste pile exists. They will most certainly require a closure plan.2) Prioritize a solution to disposal method either DRMO or new contract managed by MCB Camp Lejeune.3) Develop closure plan	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>LANTDIV has an Indefinite Quantity Contract that could be used to develop a closure plan for this waste pile.</p>	

12.04-08/01/90

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCB Camp Lejeune</p>	<p>PROBLEM #</p> <p>SURVEY DATES: 5/29/6-1-90</p> <p>LANTDIV Contact</p> <p>for Questions and Assistance: <u>S. G. Martin</u></p> <p>Telephone: <u>A/V 565-4719</u></p>
<p>2. PROBLEM DESCRIPTION:</p> <p>MCB Lejeune has significant amounts of petroleum contaminated soil stored at various sites across the base. Disposal through the current DRMO contract would cost \$1200/ton or 1,100,000 for the 930 tons on hand. This waste continues to be generated by various spills on soil by the squadrons.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>"Guidelines for Remediation of Soil Contaminated by Petroleum" by the NC Department of Environment, Health, and Natural Resources. These guidelines regulated soil containing more than 10 ppm total petroleum hydrocarbons.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>An A&E study on disposal of petroleum contaminated soil was sent to MCB Camp Lejeune (D. Piner) on 20 July 90. This study presents a disposal option more economical than the DRMO cost cited above. The suggested process is enhanced evaporation and combustion of hydrocarbons in the fuel. This can be conducted on site or in Norfolk, VA by Soil Remediation, Inc.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>Cost estimate is \$60/ton for outside treatment; \$94/ton offsite treatment. Offsite cost estimate includes bulk transportation cost and landfill cost.</p>	

LANTNAVFACENCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCB Camp Lejeune Hadnot Point</p>	<p>PROBLEM #2 SURVEY DATES: 5-29 thru 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: Maintenance Shops Excessive grit accumulation in grit pits and oil/water separators at vehicle washracks. Causing short circuiting through separators and even overflows to storm ditches from grit pit emergency overflow lines. In addition, grit disposal is a problem. Facilities seem to have a problem with getting grit picked up (by DRMO?) after they clean the grit pits. Some facilities stock-piling grit on part of washracks or on ground (pavement).</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>Section 301.A of Clean Water Act - Prohibition of unpermitted discharges. N.C. Administrative Code 15 NCAC 2H.0100 Wastewater Discharges to Surface Waters (Specifically 2H.0100.0127)</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>Provide efficient means for disposal of contaminated grit. Facilities should initiate routine cleanup/maintenance of grit pits and separators. permit overflow pipes under Certificate of Coverage obtained from NC DEM.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>See attached sheet for listing.</p>	

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCB Camp Lejeune Hadnot Point</p>	<p>PROBLEM #1 SURVEY DATES: 5-29 thru 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION:</p> <p>Building HP670 - Water Treatment Plant</p> <p>Backwash pond level high due to solids accumulation. Evidence of overflows from pond through emergency pipe to ditch parallel with the adjacent railroad track.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>Section 301.A of Clean Water Act - Prohibition of unpermitted discharges. N.C. Administrative Code 15 NCAC 2H.0100 Wastewater Discharges to Surface Waters (Specifically 2H.0100.0127)</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>Solid removal maintenance shall be initial to maintain a minimum of 12" between the normal backwash highwater level and the discharge pipe invest. 12" free is required to prevent discharge from the pond during storm events. Permit overflow pipe under Certificate of Coverage obtained from NC DEM.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>Pond is lined. Problem with puncturing liner during solids removal. Activity is aware of solids accumulation problem and is planning on removing solids by hand.</p>	

12.04 - 08/01/90

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCAS New River</p>	<p>PROBLEM #17</p> <p>SURVEY DATES: 6-1-90</p> <p>LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: AS 4155 Steam Plant Fuel Transfer Station. No containment provided. Pad drains directly to a storm ditch. If spill occurs off-loading activities, fuel would drain directly of adjacent receiving stream in violation of SPCC.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>40 CFR Part 112 Oil Pollution Prevention - Section 112.7 Guidelines for the Preparation and Implementation of Spill Prevention Control and Countermeasure Plan.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>Provide new truck unloading facility to meet current SPCC design criteria storage must be provide for the largest compartment of fuel delivery truck should it rupture.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>Submit PCR and secure CMC PA \$80K funding and initiate a construction project.</p>	

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCB Camp Lejeune Hadnot Point</p>	<p>PROBLEM #3 SURVEY DATES: 5-29 thru 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: Building HP 1700 - Steam Plant Steam condensate from ash suppression system on old Ash Silo is entering a storm drain. This storm drain discharges to Beaver Dam Creek. Heavy accumulation of fly ash in Creek (location - next to Exchange).</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>Section 301.A of Clean Water Act - Prohibition of unpermitted discharges.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>Tie ash silo discharge into existing grit chamber (approximately 8 ft. away) which discharges to sanitary sewer system. Recommend cleaning out the old grit chamber and transfer liquid with a pipe to the new ash grit separator pit. Do this immediately.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p> <p>Activity aware of problem. Project currently under construction to replace Ash Silo System. Housekeeping in area needs to be improved to reduce non-point source pollution.</p>	

LANTNAVFACENCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY: MCAS New River</p>	<p>PROBLEM #17 SURVEY DATES: 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: Building AS-4135 Ground Support Maintenance Facility. POL and Hazardous Waste Storage has no secondary containment.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc) 40 CFR Part 112 Oil Pollution Prevention - Section 112.7 Guidelines for the Preparation and Implementation of Spill Prevention Control and Countermeasure Plan.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling) Provide enclosed facility for POL and Hazardous Waste Storage for secondary containment.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.) Estimated construction cost \$60K. Submit PCR to CMC and initiate construction project.</p>	

LANTNAVFACENCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY: MCB Camp Lejeune</p>	<p>PROBLEM #17 SURVEY DATES: 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645; 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: Building HP1780 - 2nd Echelon Maintenance Shop washrack not in use as a washrack - used for storage of POL and Hazardous Waste. If spill were to occur, could reach adjacent storm ditch through grit pit emergency overflow line.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc) 40 CFR Part 112 Oil Pollution Prevention - Section 112.7 Guidelines for the Preparation and Implementation of Spill Prevention Control and Countermeasure Plan.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling) Plug emergency overflow line in grit pit to provide for secondary containment.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.) Estimated construction cost \$60K submit PCR to CMC and initiate construction project.</p>	

LANTNAVFACENCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY: MCAS New River</p>	<p>PROBLEM #17 SURVEY DATES: 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: Water Treatment Plant Backwash Pond Emergency overflow weir which discharges to Creek is not permitted.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc) Section 301.A of Clean Water Act - Prohibition of unpermitted discharges. NC Administrative Code 15 NCAC 2H.0100.0127 Wastewater Discharges to State Waters - Certificate of Coverage.</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling) Obtain permit for emergency overflow weir under a Certificate of Coverage obtained from NC DEM.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.) One Certificate of Coverage can cover all similar discharges on the Base.</p>	

LANTNAVFACENGCOM
ENVIRONMENTAL COMPLIANCE EVALUATION
PROBLEM NOTIFICATION FORM

<p>1. ACTIVITY:</p> <p>MCB Camp Lejeune Courthouse Bay</p>	<p>PROBLEM #17 SURVEY DATES: 6-1-90 LANTDIV Contact for Questions and Assistance: <u>L. Speas & C. Wallace</u> Telephone: <u>565-6645, 565-6982</u></p>
<p>2. PROBLEM DESCRIPTION: A-47 AMPTRAC Maintenance Facility Covered Wash Racks for Detail Washing. Overflow from grit chamber discharges to Courthouse Bay. At this outfall there is an oil absorbent boom which is saturated with oil. Also, heavy oil sheen behind boom.</p>	
<p>3. REFERENCE (Applicable laws, regulations, instructions, etc)</p> <p>Section 301.A of Clean Water Act - Prohibition of unpermitted discharges. NC Administrative Code 15 NCAC 2H.0100.0127 Wastewater Discharges to State Waters - (Specifically 2H.0100.0127)</p>	
<p>4. RECOMMENDED CORRECTIVE ACTIONS (including any mandated scheduling)</p> <p>Replace absorbent boom. Permit discharge under Certificate of Coverage as described in Problem #2.</p>	
<p>5. OTHER INFORMATION (Associated cost estimate, etc.)</p>	