09.05-09/01/90-00504

COMMUNITY RELATIONS PLAN

FINAL

FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AT
HADNOT POINT INDUSTRIAL AREA

AND

LIMITED SCOPE INVESTIGATIONS
AT
SITES 6, 48, AND 69

MARINE CORPS BASE CAMP LEJEUNE
NORTH CAROLINA

Prepared For:

NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION

Prepared By:

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
RUTHERFORD, NEW JERSEY

ESE PROJECT NO. 49-02036

SEPTEMBER 1990

Doc. No.: CLEJ-00504-9.05-9/01/90

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Navy position, policy, or decision, unless so designated by other documentation.

The use of trade names in this report does not constitute an official endorsement or approval of the use of such commercial products. This report may not be cited for purposes of advertisement.

Doc. No.: CLEJ-00504-9.05-9/01/9

ACRONYMS

CRP	Community Relations Program
EPA	Environmental Protection Agency
MAGTFs	Marine Air-Ground Task Forces
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MEF	Marine Expeditiary Force
MEK	Methyl ethyl ketone
NCDEHNR	North Carolina Department of Environment, Health, and Natural Resources
NFEC	Naval Facilities Engineering Command
PAO	Public Affairs Office
POL	Petroleum, Oil, and Lubricants
RI/FS	Remedial Investigation/Feasibility Study

TABLE OF CONTENTS

SECTION		PAGE
1.0	INTRODUCTION AND BACKGROUND	1
1.1	SITE LOCATION AND DESCRIPTION	2
1.2	SITE HISTORY	3
1.3	ENVIRONMENTAL STUDIES	4
2.0	COMMUNITY BACKGROUND	6
2.1	COMMUNITY DEMOGRAPHICS	6
2.1.1	EMPLOYMENT	6
2.1.2	EDUCATION	7
2.1.3	RECREATION	7
2.2	COMMUNITY INVOLVEMENT HISTORY	9
2.3	COMMUNITY INTERVIEW PROGRAM	11
3.0	COMMUNITY RELATIONS PROGRAM	12
3.1	GOALS AND OBJECTIVES	12
3.2	RESPONSIBILITIES	14
3.3	COMMUNICATION ACTIVITIES AND TECHNIQUES	16
3.3.1	AGENCY COMMUNICATION TECHNIQUES	17
3.3.2	LOCAL COMMUNITY AND MEDIA COMMUNICATION TECHNIQUES	18
3.3.3	CAMP LEJEUNE PERSONNEL, RESIDENTS, AND CIVILIAN WORK FORCE COMMUNICATION TECHNIQUES	21

APPENDICES

APPENDIX A	Site Maps
APPENDIX B	Historical News Clippings
APPENDIX C	Industries in Onslow County
APPENDIX D	Media List
APPENDIX E	Community Interview Participants
APPENDIX F	Program Points of Contact
APPENDIX G	Recommended Locations of Information Repositories
APPENDIX H	Recommended Locations for Community Meetings
APPENDIX I	Elected Officials
APPENDIX J	Civic and Community Groups
APPENDIX K	Regional Schools
APPENDIX L	Community Relations Schedule

TABLES

TABLE		PAGE
Table 2-1	Breakdown of Industry by Type in Onslow Cty	8

1.0 INTRODUCTION AND BACKGROUND

This document presents the Community Relations Plan (CRP) for Camp Lejeune. The objective of this plan is to provide effective communication techniques between the Marine Corps, regulatory agencies, and the public. Section 1.0 of this CRP presents the history and background of Camp Lejeune, Section 2.0 presents information about the surrounding community, and Section 3.0 covers the details of the community relations program. The following appendices are also included:

- Appendix A - Site Maps
- Appendix B - Historical News Clipping File
- Appendix C - Industries in Onslow County
- Appendix D - Media List
- Appendix E - Community Interview Participants
- Appendix F - Program Points of Contact
- Appendix G - Recommended Locations of Information Repositories
- Appendix H - Recommended Locations for Community Meetings
- Appendix I - Elected Officials
- Appendix J - Civic and Community Groups
- Appendix K - Regional Schools
- Appendix L - Community Relations Schedule

The intention of this CRP is to keep residents of Onslow County and the surrounding area knowledgeable of planned and ongoing activities at Camp Lejeune; and, to provide a means whereby citizens and agencies can interact with Camp Lejeune, supporting Marine agencies, and assist in resolving issues of public interest and concern. Specific purposes of this CRP are to:

1. Provide for the exchange of information regarding the remedial investigation/feasibility study (RI/FS) and other Installation Restoration Process activities;
2. Solicit input, comments, and active involvement from the public, elected and civic leaders, and concerned agencies regarding the program; and
3. Provide a centralized point of contact for public agencies to express concerns and provide suggestions for developing an effective communications network to provide desired information regarding environmental matters at Camp Lejeune.

1.1 SITE LOCATION AND DESCRIPTION

Camp Lejeune and the New River Marine Corps Air Station (MCAS) are located in southeastern North Carolina, in Onslow County, near the town of Jacksonville. The Marine base and air station lie approximately 150 miles south of Virginia and 100 miles north of South Carolina. The installations are bordered by the Atlantic Ocean and the communities of Jacksonville, Verona, Sneads Ferry, Piney Green, Hubert and Dixon.

The area includes 110,000 acres on both sides of the New River inlet most of which is forested land. Camp Lejeune, known as the "Home of Expeditionary Forces in Readiness", occupies 170 square miles with 14 miles of coastline and approximately 6,800 buildings and facilities. Included on the installation are more than 442 miles of roads, 50 miles of sidewalks, and 50 miles of railroads.

Residents receive support services from a number of organizations on base. For example, there are 11 chapels servicing the religious needs of the military community and the Naval Hospital provides health care to retired military members and their families. The hospital is a 265-bed facility with 15 ambulances and nine branch clinics/dispensaries. The medical facilities accommodate almost 38,000 patients monthly.

Camp Lejeune has seven waste water treatment plants, nine fire stations, 17 electric substations, three commissaries and 18 dining facilities. There are also many recreational facilities on base including 175 outdoor playing courts and fields supporting football, tennis, track and field events, and other activities. Special Services also operates three swimming pools, two bowling centers, two 18-hole golf courses, one stable, two marinas, three movie theaters, a large recreational beach complex, and many general use areas for picnicking, games and other activities.

Because it is so large, Camp Lejeune has used localized sites for waste disposal. These sites are located in many parts of the installation and include disposal on the ground surface and the use of borrow pits. Spreading of waste oils, solvents, and other petroleum, oil, and lubricant (POL) compounds on roads have been used in the past as a method of dust control.

In the shallow aquifer beneath Hadnot Point, 15 volatile organic compounds have been identified. The four most serious of compounds violate recommended North Carolina and EPA standards. Two large plumes have been identified in the shallow aquifer. One includes a portion of the

industrial area between Building 1700 and the Burger King extending from Holcomb Boulevard to Louis Street. The second includes the area from the fuel farm on Ash Street northeast to Sneads Ferry Road. Overall, most old disposal sites and areas which received wastes are in the Hadnot Point area (location of much of the base industrial activity), and at MCAS New River. Site locations of past waste disposal areas are shown in Appendix A, and discussed further in the following sections.

1.2 SITE HISTORY

Camp Lejeune had its beginnings in the late 1930's when a selection board decided on the New River area of North Carolina for a new Marine training base. The facility would be within easy reach of an air support activity (nearby Cherry Point) and two deep water ports (Morehead City and Wilmington). In addition, the temperate climate made the New River area an ideal location. Construction for the base began in April 1941, and the following month Lieutenant Colonel W.P.T. Hill became the first commanding officer of what was then known as Marine Barracks, New River. The installation was named in honor of Lieutenant General John A. Lejeune, 13th Commandant of the Marine Corps, in December 1942.

The base's first warehouse was a converted tobacco barn while a summer cottage acted as base headquarters. Heavy rains frequently turned dirt trails into muddy quagmires making transportation difficult at best. Over the years, the base has changed considerably. Today there are six Marine and two Navy commands located at Camp Lejeune. The Marine Corps Base owns all real estate, operates entry-level formal training schools and provides support and training for tenant commands. The Command Element, II Marine Expeditionary Force (MEF) coordinates operational planning for Fleet Marine commands. The 2nd Marine Division and the 2nd Service Support Group are the ground combat, and service and support element of II MEF, respectively. The production and release of information during planning and execution of operations is the responsibility of the 2nd Surveillance, Reconnaissance and Intelligence Group. The final Marine command is the Command Element, 6th Marine Expeditionary Brigade which contains the planning staff for Fleet Marine Forces associated with Maritime Prepositioning Ships Squandron-1 and the tactical exercise controller for special operations capable expeditionary units. The naval commands are the Naval Hospital and the Naval Dental Clinic.

Camp Lejeune and the New River Air Station are operated as installations which train and deploy forces, organized into Marine Air-Ground Task Forces (MAGTFs), to locations around the world. The fundamental task of

both is to provide the necessary facilities for units to maintain their combat readiness. For further information, historical news clippings are included in Appendix B.

1.3 ENVIRONMENTAL STUDIES

During Camp Lejeune's long history using live ordnance for training purposes, the base's past industrial activities and waste disposal techniques were based on commonly accepted practices. Since this time these practices have been determined to cause surface water, groundwater, and soil contamination problems. In response to this problem soil, groundwater, and surface water quality investigations began at Camp Lejeune in 1983.

The environmental process of assessing hazardous waste sites used by the Department of the Navy, including the Marine Corps, is known as the Installation Restoration Process. It is a process fully consistent with applicable federal and state environmental laws, and grew out of the "Superfund" legislation of 1980. The Installation Restoration Process is deliberately and carefully put into effect in coordination with the United States Environmental Protection Agency (EPA), Naval Facilities Engineering Command (NFEC), Defense Reutilization-Marketing Service, and the North Carolina Department of Environment, Health, and Natural Resources (NCDEHNR).

The major steps in the Installation Restoration Process begin with extensive sampling of each site to determine the type, degree and extent of contamination. Careful analysis of these samples will be followed by a Feasibility Study to consider remedial alternatives. From this study, a record of decision will be prepared, reviewed by the public and regulatory agencies, finalized and implemented. Each site will be subject to public comment.

Assessments of human health or environmental risk have been made by considering factors such as the type of material involved and the potential for contaminant migration. Fifty sites were judged to present no significant risk and do not need further evaluation. Twenty-six sites have potentially hazardous materials and reasonable potential for material migration. Of these, five sites had been identified for immediate study. The sites include two past landfills, a duel storage facility, a past waste storage lot, and groundwater tables beneath a section of the base's industrial area. Preliminary site investigations were completed on these sites; and, in-depth site studies and development of clean-up solutions

will begin before the end of 1990. Testing performed to date shows that none of this contamination represents an immediate threat to public health or the environment.

Many of the sites judged as needing confirmation contain buried POL compounds (e.g., contaminated fuels, waste oils, solvents, and hydraulic fluids). Other contaminants found include mercury, tetrachloroethylene, trichloroethylene, trihalomethane, dichloroethane, methylene chloride, and Dichlorodiphenyltrichloroethane. At Hadnot Point, the Air Station, and Camp Geiger fuel farms, there have been releases of either Avgas, Mogas, JP-4, or JP-5 in significant quantities to generate concern about the groundwater aquifer. Recent deep well monitoring has identified an additional contaminant, methyl ethyl ketone (MEK) in the deep aquifer. This new data will compound the problem of identifying groundwater treatment options for the deep aquifer because MEK is not treated with the same methods as the other pollutants identified to date.

Since the mission of the base requires training using live ordnance, year-round impact areas have been set aside for this purpose. Explosions have a local blast effect on the environment, but they are not thought to threaten the groundwater. Skilled Explosive Ordnance Disposal (EOD) personnel have typically handled unexploded rounds in contained areas where ordnance is either burned or electrically exploded.

After the remediation is complete, a long term monitoring program will continue to assess how well the clean-up solution(s) works over time. If problems arise, the Installation Restoration Process is repeated. Although much testing and study remains to be done, Camp Lejeune and the Marine Corps are fully committed to a remedial program for these sites and remediation of past disposal practices which may be a threat to health and the environment, as required by law.

2.0 COMMUNITY BACKGROUND

2.1 COMMUNITY DEMOGRAPHICS

2.1.1 EMPLOYMENT

Since its construction Camp Lejeune has been the major source of wages and salaries for the local economy. In Fiscal Year 89 gross pay for military personnel, civilian employees and employees of the Marine Corps Exchange and non-appropriated fund organizations totaled over $563 million. This dollar amount reflects more than basic pay. For military personnel it includes allowances for subsistence, housing, and clothing; hazardous pay; jump pay; and sea duty pay. Civilian salary data includes cash awards, the funded portion of the civil service retirement, severence pay, group life insurance, and the government's portion of a health benefits program.

Camp Lejeune and its supporting organizations were responsible for a population of over 124,000 in January 1990. This figure includes approximately 43,263 active-duty military personnel at Camp Lejeune and 51,656 of their dependents, approximately 9,760 military retirees within a 50-mile radius of Camp Lejeune and their 14,933 dependents. Of the 48,000 people working directly or indirectly for the Department of the Navy at Camp lejeune in January 1990, approximately 90 percent were military personnel.

The civilian work force contains 1,171 civilian federal retirees and survivor annuitants and more than 4,800 civilians (including 3,036 Department of Defense civilians). In addition to Department of Defense employees, the Camp Lejeune work force also includes employees of private organizations on base such as the post office, credit union, banks, airline ticket office and employees of service contractors. The majority of the civilian work force falls between the ages of 31 and 60.

Camp Lejeune, the largest forest management program in the Marine Corps, sells commercial timber harvested by private timber contractors. In Fiscal Year 1989 the gross proceeds generated $737,536. Forest Management expenses totaled $491,209. Forty percent of the net proceeds from timber sales were returned to the Onslow Board of Education for utilization in the public schools, as required by federal law.

The city of Jacksonville is located along the western edge of Camp Lejeune. The city lies in a richly forested area with numerous rivers. The city contains approximately 31,000 people which, combined with other cities in the area, provides Onslow County with a population of 131,000.

Members of the community include both active, and retired, military and civilian personnel. Additional work force members work in Jacksonville and surrounding communities, or commute to the Wilimington area. The communities surrounding Camp Lejeune contain a variety of industries. Construction, manufacturing, retail, and packaging companies comprise the majority of businesses in the area. For a breakdown of industries in Onslow County see Table 2-1. The city contains four banks, one daily newspaper, and the Jacksonville-Onslow Chamber of Commerce. The Chamber members include military personnel who provide information to the local community regarding military activities. One State Senator, and one member of the House of Representatives, reside in and support the interests of Jacksonville.

2.1.2 EDUCATION

The present Department of Defense civilian work force at Camp Lejeune includes more college graduates than ever before. Nearly 17 percent have college diplomas, and an additional 35 percent have completed at least some post-secondary school education. Regional educational needs are served by 46 public and private schools, 14 daycares or pre-schools, and the local Coastal Carolina Community College and James Sprunt Community College. On-base education is provided to children of Camp Lejeune military personnel. On base there are five elementary schools, one middle school and one senior high school. These schools are accredited by the state of North Carolina and the Southern Association of Colleges and Schools.

Camp Lejeune educational facilities, along with area schools and colleges, provide continuing education opportunities for adults to enhance personal growth and career development. In 1989 there were nearly 6,000 students enrolled in adult education and post-secondary education programs aboard Camp Lejeune. Educational programs available to military personnel and dependents include Coastal Carolina Community College, Southern Illinois University, Golden Gate University, Boston University, and Campbell University.

2.1.3 RECREATION

The Food and Hospitality Division of Moral, Welfare and Recreation has an annual non-appropriated budget of $12.5 million. This division employs 510 civilians with an annual payroll of $3.0 million. In addition, this division operates 12 clubs, 20 snack bars, numerous mobile units and the Hostess House which serves officers, staff noncommissioned officers and enlisted personnel. Annual retail sales for all clubs exceed $14.0 million.

TABLE 2.1

BREAKDOWN OF INDUSTRIES IN ONSLOW COUNTY

Name of Company	Location	Product
Alton Packaging Corporation	Jacksonville	Paper tubes, Paper Board
Atlantic Industries	Jacksonville	Mens Shirts and Ladies Shirts
Barrus Construction	Jacksonville	Asphalt, Ready-Mix Concrete
Belle-Dream, Inc.	Jacksonville	Lingerie, Piece Goods
Daily News	Jacksonville	Newspaper
Del-Mar Garments, Inc.	Jacksonville	Ladies Dresses
Holly Ridge Foods, Inc.	Holly Ridge	Frozen Turnovers
Liberty Industries	Jacksonville	Metal Stamping
Martin-Marietta Aggegates	Belgrade	Crushed Stone
Mine Safety Appliances Company	Jacksonville	Safety Equipment
Murray Chris Craft	Swansboro	Fiberglass Yachts, Fiberglass & Yacht Materials
Progressive Service Company	Jacksonville	Cutting Dies
Richlands Manufacturing	Richlands	Ladies Knit Sportswear, Piece Goods
Stanadyne, Inc.	Jacksonville	Diesel Injection Pumps and Nozzles
Swansboro Garment Company	Swansboro	Ladies Dresses, Pants
Thorn Apple Valley of Carolina	Holly Ridge	Bacon Packaging
Thompson Sign Company	Jacksonville	Neon & Plastic Electric Signs, Lettering, Plexiglass
Truss Builders of Holly Ridge	Holly Ridge	Roof and Floor Trusses
United Parcel Service	Jacksonville	Bulk Mail and Package Delivery
Weyerhaeuser Company	Jacksonville	Plywood, Log Cores, Chips, Logs, Glue Ingredients

Doc. No.: CLET-00504-9.03-9/01/91

Camp Lejeune Special Services has an annual non-appropriated fund operating budget. Special Services provided recreation activities and services for more than 1.7 million patrons during Fiscal Year 1989 at its more than 100 facilities. The 231 employees of Special Services received an annual payroll of $2.78 million. The Marine Corps Exchange and Moral, Welfare and Recreation Services Division has annual retail sales and services of over $76 million, providing to the Camp Lejeune recreational fund more than $3.9 million annually.

Retirees of the armed forces have access to all Camp Lejeune facilities including shopping privileges at the commissary and the Marine Corps Exchange, use of all recreational facilities, and medical attention as available at Camp Lejeune's Naval Hospital.

Three movie theaters, 12 radio stations, and two bowling alleys serve the Camp Lejeune and New River area. In addition, there is one live theater at Hadnot Point. The Camp Lejeune area is serviced by four local newspapers: The Daily News of Jacksonville, The Morning Star of Wilmington, The News and Observer of Raleigh, and the Camp Lejeune Globe.

For the outdoorsman, coastal Carolina provides a lush environment for turkey, deer, bear, and duck hunting. Fisherman can wet their lines with saltwater or freshwater fishing. Boating, camping, and archery are also available. The area also provides golfing, skeet and trap shooting, swimming, and horseback riding. There are extensive intramural sports facilities including tennis, racquetball, squash, aerobics, handball and basketball courts.

2.2 COMMUNITY INVOLVEMENT HISTORY

The program of community relations at Camp Lejeune-New River has evolved from humble beginnings. Camp Lejeune has become more sensitive to local populations due to its economic role in the community and the risks associated with ordnance use and storage. It continues to bring the military and civilian communities together, to share ideas and seek solutions to common problems, to foster goodwill and understanding for a stronger community.

Long a cornerstone in the solid foundation of trust and cooperation between on- and off-base communities, the Joint Military Affairs Committee continues to play a leading role. A mix of local professionals, politicians, business and servicemen, the committee sponsors events such as fish frys, sporting events and reciprocal receptions to enhance

relations and recognize excellence in civilians and servicemen alike. In addition, the 2nd Marine Division Band and color guard provide musical and ceremonial support to not only their Eastern Carolina neighbors, but to the rest of the eastern seaboard as well. Each year they add their unique and distinctive flair to numerous events, including social gatherings, parades, festivals, and holiday and memorial observances.

The speakers bureau, sponsored by the Public Affairs Office (PAO), affords citizen groups the opportunity to meet and hear from Marines and Sailors in subjects ranging from leadership to skydiving. The most effective community relations tool is the individual Marine or Sailor speaking about himself, his mission and esprit de corps.

Supporting the community relations mission each year are various units such as the base Provost Marshal's Office (PMO). In addition to sponsoring "Officer McGruff" and Project "DARE" crime/drug prevention programs at local schools, they also sponsor the "Convincer", a seatbelt safety program, and various safety fairs for community benefit. PMO also participates with local colleges and law enforcement agencies in the sharing of equipment, law enforcement information, and curriculum development at Coastal Carolina Community College.

Camp Lejeune Marine Engineers constructed artificial reef material for the Department of Fisheries to be deposited near Onslow Beach and offered to build pilot houses for their research vessels operating from Jacksonville. The Assault Amphibian Battalion provided assistance in transportation of county emergency crews during the winter blizzards. The 2nd Medical Battalion sponsored Community Awareness Day while the PAO sponsored luncheons with all local television, radio, and print media to present issues and increase awareness and cooperation. Other community relations activities have included Rotary Club Breakfast Programs, the "Camp Lejeune Report" radio and television broadcasts, and cooperation with the Jacksonville Beautification Committee to construct memorials.

This past year also witnessed the extension of a helping hand from the units of the base to Onslow County to unload food for needy families, and assisted in map production for the Office of Emergency Medical Services Rescue Squad. This year's warmth of giving during the holiday season was realized in the base's participation in the Christmas Cheer Program, which provided food and gifts to needy families in the local area.

2.3 COMMUNITY INTERVIEW PROGRAM

A survey of the community was conducted by the PAO from February 5, 1990, to March 24, 1990. The purpose of these community interviews was to identify attitudes and concerns in regard to the environmental studies at Camp Lejeune. Appendix E presents a list of persons interviewed and their specific concerns regarding Camp Lejeune.

Forty-one interviews were conducted and the following general comments were expressed by the majority of interviewees. As expected there is almost unanimous concern about the potential for contamination of the New River, particularly from the Air Station mercury site and Rifle Range chemical dump. This includes possible effects of contaminants on fish tissue as well as water and sediment. There is general concern that the Marine Corps identify the extent of interest about the proximity of the Rifle Range site relative to the new elementary school planned to open in the Fall 1990, on Route 210 across from the Rifle Range.

Concern was expressed about saltwater intrusion and potential for crossover contamination from base sites into the Castle Hains aquifer, with additional concerns over potential of base aquifer contamination impact on city drinking supplies. There was significant concern about what Camp Lejeune plans on doing with the waste material that is recovered from base sites during the Installation Restoration Process. Many interviewees stated the importance of reassuring the community that the problem is not just being transferred to another location.

The overall feeling in terms of public information about the issue of the cleanup is that the Jacksonville Daily News is the most effective means of updating the majority of civilians and military. Many interviewees, however, openly questioned that paper's objectivity. Generally, there was surprise that the base was taking the bold community interview approach. The base of credibility Camp Lejeune enjoys, coupled with the general belief that the base is taking a more active approach at environmental remediation than is the City of Jacksonville or Onslow County, resulted in an overwhelmingly positive reception by interviewees.

3.0 COMMUNITY RELATIONS PROGRAM

A CRP is an ongoing process of keeping the community aware, informed, and involved in base operations. In order to do this, the Marine Corps is developing a program with input gathered from elected officials, local businessmen, environmental groups, and citizens. As events occur, information will be distributed by the base to keep citizens informed. The Department of the Navy and Headquarters Marine Corps, along with input from key officials and community members, have developed a comprehensive, pro-active CRP to address issues of community concern regarding the ongoing Installation Restoration Process at Camp Lejeune. The intent of the CRP is to promote a program which will provide factual and timely information to the local community and regulatory officials on each critical stage of the cleanup program being conducted at Camp Lejeune, focusing information on the 26 priority sites of cleanup. Through community interviews, and public information programs, the community will have an opportunity to provide feedback to Camp Lejeune officials on areas of concern regarding site actions.

In particular, the CRP will enlist the support and cooperation of city and local officials of Jacksonville and Onslow County. These individuals have a longstanding familiarity with the area, and its residents, and hold visable positions of responsibility within the community. The individuals will be considered a key resource in efforts to communicate openly and effectively.

The Camp Lejeune CRP has been prepared in response to a high level of interest from the local community. The plan will educate, without alarming, residents so they better understand the Installation Restoration Process.

3.1 GOALS AND OBJECTIVES

The goal of the Installation Restoration Process CRP is to open a two-way channel of effective communication between the people of Onslow County, the State of North Carolina, the various federal, state, and local agencies, and Camp Lejeune. Through community interviews, public forums, and information libraries the public has the opportunity to voice its concerns about site actions at various critical points in the cleanup process. This CRP has been designed to fulfill requirements of the following references:

1. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (Public Law 96-510), as amended, including Section 117 of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499, October 17, 1986).
2. EPA guidance and publications including Public Involvement in the Superfund Program (WH/FS-86-004) and CERCLA Compliance with other environmental statutes [Federal Register 50(20):5928-5932].
3. The publication Community Relations in Superfund: A Handbook [Office of Solid Waste and Emergency Response (OSWER) Directive Number 9230.0-3A, March 1986].
4. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (under revision).

Objectives for the Camp Lejeune CRP are:

1. Ensure that the public understands that personal and community health, and interests, are of paramount concern to Camp Lejeune;
2. Keep local residents, Camp Lejeune military personnel, civilian employees, and federal, state, county, and local officials informed in a timely manner of activities, findings and actions related to the RI/FS phase of the Installation Restoration Program;
3. Provide local community residents; installation military personnel, residents, and civilian workers; and federal, state and local regulatory officials an opportunity to review and comment on studies being conducted at Camp Lejeune and on any recommended additional studies, remedial action alternatives, and decisions;
4. Keep the Marine Corps informed about, and sensitive to, changes in community concerns, attitudes, information needs, and activities regarding Camp Lejeune. The Marine Corps will use these community concerns as factors in evaluating modifications to the CRP, as necessary;
5. Effectively serve the installation's and neighboring communities' information needs and address citizen inquiries through prompt release of factual information through the media and other information dissemination techniques;

6. Effectively respond to the needs of the media by providing timely responses to inquiries and requests for interviews and briefings, thereby resulting in fair and accurate reporting of the findings and recommendations resulting from the Camp Lejeune RI/FS studies;
7. Create and maintain, through an active public affairs program, a climate of understanding and trust aimed at providing information and opportunities for comments and discussion;
8. Ensure that appropriate federal, state, county, and local elected officials and agencies are informed of results of the investigations and any recommended additional studies or remedial actions;
9. Provide a single entity for dissemination of information for matters regarding the progress of the RI/FS and other environmental issues at Camp Lejeune; and
10. Identify issues and potential areas of concern leading to the development and implementation of objective means to avoid or resolve conflict.

3.2 RESPONSIBILITIES

The Commanding General, Marine Corps Base Camp Lejeune, has implementation responsibility for the community relations plan. Camp Lejeune and the Marine Corps are fully committed to a remedial program for all contaminated sites and remediation of past disposal practices which may be a threat to human health and the environment.

Additional responsiblities for implementing a successful and effective CRP are shared by several other Camp Lejeune military and civilian personnel, staff members of Naval organizations, state and federal regulatory agencies, and technical personnel contracted by Camp Lejeune and NFEC to conduct environmental studies of the site. The following responsibilities have been established for implementation of the Camp Lejeune CRP:

1. Commander, Camp Lejeune North Carolina
   a. Implements the CRP; and
   b. Holds/participates in any public meetings regarding site activities.

2. Camp Lejeune PAO
   a. Plans, schedules and coordinates all activities and necessary requirements for implementing the CRP. Activities may include specific communication techniques for regulatory agencies, local community and media, and military personnel, resident and civilian work force as listed in the following sections;
   b. Informs and coordinates with NFEC as appropriate, the development and distribution of news releases and fact sheets relating to the site investigation;
   c. Provides an on-the-scene spokesperson for the Camp Lejeune site investigation program and responds to media queries using statements or plans prepared in conjunction with NFEC;
   d. Informs the state and all appropriate federal agencies of activities and findings relative to the site, in a timely manner;
   e. Ensures that Freedom of Information Act requests are properly coordinated;
   f. Remains sensitive to the needs and concerns of the local community regarding the site, and implements activities of the CRP as appropriate; and
   g. Updates the CRP as new developments and/or changes occur at the site.
3. NFEC
   a. Provides general public affairs guidance and support for the implementation of the Camp Lejeune CRP;
   b. Reviews press releases and fact sheets prepared by the Camp Lejeune PAO;
   c. Provides timely and accurate information to Camp Lejeune regarding the site investigation activities and technical data/results; and
   d. Refers to appropriate technical and legal personnel for clearance and/or coordination of all material intended for public release that has not been previously cleared or specifically authorized for release in the Camp Lejeune CRP.

4. EPA
   a. Acts as a spokesman on policy or queries concerning programs with EPA's area of responsibility;
   b. Participates in and provides input to public relations programs and monitors community relations activities;
   c. Provides a spokesman to respond to appropriate queries from briefings for local officials, interested community groups, citizens and the media; and
   d. Responds to press queries as required and notifies other involved agencies of responses and potential concerns.
5. NCDEHNR
   a. Acts as a spokesman on policy or queries concerning programs within NCDEHNR's area of responsibility;
   b. Participates in and provides input to public relations programs and monitors community relations activities;
   c. Provides a spokesman to respond to appropriate queries to briefings for local officials, interested community groups, citizens and media; and
   d. Responds to press queries as required and notifies other involved agencies of responses and potential concerns.

3.3 COMMUNICATION ACTIVITIES AND TECHNIQUES

The primary elements of success in a public involvement program are to develop an information network for relevant communication and a constructive mechanism for public participation in the program. To develop, maintain, and enhance public involvement, this Camp Lejeune CRP presents an active approach for identifying and addressing public concerns about environmental issues at Camp Lejeune, with emphasis directed to the current studies and actions relating to the Installation Restoration Process.

Essential to building and maintaining public trust is an online communication system by which relevant and accurate information is made available to local citizens, installation staff and residents, state and federal regulators, and the media in a timely and responsible manner. The

following sections present methods and techniques for implementing such a system.

3.3.1 AGENCY COMMUNICATION TECHNIQUES

Effective interagency communication is essential for a coordinated campaign in addressing community concerns. The Camp Lejeune CRP is designed to provide effective communication and information exchange among the Marines; EPA; NCDEHNR; Onslow County; communities near the installation; the general public; the media; and Camp Lejeune military personnel, civilian employees, and residents.

In the past Camp Lejeune and NFEC have met to review and evaluate previous and ongoing assessment studies, identify additional study needs, and develop program schedules. In addition, information packages have been jointly produced to be provided to appropriate Marine, federal, state, county, and community agencies. Continued meetings and close coordination between Camp Lejeune will provide the foundation for this CRP. Techniques to be included are:

1. Project Status Meetings--It is suggested that these meetings will be held quarterly, and more frequently if necessary, and will include representatives of Camp Lejeune, NFEC, NCDEHNR, Defense Reutilization-Marketing Service, EPA, Onslow County, and, if needed, representatives of other military agencies. These personnel will meet to review overall project status, concerns, accomplishments, upcoming activities, and schedules. During the course of the Installation Restoration Process at Camp Lejeune, project managers from any of the Marine's contractors may be involved in the project status meetings.
2. Specific Milestone Meetings--These meetings will be held with Camp Lejeune, NFEC, state and Onslow county regulators, and other Marine agencies, when appropriate, to review specific site study results and to identify and resolve areas of concern.
3. Telephone Conference Calls--Conference calls will be held as needed to keep appropriate agencies informed of project activities.
4. News and Fact Sheet Releases--Prior to release to public media, copies of all news releases, fact sheets, or other pertinent information related to the Camp Lejeune Installation Restoration Process will be provided to NFEC, EPA, NCDEHNR, and appropriate local regulators. Providing this information

will enable the agencies to adequately respond to media or public inquiries.

5. Prior Notice of Scheduled Community Meetings--When community meetings are scheduled as part of the Installation Restoration Process, advance notice will be provided to all agencies to allow maximum agency and public participation in the meetings. The public meetings will be announced in the local newspapers.

3.3.2 LOCAL COMMUNITY AND MEDIA COMMUNICATION TECHNIQUES

Due to the complexity of operations, and public interest in installation activities, Camp Lejeune has a Public Affairs Staff responsible for maintaining communication with regional, state, and national media. The Joint PAO is located in the central area of Camp Lejeune in Building 67. The staff includes the Public Affairs Officer, who directs diverse public affairs and communication activities. It is the resources of the Camp Lejeune PAO that will provide the foundation for implementing the Camp Lejeune CRP. To expand communication and ensure effective two-way interaction between the Marine Corps and local communities, the following public involvement techniques are recommended.

1. Community Information Line--The information line will provide area citizens a direct and personal means to receive information or express concerns relating specifically to the Camp Lejeune Installation Restoration Program. The suggested telephone number to be used is (919) 451-5100, a direct line to the PAO staff. All responses to telephone inquiries will be coordinated by the Chief of the PAO. When necessary, technical responses will be reviewed by, or jointly prepared with, the Commanding General, Camp Lejeune and appropriate technical personnel.
2. Information Respositories--Information respositories will be established at the Onslow County Library, Richland Public Library, and the Swansboro Public Library. Documents to be placed in the library for public review include news releases, the CRP, copies of the Installation Restoration Process, and project fact sheets. Locations of these repositories are identified in Appendix G. The Camp Lejeune PAO will issue a news release to regional media announcing the availability of documents for review when documents are placed in the repositories.
3. Fact Sheets/News Releases--Fact sheets and news releases will be distributed to information repositories, citizen groups, regulatory officials, elected and civic officials, local and

regional media, and those individuals on the mailing list whenever events warrant. A fact sheet relating to the Installation Restoration Process will describe the remedial actions considered and offer the Marine's preferred alternative for public comment. An updated fact sheet will be prepared after a remedial alternative is selected. Fact sheets and news releases will address the concerns expressed by local communities and will include status of studies and remedial actions, updates on schedules, and special interest items.

4. Special Briefings for Local Elected Officials--Local elected officials act as representatives of the community in participating in briefings on environmental issues relating to past and present Camp Lejeune operations and remedial activities. Therefore, it is recommended that briefings be established as ongoing events, held quarterly, to further establish and maintain this network of communication. Such meetings will provide an open forum for elected leaders to discuss topics of concern and to be briefed by appropriate Camp Lejeune environmental staff on updates of the Installation Restoration Process findings and remedial actions. The briefings and, if appropriate, site tours of Installation Restoration Process activity areas would provide an information pool for elected and community leaders to use when citizens seek information relating to Camp Lejeune. The briefings would be prepared by the PAO with technical and logistical support provided by the Engineering Division as needed.

5. Onsite Tours--Tours will be held, if approved by the site Health and Safety Officer, on an as-needed basis with local citizens, city and state officials, congressional representatives, and the media. The tours will be coordinated by the PAO.

6. Programs for Civic Groups--Slide and informational programs may be presented to regional civic groups (Appendix J) upon request. The mission, history, and economic significance of Camp Lejeune should be reviewed with emphasis on the specific Installation Restoration Process environmental studies. Appropriate speakers to discuss the objectives, studies, findings, and actions of Installation Restoration Process activities will be identified by the Camp Lejeune PAO with assistance from the Engineering Office. A news release will be distributed to regional media announcing the availability

of speakers to make presentations to civic groups. All speaking engagements will be coordinated by the Camp Lejeune PAO.

7. Community Meetings--To provide an open forum for the presentations of findings, conclusions, recommendations, and actions relating to the Installation Restoration Process, and to allow community response and interaction with the Marine Corps, public meetings may be held. Locations suitable for such meetings are identified in Appendix H. Installation Restoration Process related public meetings will be coordinated by the Camp Lejeune PAO working in conjunction with the Directorate of Engineering.

8. Citizens Advisory Committee--The PAO may form a Citizens Advisory Committee to assist Camp Lejeune in identifying and resolving community environmental affairs on an ongoing basis. The committee should be comprised of a senior non-commissioned officer (NCO); a citizen appointed by each of the mayors of Swansboro, Richland, Jacksonville, Sneads Ferry, Verona, Piney Green, Hubert and Dixon; a representative of the PAO; a representative of the Commanding General's staff selected by the Commanding General; and appropriate environmental staff. The committee will meet quarterly, or more frequently if needed, to discuss issues relating to Camp Lejeune, and the Installation Restoration Program, and to determine appropriate means to respond to community concerns. The PAO will provide a briefing or written report to the Commanding General within one week after each meeting to provide the Commander an update on public concerns identified at each meeting.

9. High School Principals/Editors Day--Participants in community surveys identified the public schools as an effective means of disseminating information to the public. It is, therefore, suggested that the PAO conduct an annual tour and briefing for regional public school principals and the editors of school newspapers. The briefing/tour should include a formal welcome from a representative of the Commanding General's Office; a briefing on the base's history, mission, and economic significance; an overview of the role and activities of the Environmental Engineering Office and the environmental issues that relate to Camp Lejeune. This yearly event would provide the student editors an opportunity to evaluate and report on the Marine Corp's mission and environmental programs. In addition, the activity would allow a special component of community leadership and local educational leaders an

opportunity to become informed and knowledgeable of the manner in which the Marine Corps identifies and solves its environmental problems. The addresses of regional schools is provided in Appendix K.

10. Other Meetings and Publications--There are a variety of association meetings in the local area that would provide a forum to establish and maintain a communication network between Camp Lejeune, state and Onslow County representatives, and community members. Further available opportunities to facilitate relations within the community would include information on public meetings and press releases.

3.3.3 CAMP LEJEUNE PERSONNEL, RESIDENTS, AND CIVILIAN WORK FORCE COMMUNICATION TECHNIQUES

Because of the proximity of the study sites to housing and work areas, emphasis is placed on the necessity of developing or expanding communication techniques that reach the installation community. This CRP will utilize and expand existing modes of communication to ensure residents and workers remain knowledgeable of activities relating to the Camp Lejeune Installation Restoration Program.

To ensure effective communication between the Marines and the installation population, the following techniques will be used.

1. Commander's Weekly Staff Meeting-- The Director of Engineering will provide brief overviews of the environmental study activities, conclusions, recommendations, and corrective actions to the Camp Lejeune Commander, preferably presented at weekly staff meetings. This practice will ensure that unit leaders remain aware of significant study milestones and can disseminate current information through the chain-of-command.
2. Camp Lejeune Information Repositories--All Installation Restoration Program-related documents, reports, news releases, fact sheets, and general information will be available for military and civilian staff review at the MCB Camp Lejeune Installation Restoration Office and the Onslow County Health Department.
3. The Globe--The Globe is published weekly and distributed at no cost to housing areas and command buildings at Camp Lejeune. Since The Globe is produced by the Camp Lejeune PAO, articles relating to environmental issues, including the Installation Restoration Program, have been published in the past. It is suggested that as the Installation Restoration

Program activities intensify, environmental surveys or questionnaires may be inserted into the paper to identify special concerns of workers and residents. Surveys concerning the Installation Restoration Program activities and any suggested remedial actions would be returned to the Engineering Office for evaluation, and articles addressing subjects of concern or interest will then be published in The Globe.

4. Press Releases--To provide the Camp Lejeune community with easily accessible direct lines of communication and information, press releases will be issued to the local media on environmental studies, activities, findings, conclusions, and recommendations. These press releases will be released by the Camp Lejeune PAO as needed.

5. Community Information Line--To provide a direct means to seek information or express concerns relating to the Installation Restoration Program activities, the information line established for area citizens also will be available to the on-post population. Notice of the availability of the community information line should be included in The Globe or printed in a small information box in each issue of the paper.

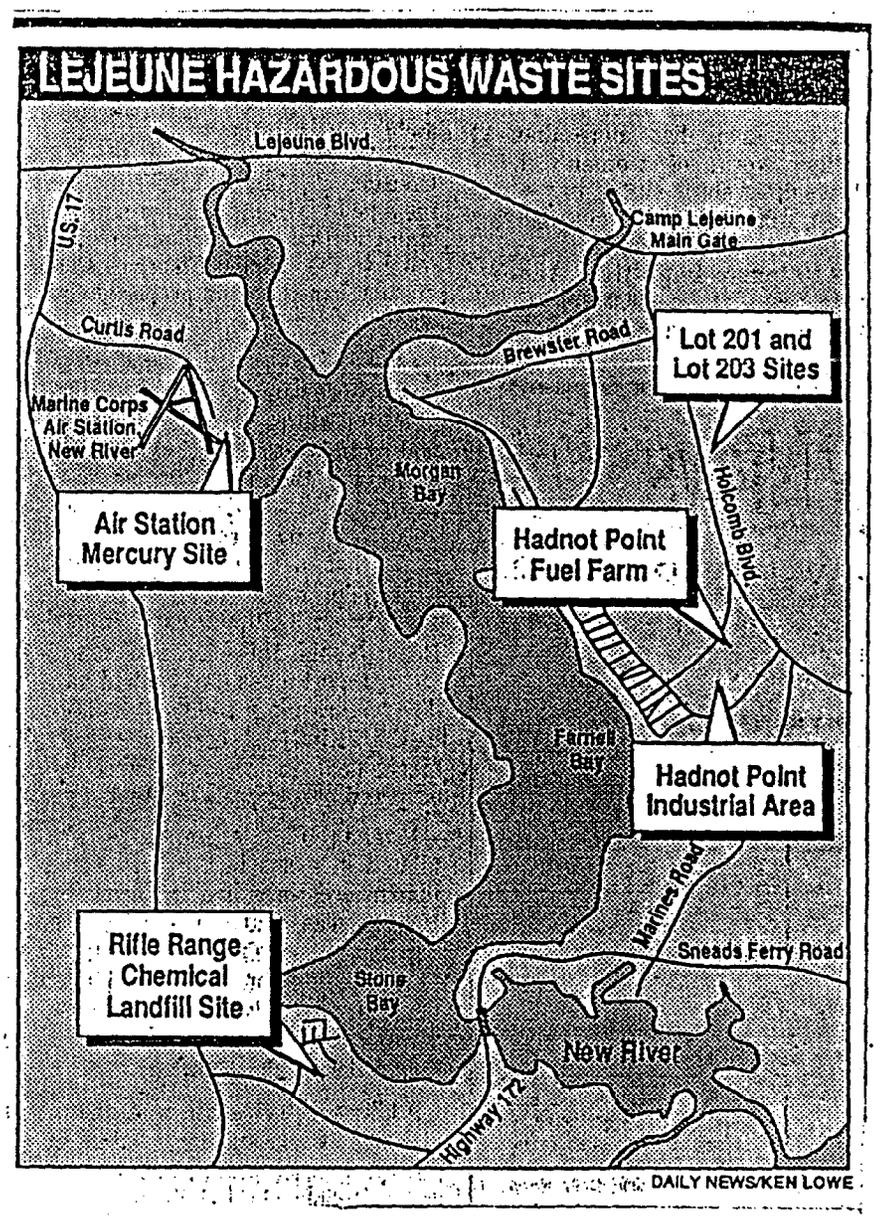
6. Community Meetings--To provide Camp Lejeune staff, workers, and area residents access to an open forum for the presentation of findings, conclusions, recommendations, and remedial actions resulting from the Installation Restoration Program studies, community meetings may be conducted at local area schools. The meetings will be arranged and coordinated by the Camp Lejeune PAO.

Doc. No.: CLEJ-00504-9.05-9/01/

APPENDIX A

SITE MAPS

Doc. No.: CLEJ-00504-9.05-9/01/0



PUBLICATION Jacksonville Daily News PAGE 1A(cont.) DATE 4 Feb. 90

CITY, STATE Jacksonville N.C.

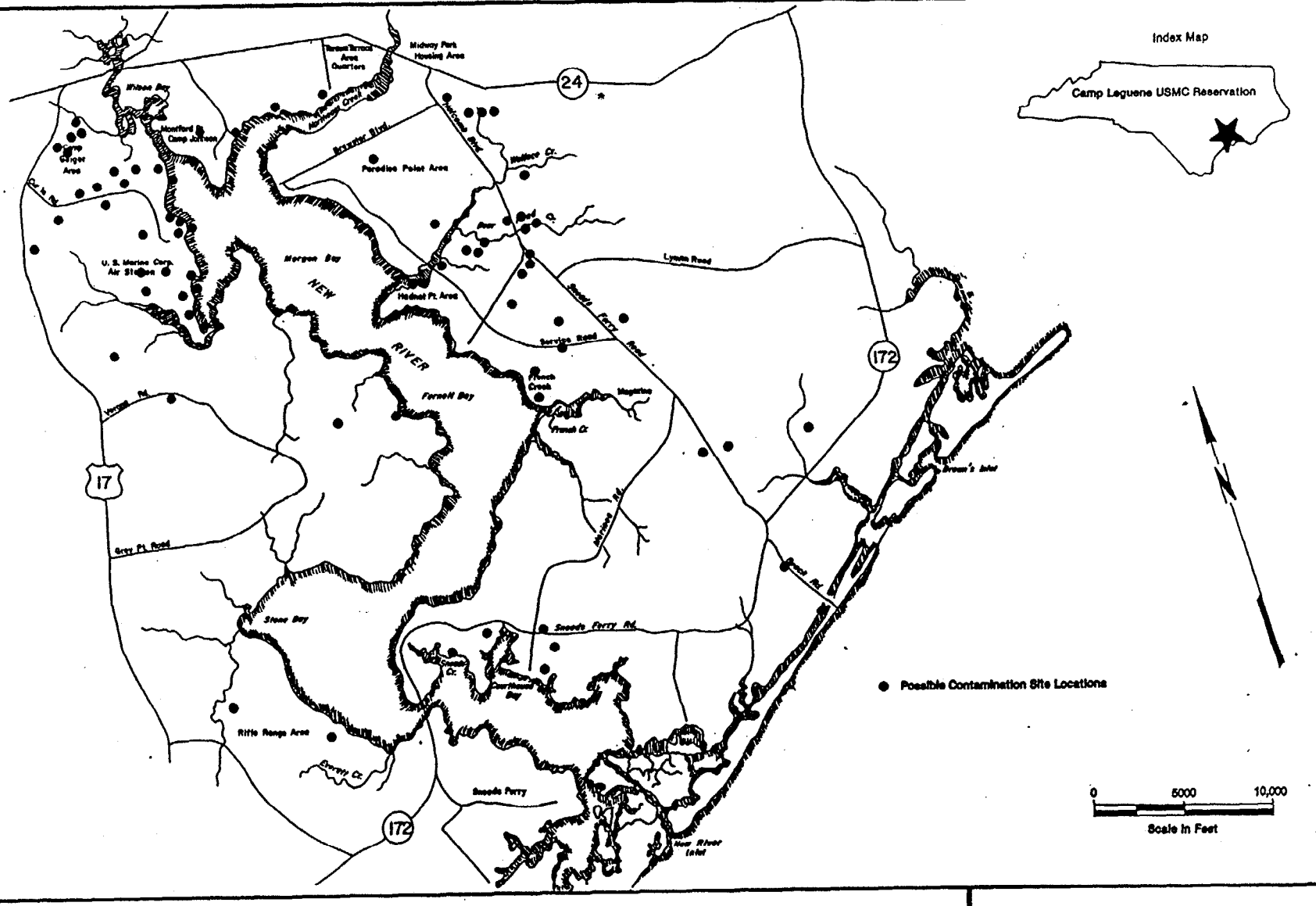


Figure 2

SITE LOCATIONS AT MCB CAMP LEGUENE

SOURCE: ESE, 1990

Prepared For:
UNITED STATES MARINE CORPS
AT CAMP LEGUENE

Doc. No.: CLEJ-00584-9.05-9/1

Doc. No. : CLET-0050A-9.05-9/01/90

APPENDIX B

HISTORICAL NEWS CLIPPING FILE

Doc. No.: CLEJ-00504-9.05-9/01/90

Marines: Troops not in waste site

The battalion surgeon determined the Marine was dehydrated and suffering from an upper respiratory infection unrelated to any chemical contamination.

By Jack Murphy
Star-News Correspondent

JACKSONVILLE — A Marine who became ill during a training exercise last month was suffering from a respiratory infection and had not been in a hazardous waste site at Camp Lejeune, base officials said this weekend after a barrage of inquiries.

Capt. Scott Campbell, a base spokesman, said word that a Marine had gotten sick apparently contributed to the concern of family members and contributed to rumors that a platoon of Marines had entered the hazardous waste site on the base.

He said the mother of one of the Marines, who lives in the Chicago area, called a radio station there, which led to some news media inquiries.

Base officials said that about 37 Marines from a platoon in "K" Company, 3rd Battalion, 8th Marines were involved in a training exercise on the night of April 26 until about 5 a.m. April 27, maneuvering through an area at Lejeune's Stone Bay Rifle Range.

The platoon commander moved his troops west toward a creek to avoid a hazardous waste site east of the platoon's position.

Campbell said the platoon followed the creek for about 200 meters, at times wading waist and chest deep, until it could no longer proceed. The platoon retraced its steps to the point it entered the creek and turned northwest to a road, where the Marines were picked up by their unit.

"At the pickup point one Marine complained of fever, headache and general malaise. He was brought in from the field and examined by the battalion surgeon who determined he was dehydrated and suffering from an upper respiratory infection unrelated to any chemical contamination," Campbell said.

Campbell said the platoon never came closer to the site than 700 meters. However, to ease any fears within the unit, all have been examined by naval doctors.

He said results of the complete physicals were all normal and that follow-up blood tests would be taken in 30 days.

PUBLICATION THE MORNING STAR DATE 900515 PAGE 3C

CITY, STATE WILMINGTON, NC

Doc. No.: CLET-00504-9.05-9/01/90

Marines say trek avoided chemical site

Exams failed to show signs of contamination

STAFF REPORT

A Marine Corps spokesman said Friday that 37 troops performing a night training exercise aboard Camp Lejeune on April 27 were not exposed to dangerous chemical pollutants and that physical exams have failed to show any signs of contamination.

According to Maj. Stuart Wagner, director of Joint Public Affairs, members of Kilo Company, 3rd Battalion, 8th Marines came no closer than 700 meters to a site suspected of containing hazardous materials.

One Marine complained of having fever like symptoms, headache and general malaise after the exercise. Following examination by the battalion surgeon, the Marine was diagnosed as suffering from dehydration and an upper respiratory ailment not related to exposure to hazardous chemicals, Wagner said.

"Because all the Marines in the platoon were fully aware of the chemical site, and one of the Marines was subsequently ill, many in the platoon erroneously assumed they had walked through the site," Wagner said.

"Because of an increased anxiety by the Marines in

■ TREK/ FROM 1A

the platoon, all the Marines have since been examined by Naval doctors," he added.

The physicals revealed no signs of chemical exposure, and subsequent treatment would depend on the results of blood tests, which will be available soon, according to the spokesman. Blood samples will also be retaken in thirty days, he said.

Two dump sites at local military bases are suspected of being environmental "hot spots," according to Stephany Del Rey, an environmental specialist hired by the Marine Corps to help clean up hazardous waste sites.

One site is a chemical landfill at a rifle range near Sneads Ferry on Camp Lejeune. According to a 1983 study, records on the site have been lost, but PCBs, pesticides and metals were disposed there from the mid-1950s to about 1976.

Publication The Daily News Page 1A Date May 12, 1990

City Jacksonville, N.C.

Doc. No.: CLET-00504-9.05-9/01/90

CAMP LEJEUNE

Funds received for fuel cleanup

As the result of a fuel oil spill discovered at Camp Geiger on April 18, the Installation Restoration Program will receive $100,000 to conduct a full site assessment to determine remedial actions necessary.

The money will come from emergency Defense Environmental Restoration Account funds of the Department of the Navy.

Field work will begin in about three weeks, according to a release from the Camp Lejeune Joint Public Affairs Office. Monitoring wells will be installed to determine the presence or absence of "selected contaminants in the ground water in the vicinity of suspected old underground diesel tanks at Geiger," according to the release.

In addition to the wells, ground water samples, soil, sediment and surface water samples will be analyzed, according to the release.

A risk assessment and feasibility study will also be prepared to determine the need, if any, for additional cleanup.

PUBLICATION DAILY NEWS PAGE 1-C DATE 29 APR 90

CITY, STATE Jacksonville, NC

Doc. No.: CLEJ-00504-9.05- 9/01/9

Fuel fouls Geiger ditch

JACKSONVILLE — Camp Lejeune planned cleanup operations Thursday at Camp Geiger, where an undetermined amount of fuel was discovered Wednesday in a ditch, a base spokesman said.

Staff Sgt. Rick Lynch said the source of the fuel had not been identified. He said that an initial investigation by the N.C. Division of Environmental Management indicated the fuel could have been dumped and probably is not from the Geiger fuel farm.

He said that an absorbent mat had been placed in the ditch as a precautionary measure and that the incident is being investigated by Lejeune's Environmental Management Division.

NEWSPAPER: The Morning Star DATE: 900420 PAGE: 2C

CITY, STATE: Wilmington, NC

Doc. No.: CLEJ-00504-9.05 - 9/01/90

CAMP LEJEUNE

Fuel spill cleanup begins

An effort to clean up a fuel spill was begun this morning at Camp Geiger, according to the base Joint Public Affairs Office.

On Wednesday, an undetermined amount of old fuel was discovered in a ditch. The source of the fuel has not yet been identified.

An initial investigation by the state Environmental Management Division's Wilmington office indicated the fuel could have been dumped and is probably not from the Camp Geiger fuel farm.

An absorbant boom was placed in the ditch as a precautionary measure prior to todays' excavation and clean up. The incident is under investigation by Camp Lejeune's Environmental Management Division.

NEWSPAPER: The Daily News DATE: 900419 PAGE: 1B

CITY, STATE: Jacksonville, NC

Doc. No.: CLEJ-00504-9.05 9/01/90

Base is seeking waste comments

Hazardous material sites involved

BY RICHARD F. SMITH
DAILY NEWS STAFF

Camp Lejeune officials are seeking input from area residents on and off-base for a Community Relations Plan that will address public concern about hazardous waste sites on base.

A total of 48 interviews will be conducted with "a spectrum of individuals — city and county officials, local business people, civic group representatives and environmental groups," said Maj. Stuart Wagner, director of Lejeune's Joint Public Affairs Office.

Wagner said interviews will begin Monday and conclude by the end of the month.

"We want an across-the-board sample of community leaders and those people interested in the process" of cleaning up the sites, Wagner said.

"We'll take the feedback and concerns of the people we've talked to and put those into the Community Relations Plan. It's our way of going out into the community to talk about the problem and how we'll clean it up," the major said.

"We've caused the problem and we're going to clean it up. The community should be able to voice their concerns," Wagner said.

The sites pose no danger to base residents or the water table, he said.

The base has set up an environmental hotline at 451-5100.

Interviews will be conducted by Wagner or 1st Lt. Ken White, also of Joint Public Affairs.

A technical representative from Lejeune's Environmental Management Department will also attend the interviews.

Lejeune was added to the National Priorities List for clean up of hazardous waste on Oct. 4, 1989. That action was taken by the U.S. Environmental Protection Agency.

The listing has made the base eligible for federal funding for

SEE WASTE/2A

PUBLICATION Jacksonville Daily News PAGE 1A DATE 4 Feb. 90

CITY, STATE Jacksonville N.C.

Doc. No.: CLEJ-00504-9.05-9/01/90

WASTE/ FROM 1A

remediation of past hazardous waste sites identified since 1982 under the Navy's Installation Restoration Program.

The Community Relations Plan is part of the IRP.

Extensive environmental studies at Lejeune and New River air station have located 26 sites that require further study because of past hazardous waste disposal practices.

Of these, five sites have been identified for immediate study due to the potential threat they pose to health and the environment.

They include two past landfills, a fuel-storage facility, a past waste storage lot and the groundwater tables beneath a section of the base's industrial area.

The five priority sites are:

□Mercury contamination in an area of New River air station. There is also possible groundwater pollution at that site.

□A chemical landfill at Lejeune's Rifle Range. The former disposal area is contaminated with organics, metals, pesticides, polychlorinated biphenyls and tetrachloroethelyene.

□Lots 201 and 203 off Holcomb Boulevard at Lejeune. Buried barrels containing traces of DDT were uncovered in 1988. Localized soil contamination was also found.

□Fuel leakage at Hadnot Point Fuel Farm that has polluted the soil and ground water.

□Organic contamination by tetrachloroethelyene in the soil and ground water in the Hadnot Point Industrial Area.

Preliminary site investigations have been completed on these five sections and in-depth site studies and development of cleanup solutions will begin before the end of the year, according to a statement released by Wagner.

Testing performed to date shows that none of this contamination represents an immediate threat to public health or the environment.

Although much testing and study remains to be done, Lejeune and the Marine Corps are fully committed to a cleanup program for these sites and correction of past disposal practices which may be a threat to health and the environment, as required by law, according to the statement.

PUBLICATION Daily News PAGE 1A(cont) DATE 4 Feb.90

CITY, STATE Jacksonville N.C.

Doc. No.: CLEJ-00504-9.05-9/01/9

Measures taken to prevent future water contamination

EDITOR'S NOTE: This is the final part in a series about the drinking water in the Camp Lejeune/MCAS New River system, and focuses on the base's future plans and concerns.

By Cpl. Dave Mundy

As base officials embark on a cleanup of old waste sites that have threatened the water supply, the institution of programs to effectively manage hazardous wastes is slated to prevent future contamination of ground water in the Camp Lejeune/MCAS New River area.

"Most of the problems we are dealing with stem from years ago, when solvents and fuels were used all over the place and routinely dumped," said B. W. Elston, assistant chief of staff, facilities, MCB. "Over the years, it built up. But now we have a very intensive hazardous waste/hazardous material program."

Regular inspections of all sites where hazardous materials and wastes are used or stored is at the heart of the base's management program.

"We inspect units and work sites on a regular basis," Elston said. "Fleet Marine Force, Atlantic and Headquarters, Marine Corps also inspect, plus we are inspected by the state and the federal Environmental Protection Agency. Very few municipalities, I'd say, are inspected as often or as thoroughly as our public works are. Violations are reported promptly and corrected immediately."

The inspections, rules and regulations regarding the handling and storage of hazardous materials all make for a lot of paperwork.

"It is time-consuming and, technologically and logistically, very difficult," Elston admitted. "It's frustrating to everyone involved, because those units have another mission: training their Marines for combat. But it's necessary to ensure that the environment is maintained and public health is protected."

The management goes beyond mere inspections. The base recently sponsored a week-long training program for Marines involved with the handling and storage of hazardous materials and wastes, and included briefings about state and federal regulations and procedures. One session of the course was set aside for unit commanders as well.

"It's important for unit commanders to be aware of their responsibilities," Elston noted. "They can be held personally responsible for the hazardous waste disposal practices of their units."

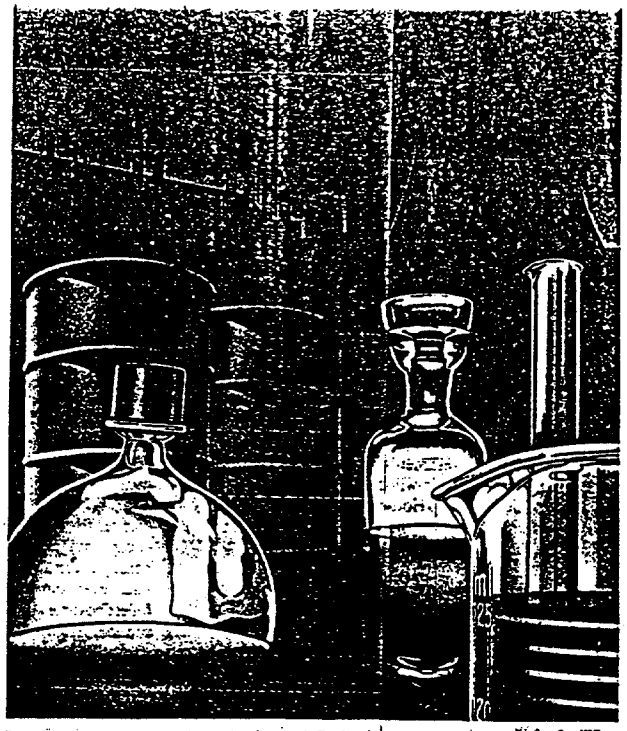
Even as the base stands guard against future contamination, the cleanup of old hazardous waste sites will soon begin.

The base will soon have a Federal Facilities Agreement to outline the coordination between the base, state and federal agencies in the cleanup effort, which is Phase III of the Installation Restoration Program.

Camp Lejeune is awaiting the release of the EPA's National Priorities Listing, which is that agency's ranking of the nation's most threatening hazardous waste sites. A listing on the NPL will qualify the base for Federal funds in the cleanup efforts.

Part of the cleanup process is already underway. In the Hadnot Point Industrial Area, for example, monitoring of wells known to be contaminated is continuing, as well as testing of soil gases and air monitoring in underground workspaces.

In addition to cleaning up the sites where contaminants are known to have



trying to get a step ahead.

"The U. S. Geological Survey is doing a study right now, mapping how contamination might move through the groundwater in our soil," Elston said. "If we know the nature, type and consistency of the soil and how the groundwater moves within it, we can predict where contaminants might move and then take preventive action."

But, whatever the cleanup method used, the process will be lengthy and costly.

"Initially, we hope to have funding from DERA," Elston said. "Thereafter, we'll be using our own funds. I don't know how long it will take, but it will be very, very expensive."

"We always take measures to go at least a step beyond what is required by law and to ensure that we do not provide water that is unsafe for those using it. The commanding general will not accept anything less."

B. W. Elston

eliminate mistakes of the past, it remains the concern of Marines aboard Camp Lejeune and MCAS New River to avoid future mishaps.

"The best way to avoid future contamination is to have good housekeeping in maintenance areas," said Elizabeth Betz, base chemist. "If some one is sloppy, it will get into the system.

"We always take measures to go at least a step beyond what is required by law and to ensure that we don't provide water that is unsafe for those using it," Elston said. "The commanding general will not accept anything less."

NOW OPEN

ptember 14, 1989

Doc. No.: CLEJ-00504-9.05-9/01/90

IN ITS PLACE— The Hazardous Waste Compound at 8th Comm. Bn. Motor Transport Shop is as it should be. All of the waste and materials are properly stored and labeled.

Cam Lejeune cleans up(s act

Story and photo by
Cpl. C. M. Abercrombie

Camp Lejeune is like any other military base in the United States.

"Camp Lejeune is basically a big city. We use a large quantity of hazardous materials; therefore, we produce a substantial amount of hazardous waste," said Sammy Gwynn, Environmental Control Specialist for Camp Lejeune. The label Hazardous Materials covers a wide variety of substances, from dental resin to trichloroethane."

The Enviornmental Protection Agency conducts annual inspections of Camp Lejeune. Each year, the same discrepancies are found.

"The EPA issues a copy of their findings to this department. Using these records I can pinpoint the areas we most often get hit on," Gwynn said.

Some of the most common problems at this base are paperwork related.

"Training records, manifests and storage labels improperly filled out are the things they usually find," Gwynn said.

Each unit has a Hazardous Materials Disposal Officer, but the responsibility actually lies with the individual Marine.

"If each Marine would adhere to the guidelines we provide for them these problems would be a thing of the past," Gwynn said.

"The handlers are the key," he continued. "If the person on the job site takes the job seriously, it would prevent a lot of headaches later on."

The Marine Corps, along with the Natural Resources and Environmental Affairs Department, have developed several programs to make the hazardous materials and waste program as efficient as possible.

Last year a program was initiated to supply the Marines on the job, as well as their unit leaders, with accurate information on the proper handling and storage of hazardous materials and waste.

"I feel this is the most important step we have made." Gwynn said. "Using the training courses we can give accurate information to everyone from the Private at the ramp to his commanding officer who makes the units policies."

NREAD in coordination with the base fire department have developed a spill response system to cover any emergency.

"The Spill Response Program is crucial," Gwynn said. "Through proper training we can give the firemen at the site the information and equipment to effectively control any hazardous spill we may encounter at Camp Lejeune."

The Oil Waste Program can save the Marine Corps an enormous amount of money. This system of recycling also makes monitoring of oil waste much simpler.

"This program enables us to recycle used oil for three or four cents a gallon. If we had to buy this oil from outside sources it may cost as much as four or five dollars a gallon," Gwynn explained. "With the oil put back into the system to be recycled we know where it is, and the disposal process is eliminated."

Despite all of the progress made here during the past year or two there is still some work to do. As with any education program in the Marine Corps, personnel turnover is still a problem.

"Each unit needs to make sure the knowledge is first obtained, then ensure the information is passed on to the next man," Gwynn stated.

The source to obtain the know how has been supplied. Now it is up to the individual Marine to see the mission is completed and the information passed on to those who relieve him.

Doc. No.: CLEJ-00504-9.05- 9/01/90

Storage lot reopens briefly

CAMP LEJEUNE — The Defense Reutilization and Marketing Office's Lot 203 was reopened Wednesday and will remain open long enough for the office's workers to recover surplus property stored there, base officials said.

The storage lot, off Holcomb Boulevard near Wallace Creek, was closed in March after a number of 55-gallon drums — including one marked "DDT" — were found buried there.

Base officials said the decision to reopen the lot temporarily was based on the results of soil tests showing no shallow contamination exists that could threaten the health or safety of workers at the site.

Following the removal of the stored property, the lot will be closed again to test for subsurface and groundwater contamination.

PUBLICATION NEWS AND OBSERVER PAGE 2 C DATE 1 DEC 89

CITY, STATE RALEIGH, NC

Doc. No.: CLEJ-00504-9.05- 9/01/90

CAMP LEJEUNE

Study allows lot reopening

Findings of a site-safety report on possible health risks to workers at the Defense Reutilization and Marketing Office's Lot 203 have led Camp Lejeune officials to temporarily reopen the lot today because no apparent risk to human health was found.

The decision is based on results from a number of soil-gas tests conducted in February and this month, according to the base Joint Public Affairs Office.

Results indicated no health-threatening soil contamination exists, said Lejeune spokesmen.

Lot 203 is maintained by the DRMO as a site for surplus government property.

It was closed in March when two 55-gallon drums, one labeled DDT, were unearthed while an employee was relocating metal bunk beds.

Base personnel plan to reopen the site long enough to retrieve the surplus property stored there.

The site will again be closed so a full remedial investigation of subsurface and groundwater contamination can be conducted.

PUBLICATION DAILY NEWS PAGE 1B DATE 891129

PLACE Jacksonville, NC

Doc. No.: CLEJ-00504-9.05-9/01/90

Fuel leak clean up

Base officials are nearing completion on an engineering study report for the clean up of fuel leaks discovered at the Camp Lejeune Bulk Fuel Storage Facility at the Hadnot Point Industrial Area.

This report and subsequent clean up are part of the base's ongoing program to identify, evaluate, control and correct past deficient waster disposal sites and practices involving ground water contamination, associated with the placement of Camp Lejeune on the National Priorities List (NPL).

Monitoring well studies have determined the fuel product to be gasoline, and a preliminary report was made to North Carolina in May.

Previous studies in 1986-87, showing these fuel compounds to be detectable in the groundwater of the Hadnot Point Industrial Area, led the Commanding General to make the decision to close the fuel farm on June 12. By early 1989, the fuel farm operation should be replaced by; an interim fuel operation in the Industrial Area.

The clean up is expected to begin following final design of a fuel recovery system.

Base officials will continue to monitor all ground water wells for possible contamination. The drinking water at Camp Lejeune is continually tested with the base meeting all treatment standards required by the EPA.

Wells and disposal sites do not pose health hazards to people living or working on or near the base as long as they drink water from approved sources. People should not drink water out of streams or from unchecked wells on the base.

There is no danger of any contamination in the drinking water on or off base, and all contaminated ground water wells have been sealed.

Camp Lejeune has set up a 24-hour phone line for people with questions or comments about the sites. The number is 451-5100.

PUBLICATION The GLOBE PAGE 3A DATE 27 Oct 89

STATE CAMP LEJEUNE, NC

Doc. No.: CLEJ-00504-9.05-9/01/c

Lejeune waste sites placed on federal list

Hadnot fuel farm spill is first to be cleaned up

BY RICHARD F. SMITH
DAILY NEWS STAFF

Camp Lejeune has been placed on the federal National Priorities List for identification and cleanup of hazardous-waste sites.

The list is used by the U.S. Environmental Protection Agency to deal with old-waste sites on federal land under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, usually called the Superfund.

Installations are ranked on the list by the Harzard Ranking System, which assigns values relating to the risk of movement of contaminants through ground water, surface water and air, according to the Lejeune Joint Public Affairs Office.

Studies at Lejeune during 1982 revealed 76 separate sites for past hazardous waste management operations.

Of those, 26 sites warranted more study because they represented a potential threat to health and the environment.

A follow-up probe of these sites in 1984 resulted in the closure of eight drinking wells in the Hadnot Point Industrial Area because of verified contamination from fuel compounds.

Two wells were closed in base housing in Tarawa Terrace because of pollution from an off-base dry cleaner. Other sites are still in the preliminary stages of investigation.

Base spokesmen say there is no immediate health threat from the sites, but base officials instituted safety measures during 1988 to detect any movement of pollutants from the most severely affected sections.

For more information on the program or Lejeune's listing on the NPL, call the NPL hotline at 451-5100.

The Hadnot Point fuel farm will be the first area on base to be cleaned up under a new agreement with federal officials.

PUBLICATION Daily News DATE 23 Oct 89 PAGE 1 B

CITY, STATE Jacksonville, NC

Doc. No.: CLEJ-00504-9.05-9/01/90

Dump cleanups dragging as EPA adds Lejeune, other sites to list

STAFF AND WIRE REPORT

WASHINGTON, D.C. — The federal government is losing ground in its program to clean up the nation's most dangerous hazardous waste dumps.

In eight years, cleanup work has been completed on only about three dozen sites, and on Thursday the Environmental Protection Agency added 93 new properties in 32 states — including Camp Lejeune and four other sites in North Carolina — that need to be cleared of hazardous waste and debris.

Camp Lejeune and EPA officials recently reached agreement on a cleanup plan, with the Hadnot Point fuel farm set to be the first site addressed. The construction phase is scheduled to begin in January 1990.

The additional sites bring to 1,194 the waste dumps scheduled to be decontaminated under the Superfund program, which is aimed at dealing with the nation's most hazardous waste problems. EPA officials have said the program likely will cost tens of billions of dollars and take decades.

Other North Carolina sites added to the list are Benfield Industries, Inc., Hazelwood; Geigy Chemical Corp., Aberdeen; JFD Electronics-Channel Master, Oxford; and National Starch & Chemical Corp., Salisbury.

body topper T-SHIRTS
346-2022
HEADQUARTERS FOR
LOCAL SCHOOL DESIGNS
Western Plaza

PUBLICATION DAILY NEWS DATE 890929 PAGE 12A

CITY JACKSONVILLE, N.C.

Hadnot fuel farm is first on list of cleanup sites

Doc. No.: CLEJ 00504-9.05-9/01/90

BY RICHARD F. SMITH
DAILY NEWS STAFF

The Hadnot Point fuel farm will be the first hazardous-waste site at Camp Lejeune to be cleaned up under a new agreement with federal officials, according to a base spokeswoman.

The fuel farm was confirmed as the initial site to be cleaned up during meetings on Sept. 7 and 8 between base officials and U.S. Environmental Protection Agency personnel at EPA regional headquarters in Atlanta.

Lejeune officials attending the meeting were Lt. Col. Joe Wellington and Capt. Steve Hinkle of the Staff Judge Advocate's Office and Stephany Del Re, an environmental specialist at Lejeune.

Base personnel "will clean up the most hazardous sites first, the Had- [illegible] Point fuel farm being the most [illegible]rdous," said 1st Lt. Colleen [illegible]an of the Lejeune Joint Public Affairs Office.

The cleanup effort "is now in the design phase and will enter into the construction phase sometime in January 1990. Further studies will be conducted to define the lower aquifer in the Hadnot Point Industrial Area beginning in October 1989," said a statement from Joint Public Affairs.

"Based upon this characterization, remedial alternatives will be developed to clean up the upper and lower aquifers in the Hadnot Point Industrial Area," said the release.

"It is not technically feasible to estimate completion of the cleanup. The base will be required to treat and monitor the groundwater until EPA/state standards have been met," according to Joint Public Affairs.

Estimated cost of the clean-up will be developed in a feasibility study that will be completed in fiscal year 1990. The U.S. government will pay for the effort to remove the hazardous waste.

Gasoline leaks at the bulk fuel storage facility in Hadnot Point caused the fuel farm tanks to be closed in June 1988.

Monitoring tests confirmed existence of the problem in April 1988. Leaks from an underground tank system were confined to an area two square blocks around the fuel farm.

The spill was contained by the section's natural flat terrain and water-table conditions, according to Joint Public Affairs. The number of gallons spilled was unknown.

Studies of monitoring wells determined the leaking fuel was gasoline and a preliminary report was made in May 1988 to North Carolina environmental officials.

After the leak was discovered, fuel bladders were used instead of tanks.

The study report on the fuel leak was prepared by engineers from the Naval Facilities Engineering Command in Norfolk, Va.

PUBLICATION DAILY NEWS DATE 890916 PAGE 1C
STATE JACKSONVILLE, N.C.

Doc. No.: CLEJ-00504-9.05-9/01/90

Private group lists 22 worst groundwater pollution sites

By TOM MATHER
Staff Writer

The 22 worst sources of groundwater pollution in North Carolina were listed in a report released Tuesday by a private environmental group.

The report by the Clean Water Fund of North Carolina concludes that state and federal agencies have not done enough to clean up groundwater even though about half of the state's residents get drinking water from wells.

"I don't think groundwater has ever been high on anybody's list," said Joseph T. "Chip" Hughes Jr., a researcher with the environmental group and the author of the report. "That's why we're trying to draw attention to it.

"There is a lot of tracking of the problems and a little monitoring, but very little cleaning up."

Three sites are in Wake County: an abandoned landfill at N.C. State University, Schrader Bellows, a valve-manufacturing plant near U.S. 1 and N.C. 98 in Wake Forest, and a tract owned by Bahlsen Inc., formerly known as Austin Foods Co., in downtown Cary.

The other sites are in 17 counties, and all had pollutants at levels more than 1,000 times higher than allowed, the report said.

"We'd like to see real enforcement happen at all of these contaminated sites," Mr. Hughes said.

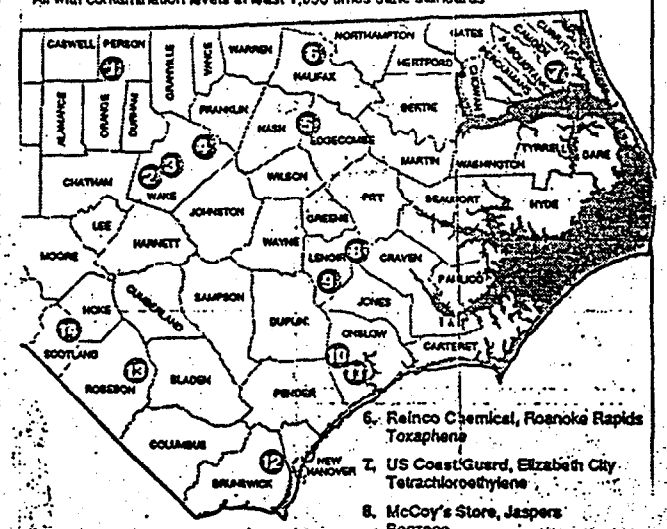
State officials, responding to the report, acknowledged that they had been slow to clean up groundwater but said they had acted quickly to prevent people from drinking contaminated water.

"The report gives the impression that a lot of people continue to drink that contaminated water, and they're not," said Debbie K. Crane, a spokesman for the state Division of Environmental Management.

When the state identifies problems, he said, it provides bottled water to affected residents. And, in some cases, nearby cities have extended water lines to areas with polluted wells.

Groundwater contamination in Eastern North Carolina

All with contamination levels at least 1,000 times state standards



1. Otha Day residence, Roxboro
   Benzene
2. Bahlsen Inc., Cary
   1,2 Dichloroethane
3. NCSU, Raleigh
   Benzene
4. Schrader Bellows, Wake Forest
   Trichloroethylene
5. Ico Unican, Rocky Mount
   Methylene Chloride
   Schlage Lock, Rocky Mount
   Trichloroethylene
6. Reinco Chemical, Roanoke Rapids
   Toxaphene
7. US Coast Guard, Elizabeth City
   Tetrachloroethylene
8. McCoy's Store, Jaspers
   Benzene
9. Borden Chemical, Kinston
   Toxaphene
10. ABC 1 Hour Cleaners, Jacksonville
    Tetrachloroethylene
11. Hadnot Point Tanks, Camp Lejeune
    Benzene
12. Potter's Pits, Maco
    Benzene
13. C. Shipman, St. Pauls
    Benzene
14. Colonial Freight, Laurinburg
    Benzene

Source: Clean Water Fund of N.C.

"Admittedly the cleanup process is slow, but people aren't drinking the water at that point," she said. "We have a lot of people that are on alternative water supplies."

The Clean Water Fund's list was drawn from the study of 84 confirmed groundwater pollution cases ranked as high priorities for government cleanup. The group's report charges the following:

- No cleanup has taken place at any of the 84 sites.
- No fines, penalties or enforcement actions were taken at 59, or 70 percent, of the sites.
- One-third of the pollution sources were hazardous waste

- Drinking water wells are within three miles of 75, or 88 percent, of the sites, and thousands of nearby residents have ingested varying levels of toxic chemicals.

Cleanup measures have been hampered by lack of money, insufficient staffing and difficulties in tracing the sources of pollution, Ms. Crane said.

"You have to find the responsible party in order to do the cleanup," Ms. Crane said. "It's usually not real clear-cut."

Nevertheless, she said, the state's enforcement of groundwater pollution laws should improve in the near future. The state recently adopted stricter ground-

Doc. No.: CLET-00504-9.05-9/01/90

Another state official said cleanups were not necessarily the best way to handle the contamination because of high costs, problems with disposing of the pollutants and other potential problems.

"If the contamination is static, and there is no evidence to suggest that it will move and cause harm to the public health or the environment, it makes sense just to leave it alone," said Stephen T. Reid, spokesman for the state Solid Waste Management Division.

Much of the pollution documented in the report came from landfills, septic tanks, leaking underground storage tanks and hazardous-waste dumps, the Clean Water Fund said.

The NCSU landfill, a 1.5-acre site between Carter-Finley stadium and Interstate 40, contains hazardous and radioactive wastes that were buried in unlined trenches between 1969 and the early 1980s. The pollutants included benzene, a cancer-causing compound found at levels that were 128,000 times the state standard of 1 part per billion.

Dr. Charles W. Welby, an NCSU professor and groundwater expert, said the university had installed more than 30 wells to monitor the landfill. The contamination has spread very little and does not threaten drinking water supplies, streams or lakes, he said.

"The hazard we have out there is really very small," said Dr. Welby, a professor of marine, earth and atmospheric sciences. "This thing is geologically isolated from anything it is likely to impact."

The U.S. Environmental Protection Agency has identified the landfill as a "Superfund" site, meaning that it qualifies for federal cleanup money.

"We aren't to a point yet where EPA has approved a cleanup plan," he said. "Don't ask me why we aren't. When we get to that point, then EPA will say, 'Go clean it up.' "

In 1983, a 70-gallon spill of trichloroethylene, a toxic element, contaminated the Schrader Pollution Site in Wake Forest, the report said. Sampling studies of groundwater there have found trichloroethylene levels as high as 34,673 parts per billion — more than 12,000 times the state standard.

Contamination at the Pollution site in Cary apparently was caused when the agricultural chemical company W.R. Grace owned the site, the report said. Groundwater testing there has found contamination from lead, xylene, dichloroethane and other pollutants — some at levels more than 3,000 times state standards.

City: Raleigh, NC
Pub: News & Observer
Date: Wednesday, 13 Sep 89
Pages: 1C & 2C

Doc. No.: CLEJ-00504-9.05-9/01/9

Base officials are negotiating waste cleanup

Meeting held with the EPA

BY RICHARD F. SMITH
DAILY NEWS STAFF

Three Camp Lejeune officials were in Atlanta last week to meet with personnel of the U.S. Environmental Protection Agency.

The base and federal workers are in the final stages of negotiating a draft Federal Facilities Agreement that will outline Lejeune's approach to cleanup of old hazardous waste sites on base, according to the Lejeune Joint Public Affairs Office.

The meetings were held at the EPA's regional headquarters.

Attending from Lejeune were Stephany Del Re, an environmental specialist with Marine Corps Base, and Lt. Col. Joe Wellington and Capt. Steve Hinkle of the base Staff Judge Advocate's office.

The FFA will specify the schedule and milestones for removal of 22 past hazardous waste sites aboard the base. The sites were identified in 1983 as part of the Navy's Installation Restoration Program.

Negotiations also involved officials from the state of North Carolina and the Navy.

The resulting document will be released for public comment when negotiations are complete and a final draft is prepared.

Public notification of the document's availability will be made by the EPA.

The EPA will accept comments from the public for a period of 45 days after the announcement of availability.

At the conclusion of the comment

PUBLICATION DAILY NEWS DATE 890911 PAGE 1B
CITY, STATE JACKSONVILLE N.C.

Doc. No.: CLEJ-00504-9.05-9/01/9

period, all parties will review and discuss all comments before finalizing the FFA.

Base administrators are continuing an effort to identify, evaluate, control and correct past deficient waste-disposal sites and practices involving groundwater pollution.

The base and ABC One Hour Cleaners in Jacksonville were among 229 sites nationwide that the EPA has proposed for cleanup of past inadequate waste-disposal areas.

The EPA's Superfund normally finances 90 percent of cleanup costs on civilian land, but federal agencies must use their own money for such efforts on U.S. property.

The cleanup at Lejeune is being funded by the Navy's Defense Environmental Restoration Account.

A chemical used in dry cleaning leaked from a tank behind ABC cleaners at 2127 Lejeune Blvd. during 1985 and contaminated three wells, including two wells at base housing in Tarawa Terrace, according to EPA and Lejeune officials. Those wells are now closed.

Lejeune personnel continue to monitor all groundwater wells for possible pollution. Drinking water at Lejeune is continually analyzed with the water meeting all treatment standards required by the EPA.

Wells and disposal sites do not pose any danger to persons living or working at or near the base as long as they drink water from approved sources. People should not drink water out of streams or from wells that are not monitored.

There is no hazard of pollution in drinking water on or off base. All contaminated groundwater wells have been sealed, according to Lejeune spokesmen.

ICATION DAILY NEWS DATE 890911 PAGE 1B

, STATE JACKSONVILLE N.C.

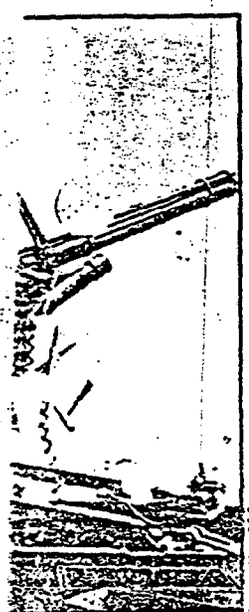
Doc. No.: CLEJ-00504-9.05-9/01/90

ready to
gether
age 7A

26th MEU (SOC)
hits Spanish shores
Pages 8A, 9A

OBE

ulation: 28,500 September 7, 1989



Lance Cpl. M.L. McLean

rtillery Regiment, 82nd Air-
participating in their annual
e fifth time in as many years
control drone missiles were
d FSSG, helped the soldiers
ines from Landing Support
and heavy equipment. "It
rofessionally and productive-
. 3rd th ADAR.

Efforts underway to ensure safe drinking water

EDITOR'S NOTE: This is the second in a three-part series about drinking water in the Camp Lejeune/New River system, and examines the base's efforts to provide safe drinking water.

By Cpl. Dave Mundy

The discovery of hazardous waste sites at Camp Lejeune during testing from 1982-84 brought about the immediate closure of eight wells from which drinking water was drawn.

Base officials are exploring ways to clean up the sites and monitoring other existing wells as they wrap up Phase II of the Installation Restoration Program, DoD's program for identifying and cleaning up past hazardous waste storage or dumping sites.

Phase II of the IRP consists of conducting feasability studies at sites located during the 1982-84 tests, determining the cleanup method and continuing testing.

See Water, Page 4A

Doc. No.: CLET-00504-9.05-9/01/90

Water—

Continued from Page 1A

"We're negotiating a Federal Facilities Agreement between the Marine Corps/Navy, the state and the EPA right now," said B.W. Elston, deputy assistant chief of staff, facilities, MCB. The agreement will coordinate how all interested parties will approach the cleanup effort. "With that agreement, we will be on-line to start Phase III, which is developing the technology and actually doing the cleanup."

Closing and moving the fuel farm in the Hadnot Point Industrial Area will be one of the base's top priorities, Elston said.

"Fuel leaks over the years at the fuel farm have resulted in a plume of fuel underneath the farm that threatens our ground water in that area," Elston said. "Closing and moving the fuel farm has been a top priority. We are already taking measures to clean the site up."

The only holdup has been in obtaining funding.

"We plan to close that fuel farm as soon as we can get an alternate or temporary fuel farm on line," Elston added. "We are awaiting urgent construction funds from HQMC to build a new facility."

The Hadnot Point Industrial Area remains the base's biggest environmental concern. Elston said if the area is ranked on the EPA's National Priorities Listing, funds will be made available through the Defense Environmental Restoration Account for the cleanup.

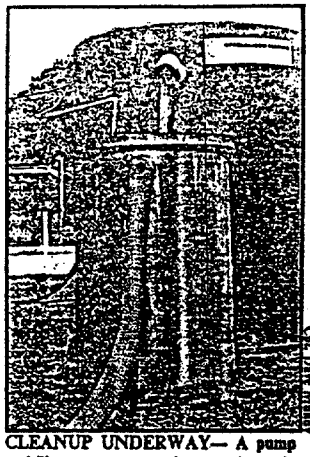
Some corrective action is already being taken at the old gas station in Tarawa Terrace.

"Right now, we have a system operating in Tarawa Terrace, where a pump is taking water from underground and separating contaminants," base Environmental Engineer Elizabeth Betz said. "But it's something that will take a long time to fix."

The housing area and Camp Johnson are now served by a permanent water line from the Hadnot Point treatment facility.

In addition, the base is continuing regular monitoring of the drinking water system.

"New state regulations have come out mandating tests every five years unless a system is classified as 'vulnerable,' in which case testing is done every three years," Betz said. "We generally run tests more often than is required."



CLEANUP UNDERWAY— A pump and filter operate near the commissary in the Tarawa Terrace housing area, separating contaminants from groundwater. The housing area's water is supplied via a permanent line from the main water treatment plant on Holcomb Boulevard.

Results of testing in March indicate the quality of drinking water at Camp Lejeune/New River is well within state and federal standards under the Safe Drinking Water Act of 1983. The check for 36 potential contaminants produced no significant negative findings.

"We met all the limits set forth in the Safe Drinking Water Act," Betz noted. "As a matter of fact, nothing was found above detection levels. The technology we have now can detect up to a half-part per billion, which is pretty minute."

The tests also sought chemicals classified as "unregulated" by the EPA — compounds for which the agency has not yet set acceptable limits.

"They didn't show up within detection parameters either," Betz said.

Tests are conducted by both base personnel and outside agencies.

"We do a lot of the bacteria tests on-base, some of them on a weekly basis," Betz said. "For the tests that are required only every few years, we generally contract them out to outside laboratories."

Having identified the trouble spots and taken action to protect the drinking water supply on an immediate basis, base officials are now preparing to start the process of cleaning up contaminated sites that could still threaten the Lejeune/New River water system.

CLEANUP CONTINUES— A pump and filter system is now operating in the Tarawa Terrace area to separate contaminants from groundwater. The groundwater was contaminated by chemicals from a dry cleaning business in Jacksonville.

"Part of Phase III is developing the technology to clean up the contaminants," Elston said. "It's not an easy task to get these chemicals out of the soil and water and dispose of them safely. It will be a long, expensive process."

NEXT: Cleanup and prevention of future contamination

> *'It's not an easy task to get these chemicals out of the soil and water and dispose of them safely. It will be a long, expensive process.'*
>
> B.W. Elston

Doc. No.: CLEJ-00504-9.05-9/01/90

The corpsman assesses the injuries and goes into action. Only the basics at this point. Stop the bleeding, calm him down and get him to the battalion aid station.

Days later, the wounded Marine is in stable condition and resting on a hospital ship ready to head back home.

It's an important lifesaving process that the wounded go through to get to that point. Alpha Co., 2nd Medical Bn. recently focused on the methods of getting down and get him to the battalion aid station.

for the Collecting and Clearing Co. or field hospital.

When wounded Marines arrive at the field hospital, they are admitted into the shock/surgical triage. The worst casualties are prepared for surgery, while the others have their dressings replaced and their paperwork started.

Everyone at the field hospital has a specific job to do and it must be performed with great skill. Lives depend on it. There can't be hesitation or indecision.

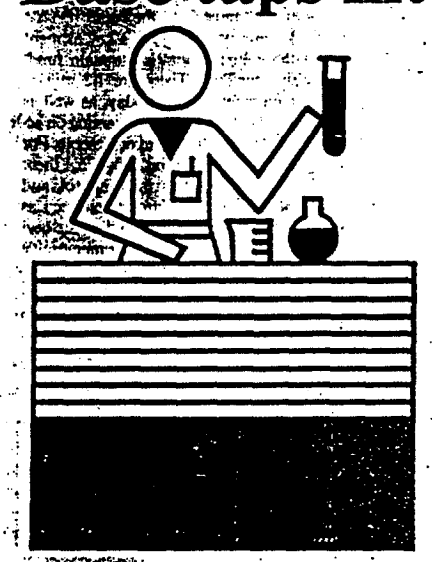
Determination '89 in September. Display Determination '89 is a large-scale combined NATO exercise and is the highlight of the 26th MEU (SOC) deployment.

The Collecting and Clearing Co. is usually located 10 to 15 miles behind the front line. It consists of two operating rooms, two intensive care units, a laboratory and a tent for X-rays. It also has a 60-bed ward, including the ICU.

"This is the first place the wounded can receive blood and surgery. The surgery conducted at this level is often referred to by corpsmen as "life and limb surgery," said HMC G.C. Centenera, acting XO, Alpha Co. "The most important goal being the survival of the patient. Even if it means the loss of a limb."

See Corpsman, Page 15A

Base taps into drinking water concerns



DoD program plans to identify, assess, clean up possible contamination

EDITOR'S NOTE: This is the first in a three-part series about the drinking water in the Camp Lejeune/MCAS New River system. The articles examine past problems that have raised concerns with the water supply.

By Cpl. Dave Mundy

During the past decade, the subject of hazardous waste has become a major environmental issue across the country. Real health dangers have been found at sites where, in years past, the "trash" was routinely dumped, buried or poured out on the ground.

The emergence of these health hazards has added a new burden to government officials at the community, state and national level: to find the sites, clean them up, and keep the contaminants from harming the population and environment.

The hazard most often comes from the contaminants filtering through the soil in which they are dumped and entering the underground water system. In most places in America, wells tapping into that system are what supply the public's drinking water.

The Safe Drinking Water Act of 1983 requires regular testing of water systems for contaminants. Recent tests on Camp Lejeune's six water systems indicated the quality of drinking water at all six sites was well within state and federal standards. In fact, no detection levels were exceeded in the testing for 36 potential contaminants.

But contaminated sites found at Camp Lejeune in 1982-84 remain a source of concern for base officials.

Preliminary testing at 76 sites aboard Camp Lejeune and MCAS New River in 1982-83 pinpointed 22 as warranting further investigation because they represented a potential threat to health and the environment. These included fuel farms, maintenance areas, open-burning pits and storage areas.

Sampling at those 22 sites was conducted in 1984.

See Water, Page 11A

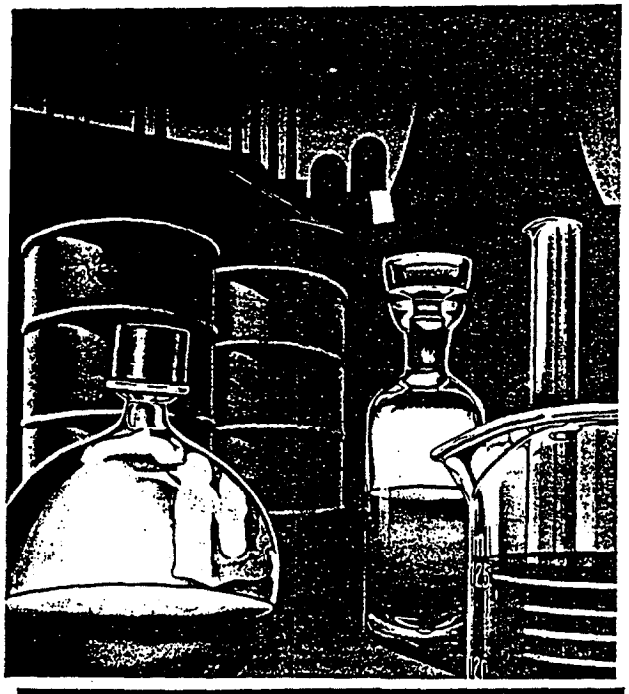
Doc. No.: CLEJ-00504-9.05-9/01/90

Water—

Continued from Page 1A

No contamination was found at three of the sites; two sites yielded no contamination by fuel, but lead compounds were present. Two more sites were identified as having traces of the chemical DDT. At 15 sites, contamination was verified.

"Even then, none of the contamination found was above the limit described as acceptable by the EPA," said B. W. Elston, deputy assistant chief-of-staff, facilities, MCB. "We closed eight wells in the Hadnot Piont Industrial Area and two in the Tarawa Terrace area as a precautionary measure and still had an adequate water supply."



"We shut down some wells that were not near the EPA limit," said Elizabeth Betz, base chemical engineer. "Then we started looking at what caused that contamination."

The testing and remedial action to clean up the sites was done as part of the Installation Restoration Program (IRP), the Department of Defense's program to identify, assess and clean up old hazardous waste sites.

The IRP consists of three phases. Phase I is a preliminary assessment and on-site inspection to identify possible contamination. Phase II is designed to determine how bad contamination is and what caused it. Phase III consists of developing the right technology and conducting the actual clean-up of hazardous sites.

The eight wells in the Hadnot Point Industrial Area were found in the 1984 sampling to be contaminated by volatile organic compounds (VOCs), mainly benzene and trichloroethylene.

"These are petroleum-based chemicals that evaporate rapidly in open air, and most come from man-made solvents," Betz said. "You'd have to look at each VOC individually, but many of them are carcinogens. That's the main reason we immediately shut the wells down, although the levels we found in the tests were not near the EPA limit."

The contamination was caused by long-term spillage and dumping in the Industrial Area.

"Past practices were not regulated and most of the chemicals we found were solvents used to clean vehicles and machinery," Betz said.

The two wells in Tarawa Terrace were shut down as a result of contamination by tetrachloral ethylene, a compound commonly used in the dry-cleaning business.

"We were puzzled when that chemical showed up. At first, we couldn't figure out how it had gotten into the Tarawa Terrace system," Betz said. "Then we looked across Highway 24. There was a dry-cleaning business right across the road from the housing area."

The contaminant had come from the dry cleaners originally suspected. Base officials immediately took action to pump safe drinking water to the housing area.

"We laid a temporary water line to Tarawa Terrace immediately upon closing the wells there," Elston said. "Since then, we have added a permanent line from our Holcomb' Boulevard water treatment plant to Tarawa Terrace. That line also serves Camp Johnson."

With the identification of contaminated sites and immediate action to protect the drinking water supply, base officials then turned to the task of measuring contamination, studying alternatives and forming plans for cleaning up the hazards.

"Once you have identified where the potential for a threat is, you start taking action to correct it," Betz said. "You cannot leave a contaminant in the groundwater."

NEXT: Present plans and actions

Simply the finest...
HAND CRAFTED
PINE REPRODUCTIONS

COUPON
Dough Boy
TRY US AND COMPARE

Doc. No.: CLEJ-00504-9.05-9/01/90

Agreement on Lejeune waste sites likely soon

By Jack Murphy
Star-News Correspondent

JACKSONVILLE — Camp Lejeune officials are close to completing an agreement to clean up old hazardous waste sites on the base that are listed on a national priority list of the U.S. Environmental Protection Agency.

Base officials are scheduled to meet Sept. 7 and 8 in Atlanta with representatives of the EPA, the state of North Carolina and the Navy to complete a draft of a Federal Facilities Agreement, which will outline how the base will clean up the sites, along with schedules and priorities for the work.

Lejeune was placed on the EPA's National Priorities List in mid-June 1988, after the hazardous waste sites were identified. The base was given a six-month negotiable period to begin a feasibility study for cleanup.

Such sites qualify for cleanup funded by what is commonly known as the Superfund. In the case of military installations, however, the cleanup funds come from the Defense Environmental Restoration Account established by Congress for Department of Defense hazardous waste sites.

A preliminary study completed in 1983 identified 76 potentially contaminated base sites and indicated 22 warranted further investigation, although the study concluded that none posed an immediate hazard to human health or the environment.

The investigation focused on the Hadnot Point Industrial Area, where eight of 35 wells showed traces of chemical contamination in 1985. The wells were closed.

Base officials said no single source had been found for the chemicals, all used primarily as solvents and degreasers.

Lejeune uses and produces large quantities of hazardous materials and waste products, and although no hazardous waste is permanently stored on base, waste was buried on the base in the past.

Lejeune officials said that when the final draft is completed following the conference in Atlanta, a copy will be made available to the public, which will have 45 days to comment.

Publication: Morning Star Page: 3C Date: 19AUG89

City, State: Wilmington, N.C.

Doc. No.: CLEJ-00504-9.05-9/01/90

Hazardous waste training held

Story and photos by
Cpl. C.M. Abercrombie

Camp Lejeune is placing the responsibility of protecting its environment on the shoulders of the individual Marine.

Recently, more than 300 Marines were instructed on the proper procedures to follow when dealing with hazardous materials and disposing of hazardous waste. The four-course series of instruction was taught by Phillip G. Coop, vice-president of Tennessee-based Environmental Safety and Designs, Inc.

The course taught Marines, as well as civilian workers on base, the laws and regulations of waste disposal.

"Handling hazardous materials is not a matter to be taken lightly. Under current guidelines set forth by the Environmental Protection Agency, unit commanders and individuals within the unit can be held liable for improper storage, handling and disposal of these materials.

"The laws and guidelines were established to protect our environment. We also want to teach the handlers how to do their job safely," Coop said.

The course consisted of four separate classes.

"To be sure the information is supplied to everyone who needs it, we have to cover a wide spectrum of people, from the private or lance corporal actually handlers who make the policies within the unit," Coop said. "The first two days of the course are mainly for the hazardous material handlers. The third day is refresher training for the Hazardous Material Disposal Officers. The fourth class is for the unit commanders."

Class one is initial training for the Marines who handle and dispose of the waste or materials.

The second class is also for the handlers of hazardous materials and goes into detail on regulations and how to dispose of, label, and store hazardous materials properly.

"These Marines need to know how to work with the materials safely, and to do so in a way the law demands," Coop said.

The third course is a refresher course for those who have already received initial training and covers new laws and regulations, as well as pending legislation.

The final class is the executive session. Commanders and unit leaders are given an overview of the other three classes so they can ensure their units follow the proper guidelines.

THE RIGHT WAY— Cpl. Janis Anderson, H&S Co., 8th Comm. Bn. explains to Lance Cpl. Douglas Mayers that the containers must be labeled correctly.

Cpl. Janis Anderson of 8th Comm. Bn. S-4 attended the first two classes after being appointed the battalion Hazardous Materials NCO. Anderson now has the job of ensuring all hazardous materials from her unit are disposed of correctly and safely.

"The course covered much more material than I expected," Anderson said. "I had to pay very close attention to make sure I didn't miss anything. The classes were informative, but there are a couple of things the Marine Corps and each unit need to address."

One problem we have in the Marine Corps is personnel turnover. Turnover is sometimes so fast, the qualified Marines are gone before new people can be trained. We need more continuous training, and a hazardous materials MOS would be a great idea, according to Coop.

"The Marine Corps seems to be on the right track with the training," Coop said.

"Protecting the environment is everyone's responsibility," he said. "We feel getting the correct information to as many people as possible is a good place to start. Federal regulations serve a purpose. If everyone would follow them, we could make a lot of progress towards improving our environment safely."

Doc. No.: CLEJ-00504-9.05-9/01/90

Preventive measures

Though there has been no reported cases of contaminated fruits, the Camp Lejeune commissaries have removed certain fruits from their shelves.

All red, white and black grapes, plums, peaches and nectarines were removes Monday, March 13 as a precautionary measure.

Any patron having purchased any of these items from one of the commissaries, prior to Monday, are asked to return them for a refund.

As a preventive measure, the Defense Reutilization Marketing Office at Lot -203 will close until soil samples recently taken can be analyzed to determine whether the lot is safe for employees and contractors working there.

The soil will be tested to ensure there are no harmful contaminants that could be a safety risk to employees and contractors.

PUBLICATION THE GLOBE PAGE 3A DATE 23 Mar 89

STATE CAMP LEJEUNE, NC

Doc. No.: CLEJ-00504-9.05-9/01/90

Emergency landing made

An AH-1T Cobra helicopter from Marine Light Attack Helicopter Squadron 167 made a precautionary landing about 10:15 p.m. Wednesday at Oak Grove because of engine problems, according to a spokesman at New River air station.

Because it is such a light helicopter, air station officials decided to transport it back to New River rather than repair it in the field, the spokesman said.

Soil samples examined

The Defense Reutilization Marketing Office at Lot 203 at Camp Lejeune has been closed until further notice, according to the base Joint Public Affairs Office.

The office will remain closed until soil samples taken recently can be analyzed to determine whether the lot is safe for employees and contractors working there.

In January, an employee operating a forklift unearthed two 55-gallon drums of an unknown substance, although one drum was marked "DDT."

The soil will be tested to ensure there are no harmful contaminants present, according to the Public Affairs Office.

TION DAILY NEWS PAGE 1B DATE 17 Mar 89

, STATE JACKSONVILLE, NORTH CAROLINA

Doc. No.: CLET-00504-9.05-9/01/9C

Lot closed; soil tested

JACKSONVILLE — Camp Lejeune officials said Wednesday that Lot 203, operated by the base Defense Reutilization and Marketing Office, has been closed until recent soil samples can be analyzed to determine whether the area is unsafe for employees and contractors working there.

Base officials said Jan. 11 that several 55-gallon drums were discovered buried at the site but that the drums posed no threat to groundwater supplies or to people working at the lot.

A civilian forklift operator inadvertently unearthed two 55-gallon drums Jan. 4 at the lot off Holcomb Boulevard near Wallace Creek. On Jan. 9, cleanup crews found several more barrels including one marked "DDT."

According to base officials the lot is one of a group of old disposal sites targeted for long-term cleanup under a plan developed by the base, state agencies and the federal Environmental Protection Agency.

ATION MORNING STAR PAGE 2-C DATE 16 march 89

, STATE WILMINGTON, NORTH CAROLINA

Doc. No.: CLEJ-00504-9.05-9/01/90

Disposal site found

A civilian employee operating a forklift in a storage lot on Jan. 4 inadvertently unearthed two 55-gallon drums that were apparently buried over a long period of time.

The forklift operator struck one of the buried drums while working in Lot -203 near the intersection of Wallace Creek and Holcomb Boulevard, which is maintained by the Defense Reutilization Marketing Office. When kerosene-like odors were noticed at the scene, the Base Spill Response Team was notified and arrived at the lot to investigate.

Initial investigation pointed to a routine fuel spill and a decision was made to dig up the barrels early this week and the site was cordoned off and covered with plastic.

On Jan. 9, efforts to clean up the site revealed several other barrels, one of which was marked "DDT." DRMO and Natural Resources officials decided to cease digging until sampling of the material could be conducted and a plan of action could be formulated for clean-up.

The area in question has already been identified as one of numerous past disposal sites under the Installation Restoration Program. The Installation Restoration Program initiated a comprehensive investigation of all past disposal sites in 1983 and, beginning this year, is developing a comprehensive plan for its clean-up in cooperation with the state and the EPA.

The base has taken all steps to ensure that the site poses no immediate safety risk to its operators by locating, documenting and removing anything deemed hazardous to continued operation in the area in question. Long-term removal and clean-up will be initiated in accordance with the remedial action plan as established by EPA guidelines.

There is no contamination or threat of contamination to the ground water supply or personnel working in the area.

PUBLICATION THE GLOBE PAGE 2A DATE 19 JAN 89

STATE CAMP LEJEUNE, NC

Doc. No.: CLEJ-00504-9.05-9/01/90

Drums discovered

Several barrels of an unknown substance have been discovered recently at Camp Lejeune, according to the base Joint Public Affairs Office.

A civilian employee operating a forklift on a storage lot Jan. 4 unearthed two 55-gallon drums, a base spokesman said. The drums were found in Lot 203 near the intersection of Wallace Creek and Holcomb Blvd.

Efforts to clean up the site on Monday revealed several other barrels. One of the barrels was marked "DDT," the spokesman said.

A plan to cease digging was made by base officials until a sampling of the materials can be conducted and a plan of action for cleanup can be formulated.

PUBLICATION DAILY NEWS DATE 12 JANUARY 1989 PAGE 1A

CITY, STATE JACKSONVILLE, NORTH CAROLINA

Site of suspected toxic material cleaned up at Lejeune

Doc. No.: CLEJ-00504-9.05-9/01/90

By Jack Murphy
Star-News Correspondent

CAMP LEJEUNE — Military and civilian specialists are working to clean up an area where several 55-gallon drums of possibly toxic materials were discovered buried. Base officials said Wednesday that the drums posed no threat to groundwater supplies or to people working in the area.

A civilian worker operating a forklift inadvertently unearthed two 55-gallon drums on Jan. 4 at Lot 203, off Holcomb Boulevard near Wallace Creek.

The worker noticed a kerosene-like odor, and the base Spill Response Team was called to the lot. The team cordoned off the area, covered it with plastic and then began digging up the barrels earlier this week.

On Monday, the cleanup workers found several more barrels, including one marked "DDT." Digging was stopped until the base officials and representatives of the N.C. Department of Natural Resources and Community Development could analyze the contents of the barrels and form a cleanup plan.

The lot is operated by the Defense Re-utilization Marketing Office, which disposes of surplus military material.

It is one of a group of old disposal sites on the base that is targeted for long-term cleanup under a plan being developed by the base, state agencies and the federal Environmental Protection Agency.

PUBLICATION: MORNING STAR Page: 3C DATE: 12 Jan. 89

CITY, STATE: WILMINGTON, NORTH CAROLINA

Doc. No.: CLET-00504-9.05-9/01/91

Marines take issue with articles on toxic waste at OC bases

Return with us now to an early summer day, say June 26, when a Register Close-up section focused on chemical contamination at the county's two Marine bases, in El Toro and Tustin.

The stories weren't subtle, and the headlines reflected the heavy hit. Examples: "MILITARY WASTE" (not only in all-capitals but in the color red), "PAST CHEMICAL DUMPING HAUNTS CONTAMINATED MARINE BASES," "Pollution producers: 'No industry can compare.' "

The discouraging words rolled on and on, as is usual in Close-up, but the beginning of a story on the section's first page pretty well summed up the indictment:

"Although the Marine Corps has improved its handling of hazardous materials in the past few years, it still is slow to comply with environmental laws, has refused to pay local fees, contributes substantially to the area's smog and produces more toxic waste than any other source in the county."

That characterization understandably wasn't especially popular with local Marine Corps folks. Shortly after the articles appeared, Maj. Stan Gould, public affairs officer for the 3rd Marine Aircraft Wing and MCAS El Toro, called to challenge some of the story statements. I asked that the objections be put in writing. After some delay, he and Navy Ensign Michael Rehor, environmental director of the Facilities Management Department at El Toro MCAS, delivered responses to statements they considered inaccurate and/or unfair. (I further delayed the matter through one of my vacations, then the involved Metro section people took even more time to file responses to the Marine objections; hence, this extremely tardy report. Finally, the Marines suggested dropping the whole thing because of the time lapse, but I didn't agree since they acknowledged that the challenges remained the same.)

A letter accompanying the Marine list referred to "numerous inaccuracies and misleading inferences [in the stories] concerning the hazardous waste and environmental clean-up situation" at the two Marine bases. It also stated that "The Department of Defense and the Marine Corps have been very open about the environmental and hazardous waste problems at the two air stations and are working very dilligently to correct them."

The stories were written by Register staffer Marla Cone and edited by Jane Bornemeier, assistant Metro editor.

Because of space considerations, not all of the Marines' objections can be included here. I have selected for discussion the ones I feel are the most important.

Oh, yes, I must note, in this discussion involving the Marine Corps, that eons ago I was an ID tag-carrying member of that armed service, so it's possible that I might have a contaminated view of the matter at hand. Of course, the Corps obviously didn't consider me one of the few good men, since during one of the wars it left me behind to help guard the endangered bars of Oceanside, and indeed I don't feel like a bridge over its troubled waters, if any, but you might want to keep the long-past connection in mind if you bother to struggle through this.

Let's take a look at part of the Marines' itemized list of objections. To allow all sides a voice in the discussion, several elements must be included for each challenged point. I don't know what confusion can be avoided, but let's proceed in this order of listing: The challenged story statement, the Marines' objection, responses from Ms. Cone and Ms. Bornemeier and comments from the ombudsman, when appropriate or when the desire strikes.

One of the main Close-up stories began: "On wind-swept days 20 years ago, the Marines had an innovative way of controlling dust on a sprawling dirt parking lot at El Toro air station.

"They routinely took an assortment of toxic waste — powerful solvents, used motor oil, transmission fluid, even excess jet fuel — and sprayed it on the ground, soaking the soil and misting the air with pollution.

"Even more recently, for 12 years ending in 1981, the Marines in Tustin disposed of toxic trash by loading large drums on the edge of a truck. As the Marines drove along, they opened the drums and let the raw chemicals flow onto the soil, polluting an area the size of a football field.

PAT RILEY

The Ombudsman

"These are only two of the dozens of environmental horror stories returning to haunt the US Marine Corps air stations in El Toro and Tustin."

The Marines had two objections to this beginning. They said the spraying of solvents, motor oil, etc., was not "innovative," that "Spraying used oil and similar materials was a standard procedure accepted nationwide for many years."

Also according to the Marines, "While the article correctly pointed out past waste-disposal procedures that today are unacceptable, the words 'horror,' 'haunt,' and 'dozens' add to an emotional slant that is not justified. The past practices exist no longer, the cleanup is being planned, and there are no immediate health hazards."

Ms. Cone responded that "Using today's standards, spraying hazardous waste as a method of dust control is considered highly unorthodox, inappropriate, unhealthful and unsafe." We said in the fifth paragraph of the story that the practice once was considered acceptable and legal, and has since stopped at the Marine base. We reiterated that in the 13th and 27th paragraphs. About the "horror," she said, "Environmental officials agree that past practices are horror stories, and they are extremely concerned about health hazards, since three Irvine-area agricultural water wells have been contaminated."

Editor Bornemeier said: "While spraying of toxic waste was not illegal, it was not widely practiced in this country — ever, except by the Marine Corps." And, regarding the "horror stories" usage, she maintained that "The Corps has chosen to quibble with three words out of thousands in this project. Taken in context, I believe the words are justified."

Ombud comment: I don't suppose folks in most areas had access to jet fuel, but the spraying of such materials as used motor oil to keep the dust down was hardly innovative 20 years ago. I guess only those of us who are older remember, and if it was so dangerous I don't see how we lived through it. And horror stories? Well, among the definitions of horror in my dictionary are "shuddering fear and disgust; terror and repugnance." I think the term was a bit exaggerated in the story usage. I don't doubt that environmental officials agree that past practices are horror stories. There are good career reasons for detecting a toxin under every rock or in every fish. But if the officials referred to past situations as horror stories, maybe they should have been quoted. As it was, the Register said it.

■ Story statement: "... the US Environmental Protection Agency believes the contamination at the El Toro base ranks with some of the nation's most infamous toxic hot spots! Love Canal in New York, Times Beach in Missouri, the Stringfellow Acid Pits near Riverside."

Marines: "True only in that MCAS El Toro might share a list of approximately 1,200 sites with these infamous spots. MCAS El Toro is neither abandoned nor poisoning any workers or residents."

Ms. Cone: "The paragraph is correct. The base has been nominated to the Superfund list [EPA's priorities for clean-up] and it is considered just as hazardous as

Please see OMBUDSMAN/11

OMBUDSMAN: Marine Corps responds to Close-up look at toxic waste at 2 OC air stations

Doc. No.: CLET 00504-9.05-9/01/90

FROM 10

those other sites, and more hazardous than some."

Ms. Bornemeier: "I find it interesting the Marines now dispute the comparison with Times Beach and other hazardous sites, when even their own commander, Brig. Gen. David Shuter, said in the story: 'I don't like being compared to the McColl dump or Times Beach, but if that's how we stack up, so be it.' "

Ombud: Terry Wilson, spokesman for the EPA regional office in San Francisco, agreed with Ms. Cone that the statement is correct in that, as he put it, "All [sites on the list] have been indentified as the most hazardous waste sites that need to be cleaned up."

However, Mr. Wilson explained, there is a "hazard ranking system" which, on a point basis, places various sites in one of 16 groups according to the degree of hazard. The ranking system is, at least to me, extremely complicated. EPA scientists look at various criteria, including the danger of specific chemicals, their potential to spread, to contaminate drinking water, etc., then add up the score for group placement. Fifty sites are in Group 1, at the top of the hazard ranking system. Stringfellow is number 32 in that group. Love Canal is number 141 in Group 3. Interestingly, both Times Beach and El Toro MCAS are in Group 8; Times Beach is number 387 in that group, but we don't know where El Toro falls because federal facilities are not numbered, according to Mr. Wilson.

I frankly cannot make much sense of the system. Let me know if you can. Residents were relocated from both the Times Beach and Love Canal areas, though they're in groups 8 and 3. No one has been relocated from Stringfellow (though it is using a new water supply), but it's in the top group.

El Toro isn't actually on the Superfund list yet; it's on the *proposed* list, but Mr. Wilson said it's extremely rare for a site proposed for the regular list not to make it.

An EPA environmental scientist in Washington told me she wouldn't consider the El Toro site as hazardous as the others named in the story. Opinions apparently differ.

■ Story: "A survey of the 6,200 acres of Marine Corps property, performed by military consultants, shows few areas at the air station are untainted by chemicals."

Marines: "Even if all suspected areas, that the article mentioned, were 100 percent contaminated, this would amount to 1.7 percent of the total acreage at MCAS El Toro, and 0.6 percent of the total at MCAS Tustin."

Ms. Cone: "The story is correct. A map of the bases provided by a March 1988 consultant report shows few areas are uncontaminated. I never said in the story that every acre was contaminated, only that most portions of the base are contaminated, which is supported by the maps we printed."

Ms. Bornemeier: "The listing does not say all sites contain all chemicals."

Ombud: We're talking "areas" and "acreage." Take your pick.

■ Story: "As many as 14 dump sites at El Toro — two as large as 20 acres apiece — and 11 areas at Tustin are contaminated with hazardous materials, including PCB-laden electrical transformers, low-level radioactive materials, buried drums of explosives and thousands of gallons of volatile jet fuel, acids and waste oils, according to a March report by military consultants."

Marines: "Only one site at El Toro or Tustin is suspected of containing very small amounts of radioactive material or explosives. There is only one potential site which may be contaminated with less than 60 gallons of PCB fluid."

Ms. Cone: "The sentence is correct, all according to the Marine Corps' own March 1988 report. Fourteen sites at El Toro and 11 at Tustin are contaminated with some type of hazardous waste. The story said all the sites contained hazardous waste. I did not say all sites contained radioactive materials or PCBs."

Ombud: The story simply didn't make the picture clear.

■ The story said a degreasing solvent called trichloroethylene (TCE) has infiltrated three agricultural wells used to irrigate Irvine Co. crops and that "Officials fear the chemicals are migrating west toward other wells that supply 70 percent of the drinking water for Santa Ana, Costa Mesa and Tustin residents. The source of the TCE spill is unproved, but water-quality officials say they are convinced it comes from one of many abandoned dumps at the El Toro air station."

Marines: "Being 'convinced' is simply a convenience for water-quality officials, since other equally valid explanations would be difficult to track down or would have no clean-up funds. The fact that an auto raceway existed for many years in close proximity, using similar degreasers with similar disposal methods, is easy to ignore now that it no longer exists. The fact that concentrations are higher further away from the air station could easily indicate that a source or dump site off base was the culprit. It is important to note that we are spending $1.2 million in a scien-

Base officials study cleanup of fuel leaks

Doc. No.: CLEJ-00504-9.05-9/01/90

By RICHARD F. SMITH
Daily News Staff

Camp Lejeune officials are proceeding with plans to clean up gasoline leaks at the bulk fuel storage facility in Hadnot Point, which was closed in June after the problem was confirmed.

An engineering study for removal of leaked gasoline products is nearly complete, said 1st Lt. Cathy Engels of the Lejeune Joint Public Affairs Office.

Monitoring tests confirmed existence of the problem in April. Leaks from an underground tank system were confined to an area two square blocks around the fuel farm.

The spill is contained by the section's natural flat terrain and water-table conditions, the lieutenant said. The number of gallons led is unknown.

dies of monitoring wells mined the leaking fuel was gasoline and a preliminary report was made in May to North Carolina environmental officials.

Studies completed in 1986-87 showed fuel compounds were detectable in the groundwater of the industrial area.

As a result, Maj. Gen. J. Edward Cassity, base commander at the time, ordered the fuel farm closed on June 12 of this year.

The facility currently is using fuel bladders instead of tanks, the lieutenant said. Bladders should be replaced by an interim fuel operation by early 1989.

The interim system will include a smaller, above-ground tank system. Maximum use will be made of existing outlying refueling areas at Courthouse Bay and Camp Geiger.

Cleanup is expected to start after final design of a fuel-recovery system. Recovered gasoline products are expected to be recycled for use on base.

A contract bid will be announced in coming months to begin construction and operation of the fuel-recovery effort. No timetable for the cleanup will be available until the engineering report is finished and approved.

The study report on the fuel leak was prepared by engineers from the Naval Facilities Engineering Command in Norfolk, Va.

The final draft was published with monitoring data and cleanup recommendations. It was approved by Lejeune officials and sent to Norfolk in September.

Lejeune personnel will continue to monitor all groundwater wells for possible pollution. Drinking water at Lejeune is continually analyzed with the water meeting all treatment standards required by the U.S. Environmental Protection Agency, the spokeswoman said.

Wells and disposal sites do not pose any danger to persons living or working at or near the base as long as they drink water from approved sources. People should not drink water out of streams or from wells that are not monitored.

There is no hazard of pollution in drinking water on or off base. All contaminated groundwater wells have been sealed, according to the lieutenant.

The base has started a 24-hour telephone line for persons with questions or comments about the problem. The number is 451-5100.

The engineering report and planned cleanup are part of Lejeune's continuing effort to identify, evaluate, control and correct past deficient waste-disposal sites and practices involving groundwater pollution.

The base and ABC One Hour Cleaners of Jacksonville were among 229 sites nationwide that the EPA has proposed for the Superfund national priorities list for cleanup of past inadequate waste-disposal areas.

The Superfund normally finances 90 percent of cleanup costs on civilian land, but federal agencies must use their own money for such efforts on U.S. property.

The cleanup at Lejeune is being funded by the Navy's Defense Environmental Restoration Account.

A chemical used in dry cleaning leaked from a tank behind ABC cleaners at 2127 Lejeune Blvd. during 1985 and contaminated three wells, including two wells at base housing in Tarawa Terrace, according to EPA and Lejeune officials. Those wells are now closed.

NEWSPAPER Daily News DATE 881024 PAGE B-1

CITY, STATE Jacksonville, N.C.

Doc No.: CLET-00504-9.05-9/01/9

EPA proposes cleanups at 2 Jacksonville sites

JACKSONVILLE — Camp Lejeune's industrial area and a Jacksonville dry cleaner are among 229 sites the U.S. Environmental Protection Agency proposes to put high on its list of places for cleanup of toxic wastes, according to a base spokesman.

The EPA had no estimate Tuesday of how soon cleaning up groundwater contaminated by chlorinated solvents in the industrial area could start or how much it would cost, said 1st Lt. Frank Shaw of the base Joint Public Affairs Office.

An EPA fund normally finances 90 percent of cleanup costs on civilian land, but federal agencies must pay to clean up their own property.

PUBLICATION News and Observer DATE 23 Jun 88 PAGE 2C

STATE Raleigh, North Carolina

Base, cleaners placed on list for Superfund

Doc. No.: CLEJ-00504-9.05-9/01/90

By RICHARD F. SMITH
Daily News Staff

Camp Lejeune's industrial area and a Jacksonville dry cleaner are among 229 sites the U.S. Environmental Protection Agency has proposed to add to the Superfund priority list for cleanup of toxic wastes, according to a base spokesman.

"The EPA proposed Tuesday to add us to the list" but there is no estimate of how soon a cleanup of groundwater contaminated by chlorinated solvents in the industrial area can start or how much it will cost, said 1st Lt. Frank Shaw of the base Joint Public Affairs Office.

The Superfund normally finances 90 percent of cleanup costs on civilian land, but federal agencies must use their own money for such efforts on U.S. property.

"We get the money from the Department of the Navy, from the Defense Environmental Restoration Account," Shaw said.

"There is no danger of any contamination in the drinking water on or off-base and all contaminated groundwater wells have been sealed off," said Col. Thomas J. Dalzell, assistant chief of staff for facilities at Marine Corps Base.

"Basically, the (EPA) National Priorities List prioritizes the areas of concern the federal government feels need to be looked at first and makes these areas eligible for federal funds," Dalzell said.

"The base meets and exceeds all treatment standards required by the EPA and pursues a continuous water-testing program," the colonel stated.

The Jacksonville dry cleaner affected by the proposal is ABC One Hour Cleaners at 2127 Lejeune Blvd.

A chemical used in dry cleaning leaked from a tank behind the cleaners during 1985 and contaminated three wells, including two wells at base housing in Tarawa Terrace, according to EPA and Lejeune officials. Those wells are now closed.

EPA administrators propose to prioritize the Lejeune cleanup as a result of a 1983 study to identify, evaluate, control and correct groundwater pollution on base, particularly in the industrial area in Hadnot Point.

Toxic chemicals were discovered in 1985 in eight of 35 wells at Hadnot Point. Those wells are also shut down.

In 1985, industrial area wells showed traces of trichloroethylene, dichloroethylene and tetrachloroethylene.

Dalzell said in February of this year that most of the pollution was caused by motor pools at Hadnot Point.

"At that time, oils, greases, solvents, gasoline and cleaning fluids and other types of chemical compounds that were used in our everyday processes were just being dumped in the ground or dumped in sewers or things like that; we really were not aware back in the '60s and '70s of the effects on groundwater contamination," Dalzell said.

Following placement of Lejeune on the priorities list, base officials will have six months to start a remedial investigation/feasibility study in consultation with the EPA and state agencies. Time to complete that review is negotiable and must include public participation.

Within 180 days after completion of that stage, Lejeune must reach agreement with EPA and state officials for completion of all necessary corrective actions.

Trichloroethylene, or TCE, was commonly used during the 1970s as a chlorinated solvent for degreasing aircraft and has also been found in dump sites at Cherry Point air station in Havelock — but not in drinking water there — and in three wells on or near El Toro Marine air station in Orange County, Calif.

Dichloroethylene and tetrachloroethylene also are toxic chlorinated solvents. They are found in many types of cleaning products.

Lejeune was cited by state environmental agencies during 1985 for violating groundwater standards.

Tests of 22 suspected hazardous-waste pollution sites at Lejeune have detected heavy metals, organic chemicals and pesticides, but concentrations are not high enough to endanger humans, base officials said in December 1985.

PUBLICATION The Daily News DATE 22 Jun 88 PAGE 1B

STATE Jacksonville, North Carolina

EPA may clean up airport, base sites

Doc. No.: CLET - 00504-9.05-9/01/90

By Janet Olson
Staff Writer

A pit at the New Hanover County Airport and an area at Camp Lejeune Marine Corps Base are among 229 sites that the Environmental Protection Agency proposed Tuesday to add to the Superfund priority list for toxic waste cleanups.

Nine of the sites are in North Carolina, including four in the southeastern part of the state.

Designation for the "National Priority List" means the site is eligible for 90 percent federal funding of an EPA-supervised cleanup, unless a federal agency owns the site. Federal agencies are responsible for cleaning up their sites using their own money.

Despite the chance for federal funding, officials in New Hanover County are wary about getting involved in a Superfund cleanup of years' worth of potentially hazardous black gunk left over from fire training exercises in a pit at the airport. If the EPA gets involved, county officials say, the cleanup could cost much more than if the county handled the job itself.

Even with 90 percent of the cleanup covered by the Superfund, an EPA-supervised project could cost the county more than $1 million — much more than the $300,000 that private contractors have estimated, said Ervin Dehn, New Hanover County Airport engineer.

The EPA hires from a limited list of contractors to clean up toxic waste sites, which adds to the cost, Dehn said.

"They might bring a contractor all the way down from Massachusetts to do the cleanup, and you've got to pay all the transportation costs," he said.

The EPA's Superfund cleanup process also is lengthy, taking anywhere from three to five years, said Michael Henderson, a spokesman for the EPA Superfund program in Atlanta.

The Air Force created the burn pit in the 1960s as a place to train firefighters, Dehn said. Later the pit became a training site for the county's volunteer fire departments.

The Army Corps of Engineers is investigating the site and the airport's history to establish whether the federal government is responsible for some of the waste, Dehn said. If the military contributed to the problem, he said, the site might qualify for a different federal cleanup program.

"Right now, the EPA is operating under the assumption that the county owns the airport and the county is at fault," he said.

Tuesday's EPA announcement brings the Superfund priority list to 1,177 sites, of which 378 have been proposed and 799 have been formally placed on the list.

Camp Lejeune was proposed for the list because contaminated groundwater was detected in the industrial area of the base. Although no hazardous waste is stored permanently at the base now, base officials say, some waste had been buried there and could contaminate soil and groundwater.

The other Southeastern North Carolina sites added to the EPA's list Tuesday are four septic service pits in northwestern Brunswick County and an area around a Jacksonville dry cleaning business.

The EPA already used some Superfund money several years ago for an emergency cleanup of the Brunswick County site in Maco, Henderson said. The agency removed about 3 million tons of topsoil contaminated with oils that had been illegally dumped into four unlined septic pits, he said. If the site is placed on the Superfund list, he said, the EPA will study whether the chemicals contaminated any private wells.

The Jacksonville site is around ABC One Hour Cleaners at 2127 Lejeune Blvd. A chemical used in dry cleaning fluid leaked from a storage tank behind the business and contaminated three nearby wells, Henderson said.

ATION MORNING STAR DATE 21 JUN 88 PAGE 1C
WILMINGTON, NORTH CAROLINA

Hazardous wastes and their effects explained

Doc. No.: CLEJ-00504-9.05-9/01/90

The overall coordinator for Camp Lejeune's placement on the National Priorities List will be Col. Thomas J. Dalzell, Assistant Chief of Staff, Facilities, Marine Corps Base. He recently answered some questions concerning NPL and the effects it might have on Camp Lejeune residents and workers.

Colonel Thomas J. Dalzell

Q. What is the National Priorities List?

A. Congress passed the Resource Conservation and Recovery Act back in the late 1970s, and that Resource Conservation and Recovery Act is our nation's hazardous waste management program. As part of that program, Congress requested that all the various activities within DoD and the federal government take a look at past hazardous waste dump sites and practices and initiate a plan to clean up these hazardous waste sites--especially where they impact on ground water contamination.

Q. Are there any hazardous waste sites aboard Camp Lejeune?

A. Yes there are. As a result of the Resource Conservation and Recovery Act the Navy developed what was called the NACIP program, and it was a program to go out and look at all Navy and Marine Corps installations and find out where past hazardous waste dump sites or any types of dumps were located. A study was done back in 1983 at Camp Lejeune, and from research of records, talking to people, and going out to look through the area, 77 old dump sites were identified here at Camp Lejeune. Of those 77 sites, 22 of them that were marked for further study, we have a number of sites right now, mainly in the Hadnot Point area where we have some test wells to monitor the amount of contamination and whether or not it's migrating through the ground.

Q. Is my health or the health of my family is any danger?

A. No it's not. All the wells which we get our raw water out of are continually tested and the wells that were identified as being contaminated have been closed off. All the other wells with water coming out contain no health problems at all to any individual who is living or working aboard Camp Lejeune or anyone in the local community.

Q. What about prior to 1983?

A. At that time we were not aware of any of these particular compounds that might have been in the ground water and we have no information that anyone's health was in any danger at that time.

Q. Could the contamination escape Camp Lejeune into Jacksonville?

A. Right now all the information we have is the contamination within the strata underground is contained, and we have no evidence of it migrating out into the local community. It's contained within Camp Lejeune.

Q. How do you test the drinking water?

A. Our drinking water is tested in accordance with the Safe Water Drinking Act. We do a bacteriological test on all of our water once a week, we do a heavy metal test once every three years, we do a volatile organic compound test once every three months, trihalomethane test once every three months and a radiological test every four years. All these tests are in accordance with federal and state regulations and meet those requirements.

Q. What are the chemicals found used for?

A. Most of the chemicals found mainly come from solvents, degreasers and other types of materials that we use in the maintenance and repair of vehicles aboard the base.

Q. What are the long term effects of exposure to these contaminants?

A. Heavy long term exposure to these chemicals could cause some health hazards, depending on the amount of chemicals ingested.

Q. What precautions should we take?

A. The only precaution anybody here at Camp Lejeune needs to take is to ensure they only drink water that is coming through our approved water sources. Don't drink water out of streams; don't drink raw water from a well site that somebody may have drilled around the area. These are the only precautions that individuals need to be aware of. At any time

Doc. No.: CLET-00504-9.05-9/01/9

individual feels there's a different taste or a dif- or or whatever in their drinking water, they contact us right away through the Joint Affairs Office at 451-5100 to let us know so we can get an investigation going right away.

Q. How will we prevent this from happening again?

We have a number of procedures that are currently in effect that were mandated by the Environmental Protection Agency. All hazardous materials are accounted for aboard base. Hazardous waste is stringently controlled by federal and state EPA regulations, and all of it is taken off the base through the Defense Reutilization and Marketing Office and sold to private firms who handle and process the material. We are no longer dumping hazardous materials in sites like was done in the past. It's all handled in a very strict program that's monitored and inspected by federal and state EPA officials.

Q. How long will it take to clean up the wells?

We really don't know how long it will take to clean these cleaned up. As part of our remedial action we're to negotiate with the federal and the state officials relative to the types of contamination we have and the processes that we'll utilize to clean it up, and then the question comes up "How clean is clean?" and those are the things we have to work out. Some of these processes only take a few years, others may take a lifetime to clean.

Q. What was the source of contamination?

A. Most of the sources of contamination were the pools that existed down in the Hadnot Point area. At that time oils, greases, solvents, gasoline and cleaning fluids and other types of chemical compounds that were used in our everyday processes were being dumped in the ground or dumped in sewers or things like that; and we really were not aware back in the 60s and 70s of the effects on ground water contamination. Now we are more aware of these things and have taken appropriate precautions to ensure the ground water contamination is not progressing any further.

Q. Is it likely that other sites on Camp Lejeune will be identified as NPL candidates?

The NPL listing applies to Camp Lejeune, and it's possible that other sites may show that we'll have to do some additional cleaning up. Once we go on the NPL listing, it involves all of Camp Lejeune and not a specific site.

Q. If there is no danger now, and the problem isn't serious, why is Camp Lejeune put on the list?

A. As I mentioned the NPL listing is a priority listing the federal government comes up with to clean up those sites they consider to be the worst sites throughout the nation. Congress has authorized what we call a "Super Fund" act and those funds are for the clean up of hazardous waste sites. Without some method of prioritizing the hazardous waste sites the federal government would have no idea of the sites they should clean up first. So on some points of view, getting put on the NPL list brings the base to the forefront relative to public attention, but on the other hand, it becomes a help to us because we are eligible for the Super Fund money to enable us to get the clean up process started in a more timely manner.

Q. If I'm concerned about this problem, who should I contact for more information?

A. If you have any concern whatsoever, or any additional information that you want concerning the extent of contamination or what we're planning on doing you should call the Joint Public Affairs Office, at 451-5100. Call them any time during the day or night and we'll get an answer back to you personally.

Q. When will the clean up begin?

A. The cleanup will probably not start for a while. We're currently in the second phase in the process of going through and looking at some remedial action that we can take. Then there's a certain time frame that we have to negotiate with the state of North Carolina relative to what procedures we are going to use and of course the time to get these cleanups will be dependent upon what the procedures we use and the availability of funding. I would anticipate sometime within the next two to three years some type of a process will be developed in which we'll start the clean up action. Right now we've just stopped using those wells. We have put down monitor wells to monitor migration of any of the contaminates to ensure we are keeping it contained until such time as when we can get a clean-up process initiated.

Q. Will Camp Lejeune be in charge of clean-up or will state and federal EPA officials contract it out?

A. Camp Lejeune will be responsible for that. We will work through our engineers at the Naval Facilities Engineering Command in Norfolk, Va., and it will be in conjunction with the federal and state EPA. We have to work hand-in-hand. Some of the funding will come through the Navy, some will come through the Super Fund that's authorized by Congress.

Doc. No.: CLEJ-00504-9.05-9/01/9

Public notice to all Base water system customers

The United States Congress amended the Safe Drinking Water Act in 1986 (Public Law 99-339). One requirement of this act is that all people using a public water system should be notified of the potential for exposure to Lead through the water distribution system and the plumbing in individual homes. All public water systems are required to make this notification even if there is no evidence of lead contamination and the drinking water complies with standards established by the United States Environmental Protection Agency (EPA).

What are the health effects of lead?

The EPA sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

The EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

What can I do about lead?

You can take two immediate steps.

The first step is to refrain from consuming water that has been in contact with your home's plumbing for more than six hours, such as overnight or during your work day. Before using water for drinking or cooking, 'flush' the cold water faucet by allowing the water to run until you can feel that the water has become as cold as it will get. You must do this for each drinking water faucet (taking a shower will not flush your kitchen tap). Buildings built prior to about 1930 may have service connectors made of lead. Letting the water run for an extra 15 seconds after it cools should also flush this service connector. Flushing is important because the longer water is exposed to lead pipes or lead solder, the greater the possible lead contamination. The water that comes out after flushing will not have been in extended contact with lead pipes or solder.

The second step is to never cook with or consume water from the hot-water tap. Hot water dissolves lead more quickly than cold water, so do not use water taken from the hot tap for cooking or drinking and especially not for making baby formula. If you need hot water, draw water from the cold tap and heat it on the stove. Use only thoroughly flushed water from the cold tap for any consumption.

What is Camp Lejeune doing about lead?

Camp Lejeune is taking several measures to reduce lead concentrations in the Camp Lejeune drinking water. Camp Lejeune monitors lead concentrations and other possible contaminants at all six of Camp Lejeune's plant distribution points. The last required testing disclosed lead concentrations at 0.005 ppm, well below the current EPA standard. In fact, EPA has proposed a lower standard for lead, 0.020 ppm, and Camp Lejeune's limits would be well below this proposed stricter standard. Camp Lejeune is currently negotiating a contract for a private, North Carolina and EPA qualified laboratory to conduct lead testing in 1988. camp Lejeune is also implementing the recent changes in the Safe Drinking Water Act. These changes require the use of 'lead-free' pipe, solder and flux in the installation or repair of plumbing connected to a public water system. Camp Lejeune will only utilize 'lead-free' pipe, solder, and flux in the future and will contractually require private contractors to utilize the same 'lead-free' materials.

Should I seek alternative sources of drinking water if I work or live aboard Camp Lejeune?

No. Camp Lejeune's water is quite safe to drink by all. As explained earlier, the lead concentrations at Camp Lejeune are well below the existing EPA standards, and well below the EPA's much stricter proposed standard. Testing of the drinking water for other contaminants is conducted on a regularly scheduled basis by the Base Natural Resources and Environmental Affairs Division (NREAD). The base NREAD laboratory is state certified for such water monitoring should be taken wherever you drink water, whether on- or off-base.

If you desire further information regarding your water supply, please contact the Assistant Chief of Staff, Facilities at 451-3034 or 3035 (on-base) or the EPA (on- or off-base) at 1-800-426-4791 or order the pamphlet Lead and Your Drinking Water from the U.S. Environmental Protection Agency, Washington, D. C. 20460.

The Camp Lejeune Globe June 9, 1988

Slippery problem: discarded oil

Story and photos by
Pfc. Timothy L. Paullin

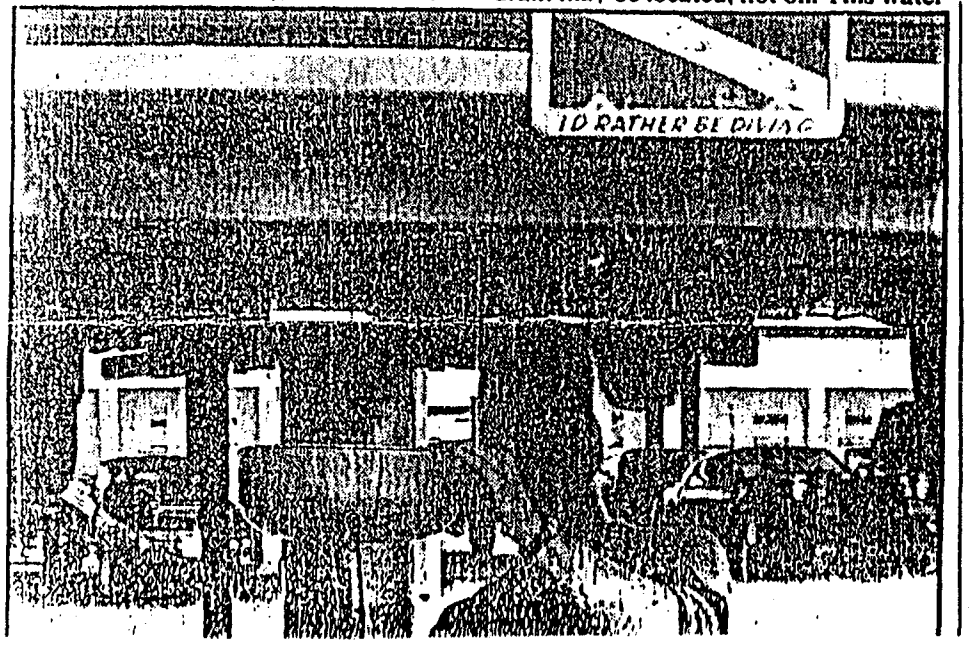
"Let me tell ya' a story about a man named Jed, A poor mountaineer, barely kep' his family fed. Then one day he was shootin' at some food, when up from the ground came a bubblin' crude-oil that is. Black gold. Texas tea," is the theme from the TV series Beverly Hillbillies.

This refined black gold is used for many things, one of which is in our vehicles . . . motor oil.

And this refined crude needs changing every so often. So what do you do with it once you've removed it from the car.

Look! A storm drain, what a convenient spot. Just park over the top of it and let the oil flow down into the storm drain.

Wrong answer! Storm drains filter rain water from a parking lot or wherever the drain may be located, not oil. This water then runs back into the ground water supply or river, according to Sammy D. Gwynn, biology technician with the Natural Resources Division



Some Marines are using these storm drains to dispose of their oil or are just pouring it onto the ground, according to Gwynn.

Dumping motor oil down a storm drain or on the ground is hazardous to the water supply and area wild life, according to Sammy Sharp of the Natural Resources Division.

"In compliance with Enviromental Protection Agency it is against Federal law to dump any kind of waste material on the ground. Once oil has been dumped then it must be cleaned up and properly disposed of. Cleaning up these waste materials is an expensive process. Not many people realize the cost involved," said Gwynn.

Storm drains are monitored on a routine basis for pollutants. Samples are taken to the lab of the Preventive Medicine Clinic located in Bldg. 65 where they are tested for contaminants.

The Natural Resources Division is here to ensure such hazardous materials are properly disposed of. Oil and waste materials being dumped is a on going pro-

"If the Marines and Sailors aboard base would use the auto hobby shop instead of dumping oil wherever, then this problem would not exist," said Gwynn.

"The auto hobby shop on base has the equipment to easily and inexpensively change your oil in about 30 minutes," said Sgt. Jackie Boone, the Special Services auto hobby shop assistant NCOIC. The procedure involved in changing your oil is simple.

"First you check in at the window and let them know you would like to change your oil. Then present your drivers license and ID card. The person on duty will then give you an oil can for your oil and the necessary tools to assist you. The cost is $1.50 per half hour and a $1.50 for tools," said Boone.

All there is to do now is put your car on the rack and lift it up. With your car suspended, the rest is simple, and the oil drains into the can provided.

With oil can in hand you simply pour it down an oil storage tank provided especially for waste oil. After the attendant checks your area to make sure all the oil is cleaned up he will return your license.

Changing your oil could otherwise cost about $20 or a lot more, depending on

Doc. No.: CLET-0050A-9.05-9/01/9

Doc. No.: CLEJ-00504-9.05-9/01/90

Lejeune potential waste cleanup site

By TOM MATHER
Staff Writer

The U.S. Environmental Protection Agency is considering adding about six North Carolina sites, including Camp Lejeune Marine Corps base in Onslow County, to its priorities list for cleaning up hazardous wastes, EPA officials said Friday.

"Camp Lejeune is currently being considered for the NPL [national priorities list]," said Trudi J. Fancher, an NPL coordinator with the EPA in Washington.

"There are approximately a half-dozen [North Carolina] sites being considered right now," she said. "I can't be more specific than that," she said.

The EPA expects to propose about 200 new sites to the "Superfund" priorities list in April, Ms. Fancher said. Currently, the EPA has approved or proposed 951 Superfund sites, including 11 in North Carolina.

Such listing makes privately owned sites eligible for cleanup money from an $8.5 billion fund established by the federal Superfund Amendments and Reauthorization Act of 1986, Ms. Fancher said by telephone. But sites on federal land, such as Camp Le-

See EPA, page 2C

Doc. No.: CLEJ-00504-9.05-9/01/90

EPA may clean up site at Lejeune

jeune, are not eligible for Superfund money.

"The agency which is responsible for the site provides the funds," she said of cleanup efforts for federal lands. "The NPL serves primarily to inform the public about potential problem for the site."

Before sites can be added to the priorities list, Ms. Fancher said, the EPA officially must propose them for listing and then hold public hearings. Those hearings probably will not be held until late spring or summer.

Camp Lejeune uses and produces large quantities of hazardous materials and wastes, according to Major Stuart W. Wagner, joint public affairs director for the base.

"Although no hazardous waste is permanently stored aboard base, past hazardous waste disposal relied on burial," Wagner said in a written statement. "This disposal method was acceptable at the time, but was subsequently found to potentially cause long-term problems through release of hazardous material into the soil and ground water.

"Camp Lejeune realizes that the high amounts of hazardous material used aboard base presents the potential for damage to the environment, and vigorously pursues hazardous waste planning and training."

In a 1983 study of past waste disposal practices, the base identified 76 potentially contaminated areas, 22 of which warranted further investigation, he said. Most of the current study has focused on the Hadnot Point industrial area of the base, where officials found chemical contamination in eight of 35 wells in 1985, he said.

Wells and disposal sites should not pose health hazards to people living or working on or near the base as long as they drink water from approved sources, officials said. People should not to drink water out of streams or from unchecked wells on the base.

The base is working with the EPA to develop a cleanup plan for the sites, but officials said they do not know how much it will cost yet. The cleanup will be paid for by the Marines and an environmental restoration fund established by Congress for federal lands.

Camp Lejeune has set up a 24-hour phone line for people with questions or comments about the waste sites. The number is 451-5100.

NEWS AND OBSERVER 2A March 5, 1988
Raleigh, N.C.

* but eligible for Defense Environmental Restoration Money.

3 March, 1988
The Globe

Continuous sampling ensures safe drinking water

Story and photo by Pfc. Timothy Paullin

With the weather getting warmer and as training progresses, more and more water is being used for drinking here as well as in the outlying areas.

The water supply is plentiful and there shouldn't be any concern with how much water is being consumed.

But concerns about whether or not the drinking water is contaminated have been mentioned.

Elizabeth A. Betz, supervisory chemist, at the National Resources Environment Affairs Division is in charge of making sure the water is properly tested.

is properly tested.

"The drinking water here is perfectly safe. I drink it myself," said Betz.

The ground lab where Betz works monitors the water and waste treatment facilities at Camp Lejeune, Camp Johnson and the Rifle Range, as well as MCAS, New River.

There are eight water treatment plants. Two of them are in the process of being shut down, but the Holcomb Blvd. facility has been expanded to cover the area of those two and better serve the Marines here.

These treatment facilities are monitored in compliance with the Water Safety Act, as well as the Clean Water Act regulations of the NREAD.

The water is tested through samples taken from water treatment plants and distribution systems here to ensure that the water we are drinking is safe.

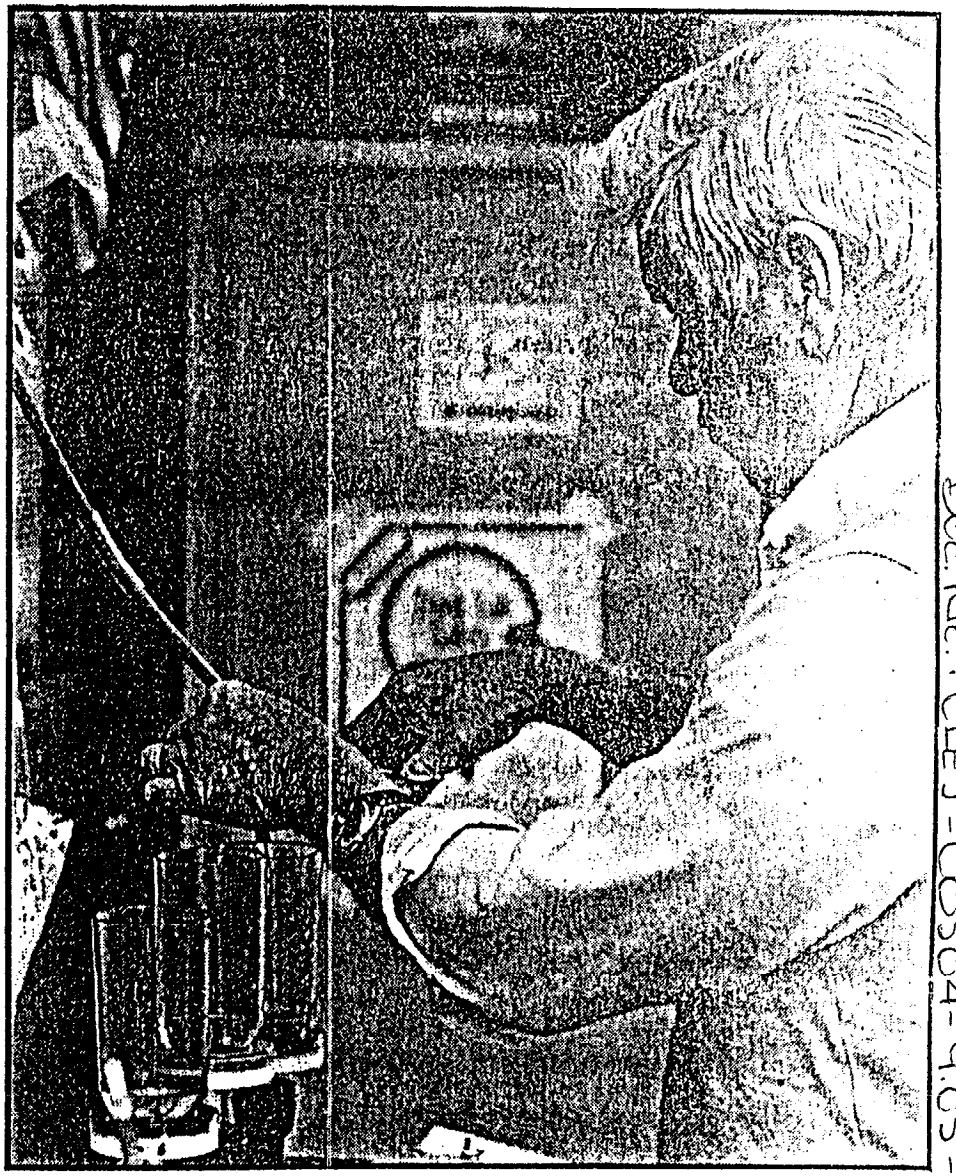
Physical science technicians take these samples to their lab in Bldg. 65 and perform bacteriological tests on the water weekly.

If any samples are found to have traces of contaminants in the water, the same water supply is tested two more times to double check.

The technicians would also double check the water treatment process to make sure it is still putting out clean, drinkable water.

In the event they still find a contaminant, the lab with the help of the Preventitive Medicine Clinic will make sure there is no chance of an epidemic resulting from the bacteria.

The micro-biology team monitoring the water treatment facilities will be the first to know problems with the drinking water here and will immediately correct problems that arise, according to Betz.



Physical science technician H. J. Burns makes a weekly bacteriological exam of waste water from the treatment plant.

Doc. No. CLET-C0504-9.05-9/01/90

Doc. No.: CLEJ-00504-9.045-9/01/90

Waste sites at base likely to be included on EPA list

By Jack Murphy
Star-News Correspondent

CAMP LEJEUNE — Parts of the base where contaminated groundwater was detected are expected to be placed on the Environmental Protection Agency's list of hazardous waste sites later this month, base officials said Thursday.

The EPA plans to include the sites on its National Priorities List of hazardous waste locations which qualify for cleanup funded by what is commonly known as the EPA's Superfund.

In the case of military installations, however, the cleanup funds come from the Defense Environmental Restoration Account, established by Congress to pay for cleaning up Department of Defense hazardous waste sites.

A preliminary study completed in April 1983 identified 76 potentially contaminated sites on the base and said 22 warranted further investigation, although the study concluded that none posed an immediate hazard to the environment or human health.

In a 40-page document released Thursday outlining the cleanup efforts, base officials said no hazardous waste was being stored permanently at the base now, but that in the past some waste had been buried, a disposal method later found to have long-term potential for contaminating soil and groundwater.

The report pledged base cooperation with the cleanup.

The investigation has focused on the industrial area of the base, where 8 of 35 wells showed traces of chemical contaminants in 1985.

The wells were closed. No source has been found for the chemicals, identified as trichloroethylene, dichloroethylene and tetrachloroethylene — all used primarily as solvents.

Periodic tests since then have shown no contamination of base drinking water.

Once the sites are on the National Priorities List, the base will have six months to put together an additional study, with the assistance of the EPA and state environmental officials. After that, an agreement must be reached to correct problems within another six months.

For anyone with questions about the issue, the base has set up a 24-hour telephone hotline, 451-5100.

PUBLICATION: MORNING STAR PAGE: 3C DATE: 24FEB88

CITY, STATE: WILMINGTON, N.C.

EPA considers waste cleanup at Marine base

Doc. No.: CLEJ-00504-9.05-9/01/90

By RICHARD F. SMITH
Daily News Staff

The Environmental Protection Agency is likely to put Camp Lejeune on the national priority list for cleanup of groundwater contamination, according to a base spokesman.

EPA action is expected in the next few days, said Maj. Stuart Wagner of the Lejeune Joint Public Affairs Office.

EPA officials are expected to prioritize the cleanup as a result of a 1983 study to identify, evaluate control and correct groundwater pollution on base, particularly in the Hadnot Point industrial area.

Toxic chemicals were discovered in 1985 in eight wells at Hadnot Point. Those wells are now closed.

The list establishes priorities for the EPA's use of Superfund monies to clean up hazardous waste sites in the United States.

Lejeune "uses and produces large quantities of hazardous materials and waste products. Although no hazardous waste is permanently stored aboard base, past hazardous waste disposal relied on burial." Wagner said in a prepared statement.

"This disposal method was acceptable at the time, but was subsequently found to potentially cause long-term problems through release of hazardous material into the soil and water," Wagner said.

"Camp Lejeune realizes that the high amounts of hazardous material used aboard base presents the potential for damage to the environment and vigorously pursues hazardous-waste planning and training.

"The base has been recognized as a model installation and will use the same commitment to excellence to deal with the groundwater contamination and will work with the EPA to clean up the sites as rapidly as possible," Wagner said.

Initial steps involve the installation restoration program, a three-phase process to identify past hazardous waste sites and take necessary cleanup action.

The first stage is a preliminary assessment/site inspection, which was completed at Lejeune in April 1983.

That study identified 76 potentially contaminated sites and concluded that while none of the areas posed an immediate threat to human health or the environment, 22 sites warranted more investigation, Wagner said.

In 1985, the Hadnot Point industrial area showed traces of trichloroethylene, dichloroethylene and tetrachloroethylene in eight of 35 wells in the area. Affected wells were immediately closed.

No single contamination point has been identified as the source of pollution of the wells and no contamination has been detected by periodic tests of drinking water on base, Wagner said.

PUBLICATION DAILY NEWS DATE 23 FEBRUARY, '88 PAGE 1-B
TY, STATE JACKSONVILLE, NORTH CAROLINA

Doc. No.: CLEJ-00504-9.05-9/01/90

Lejeune's project coordinator, Col. Thomas J. Daizell, assistant chief of staff for facilities, said most of the pollution was caused by motor pools in Hadnot Point.

"At that time, oils, greases, solvents, gasoline and cleaning fluids and other types of chemical compounds that were used in our everyday processes were just being dumped in the ground or dumped in sewers or things like that; we really were not aware back in the '60s and '70s of the effects on groundwater contamination," Daizell stated.

Following placement of Lejeune on the priorities list, base officials will have six months to start a remedial investigation/feasibility study in consultation with the EPA and state agencies. Time to complete that review is negotiable and must include public participation.

Within 180 days after completion of that stage, Lejeune must reach agreement with EPA and state officials for completion of all necessary corrective actions.

"Substantial continuous physical on-site remedial action must take place no later than 15 months after completion of the remedial investigation/feasibility study," Wagner said.

Lejeune "continuously pursues a vigorous program of hazardous-waste training, handling and management that includes annual courses of instruction for those dealing with hazardous waste. In addition, the base has minimized the use of hazardous materials by substituting non-hazardous substances for vehicle maintenance and parts cleaning," the major said.

The base has set up a 24-hour hotline for questions and comments concerning the national priorities listing. The telephone number is 451-5100.

Trichloroethylene, or TCE, was commonly used during the 1970s as a chlorinated solvent for degreasing aircraft and has also been found in dump sites at Cherry Point air station in Havelock — but not in drinking water there — and in three wells on or near El Toro Marine air station in Orange County, Calif.

Dichloroethylene and Tetrachloroethylene also are toxic chlorinated solvents. They are found in many types of cleaning products.

Lejeune was cited by state environmental agencies during 1985 for violating groundwater standards.

Tests of 22 suspected hazardous-waste pollution sites at Lejeune have detected heavy metals, organic chemicals and pesticides, but concentrations are not high enough to endanger humans, base officials said in December 1985.

Those sites were targeted for more investigation because of known or suspected contamination from fuel, discarded explosives and chemicals including toxic solvents, cancer-causing polychlorinated biphenyls or PCBs in transformer oil and pesticides.

PUBLICATION DAILY NEWS DATE 23 FEBRUARY,'88 PAGE CONT'D

CITY, STATE JACKSONVILLE, NORTH CAROLINA

Doc. No.: CLEJ-00504-9.05-9/01/9

Base site may get cleanup priority

By Jack Murphy
Star-News Correspondent

CAMP LEJEUNE — An industrial complex on the base here is likely to be placed on a priority list for cleanup work by the Environmental Protection Agency, a base spokesman said Thursday.

First Lt. Frank Shaw, spokesman for the base public affairs office, said Camp Lejeune is being considered along with other federal installations to be included on the EPA's National Priorities List for the EPA's Superfund, a pool of money set aside to clean up what EPA identifies as the most serious toxic waste problems in the United States.

Shaw said federal facilities are not eligible for Superfund money unless the contamination is caused by a private concern. The Hadnot Point industrial area is Lejeune's major problem site, he said. It is on the left on Holcomb Boulevard as one enters the "mainside" area of the base across from the main post exchange.

Shaw said a study of the area showed traces of trichloroethylene, dichloroethylene and tetrachloroethylene in eight of 35 wells in 1985. The wells were closed immediately and have remained closed.

No contamination has been detected during periodic testing of drinking water on the base, he said.

Shaw did not identify a possible source of the chemicals but said the base has minimized use of hazardous materials by substituting non-hazardous substances for vehicle maintenance and parts cleaning.

Dec. 25, 1987 p.1c

Doc. No.: CLET 00526
9.05 - 9/01/90

Lejeune likely to be on cleanup list

By RICHARD F. SMITH
Daily News Staff

The U.S. Environmental Protection Agency is likely to place Camp Lejeune on the national priorities list for hazardous waste cleanup, according to a base spokesman.

The EPA is considering that action as a result of the 1985 discovery of water contamination by toxic chemicals in 10 Lejeune wells that are now closed, said 1st Lt. Frank Shaw of the base Joint Public Affairs Office.

Other federal installations are likely to be placed on the list in addition to Lejeune.

"The national priorities list establishes priorities for the EPA's use of Superfund monies to clean up what they consider to be the most serious toxic sites in the United States," Shaw said.

"However, federal facilities are not eligible to receive Superfund monetary assistance unless the contamination is caused by a private concern," the spokesman said.

"The area under study is the Hadnot Point Industrial Area. In 1985, traces of trichloroethylene, dichloroethylene and tetrachloroethylene were found in eight of 35 wells in the area," Shaw said.

"The affected wells were immediately closed and have remained closed since. No single contamination point has been identified as the source of contamination for the wells and no contamination has been detected by periodic tests of drinking water aboard base," the lieutenant said.

"We're going to have to clean this up. The EPA is saying you've got to clean this up," Shaw said. He had no estimate of how much the project would cost or when it could begin.

If the base cannot prove the pollution comes from a private source, military funds must pay for the cleanup.

Trichloroethylene, or TCE, was commonly used during the 1970s as a chlorinated solvent for degreasing aircraft and has been found in dump sites at Cherry Point air station in Havelock — but not in drinking water there — and in three wells on or near El Toro Marine air station in Orange County, Calif.

Dichloroethylene and tetrachloroethylene also are toxic chlorinated solvents. They are found in many types of cleaning products.

Lejeune was cited by North Carolina environmental agencies during 1985 for violating ground water standards.

Two of the 10 closed wells were in

See CLEANUP, 14A

PUBLICATION Daily News DATE 24 Dec 1987 PAGE 1A
CITY, STATE Jacksonville, N.C.

Doc. No.: CLEJ-00504-9.05-9/01/90

Cleanup

From Page 1A

Tarawa Terrace and were polluted by a dry cleaner on Lejeune Boulevard, according to base officials.

"Camp Lejeune continuously pursues a vigorous program in hazardous waste training, handling and management that includes annual courses of instruction for those persons dealing with hazardous waste," Shaw said.

"The base has minimized the use of hazardous waste materials by substituting non-hazardous substances for vehicle maintenance and parts cleaning. No hazardous waste is currently disposed of aboard Camp Lejeune," Shaw said.

Tests of 22 suspected hazardous-waste pollution sites at Lejeune have detected heavy metals, organic chemicals and pesticides, but concentrations are not high enough to endanger humans, base officials said in December 1985.

Those sites were targeted for more investigation because of known or suspected contamination from fuel, discarded explosives and chemicals including toxic solvents, cancer-causing polychlorinated biphenyls or PCBs in transformer oil and pesticides.

Base officials have said those 22 sites are not considered dangerous because only trace amounts of contamination have been found to have escaped from the dumps, and people have not been directly exposed to those pollutants.

Until recent years, hazardous chemicals — including mercury and the pesticides chlordane, Diazinon and DDT — have been burned, spilled and dumped at locations across the 170-square-mile base.

No one has been identified as being harmed by the pollutants, base officials have said.

According to a Navy survey, spills of hazardous materials over the last 40 years at Lejeune have included gallons of mercury — enough to poison 184,000 acres of foot-deep water if it ever reaches the shallow water table.

The mercury was drained from radar equipment and buried, according to officials.

Since the 1960s, Building 712 had housed a nursery and day-care center for children of Marines and sailors.

However, the children were moved away in 1982 when the soil of their playground was found to be poisoned by a number of pesticides, according to the Navy review.

PUBLICATION Daily News DATE 24 Dec 1987 PAGE 1A

CITY, STATE Jacksonville, N.C.

Doc. No.: CLEJ-00504-9.05-9/01/90

Toxic chemical once at Lejeune, now at El Toro

By RICHARD F. SMITH
Daily News Staff

The same toxic chemical found during 1985 in 10 wells at Camp Lejeune is in three wells on or near El Toro Marine air station in California. Officials there recently began a probe into the cause of the contamination.

The 10 Lejeune wells were closed in 1985 after pollution by cancer-causing trichloroethylene and two other chemicals was discovered.

Lejeune water remains safe to drink, according to 1st Lt. Frank Shaw of the base Joint Public Affairs Office.

Trichloroethylene, or TCE, was commonly used during the 1970s as a solvent for degreasing aircraft and is in identified dump sites at Cherry Point air station in Havelock, said Cherry Point spokesman Gunnery Sgt. Bill Brown.

TCE has not been found in drinking water at Cherry Point, he said.

"We're dealing with skeletons of the past, 40 years of dumping with minimal or no control, to where now nothing goes into the ground," Brown explained.

Orange County, Calif., Water District officials agreed in late November to investigate high levels of TCE in three agricultural wells on or near El Toro, according to The Register newspaper there.

One well is on El Toro. Two are outside the base and supply water to farms.

The four-month study in California will cost between $260,000 and $590,000.

California water-quality officials ordered the Marine Corps in July to investigate the well contamination. However, Marines agreed to study only the pollution found on El Toro. They said a special Pentagon cleanup fund cannot be used on private property.

Fearing TCE could spread if negotiations dragged on, Orange County Water District officials agreed in late November to fund the study.

They will seek reimbursement from Marines if El Toro is responsible.

Up to seven monitoring wells will be drilled to identify the TCE source.

Water supervisors in Orange County are convinced TCE found in two Irvine Co. wells seeped from El Toro because it was formerly used for degreasing aircraft, The Register reported.

The Irvine Co. land has been used only for agriculture for decades. Farmers did not use the industrial-strength solvent.

Water from the three Orange County wells is safe for agriculture, but contains as much as 10 times more TCE than California allows for drinking water.

Irvine Co. planned to use its wells for homes in the Irvine area during a prolonged drought or if development strains existing supplies.

Ten of Lejeune's 100 wells were closed in May 1985 when TCE and two other toxic chlorinated solvents — dichloroethylene and tetrachloroethylene — were found in well water.

Lejeune was cited by N.C. agencies for violating ground water standards.

Eight of the closed wells were in the Hadnot Point water system. The other two were in Tarawa Terrace.

Well closings forced water-use restrictions in May 1985 in Tarawa Terrace.

An auxiliary waterline from the Holcomb Boulevard water plant to Tarawa Terrace was completed in June 1985 and water restrictions were lifted.

"The stuff (TCE) is still there" in the closed wells, Shaw said today.

Two wells were polluted by a dry cleaner on Lejeune Boulevard, Shaw said.

Eight were contaminated "by long-term spillage of materials on the ground. They (Lejeune officials) don't have a single source of contamination. It gets washed by rainwater into the ground (water) system. We're continuing to monitor the wells and track contamination," Shaw said.

TCE "is used as a solvent for a variety of things. We've developed a training program for hazardous waste handling and management. That's the long-term solution, the only way you'll clean it up," Shaw said.

Cherry Point waste sites bearing TCE in the soil are off-limits and are checked by that air station's Natural and Environmental Resources Office, Brown said.

PUBLICATION Daily News DATE 871222 PAGE 1-B
CITY, STATE Jacksonville, N.C.

Contaminated waste sites may lead to EPA National Priorities Listing

Doc. No.: CLEJ-00504-9.05-9/01/90

As a result of a 1983 study program to identify, evaluate, control and correct past deficient waste disposal sites and practices involving ground water contamination here, the Environmental Protection Agency is likely to place Camp Lejeune on the National Priorities List in late February.

The NPL establishes priorities for the EPA's use of Superfund monies to clean up hazardous waste sites in the United States.

Camp Lejeune uses and produces large quantities of hazardous materials and waste products. Although no hazardous waste is permanently stored aboard base, past hazardous waste disposal relied on burial.

This disposal method was acceptable at the time, but was subsequently found to potentially cause long-term problems through release of hazardous material into the soil and ground water. Camp Lejeune realizes that the high amounts of hazardous material used aboard base presents the potential for damage to the environment, and vigorously pursues hazardous waste planning and training. The base has been recognized as a Model Installation, and will use the same commitment to excellence to deal with the ground water contamination, and will work with the EPA to clean the sites as rapidly as possible.

The initial steps to clean up the sites involve the Installation Restoration (IR) Program, a three-phase nationwide process to identify past hazardous waste sites and take necessary cleanup action.

The first phase is a Preliminary Assessment/Site Inspection (PA/SI), and was completed in April 1983 for Camp Lejeune. The study identified 76 potentially contaminated sites, and concluded that while none of the sites pose an immediate threat to human health or the environment, 22 sites warranted further investigation.

The area primarily under study at Camp Lejeune is the Hadnot Point industrial area. In 1985, traces of trichloroethylene, dichloroethylene and tetrachloroethylene were found in 8 of 35 wells in this area. The affected wells were immediately closed, and have remained closed since. No single contamination point has been identified as the source of contamination for the wells, and no contamination has been detected by periodic tests of drinking water aboard base.

The chemicals found are used primarily as solvents and degreasers.

Following the placement of Camp Lejeune on the NPL, the Base has six months to initiate Remedial Investigation/Feasibility Study (RI/FS) action in consultation with EPA and appropriate state authorities. Time to complete the RI/FS is negotiable and must include public participation.

Within 180 days after completion of the RI/FS, Camp Lejeune must reach an agreement with EPA and state authorities for the completion of all necessary remedial actions at Camp Lejeune. Substantial continuous physical on-site remedial action must take place no later than 15 months after completion of the RI/FS.

Camp Lejeune continuously pursues a vigorous program of hazardous waste training, handling and management that includes annual courses of instruction for those dealing with hazardous waste. In addition, the base has minimized the use of hazardous materials by substituting non-hazardous substances for vehicle maintenance and parts cleaning.

The base has established a 24-hour Hotline for questions and comments concerning the National Priorities Listing. The number is 451-5100.

Doc. No.: CLEJ-00504-9.05-9/01/9

OPNAV 5216/144A (Rev. 8-81)
S/N 0107-LF-052-2320

DATE:

FROM:

TO:

SUBJ:

DEPARTMENT OF THE NAVY

Memorandum

Camp Lejeune water testing underway

13 Dec 84

Globe Staff Report

Environmental officials here are taking precautionary measures to ensure drinking water is free from possible contamination.

AS A RESULT of water samples taken Dec. 3, four wells in the Hadnot Point industrial area were found to contain some traces of organic compounds. According to Base Environmental Engineer Bob Alexander, four of 35 wells serving the Hadnot Point water treatment plant were shut down and additional test samples ordered [illegible]

None of the organic compounds noted in the test samples are listed in the regulations under the Safe Drinking Water Act. Testing is being conducted as part of a basewide confirmation study which is currently underway to verify whether any groundwater contamination exists and to identify abatement measures.

The closing of the four wells has not affected the ability of the Hadnot Point water treatment plant to produce potable water. Alexander added that daily water samples are being taken from the water treatment plant to ensure drinking water remains within prescribed federal and state guidelines established by the Safe Drinking Water Act.

A DETAILED SAMPLING effort of the entire Hadnot Point water system will be completed in the coming months to pinpoint any wells which might contain organic compounds. If necessary, an abatement plan will be prepared for approval by the North Carolina Division of Health Services.

The Hadnot Point water treatment plant has the capacity to produce five million gallons of potable water per day. It serves the Hadnot Point industrial area, French Creek and Hospital Point. Alexander emphasized that every effort will be made to maintain the excellent quality water supply traditionally provided to residents of Camp Lejeune.

[illegible]

U.S. GOVERNMENT PRINTING OFFICE: 1983-403-010/1810

Doc. No.: CLEJ-00504-9.05-9/01/90

Environmental study kicks-off

A team of experts contracted by the Navy is conducting an extensive environmental study at Camp Lejeune and MCAS, New River. The study, which began in May, will assess pollution control operations and soil and ground water quality at 21 sites throughout Camp Lejeune and New River.

Environmental engineers and scientists from the consulting firm of Environmental Science and Engineering, Inc. of Gainesville, Fla., will spend approximately six weeks drilling wells and collecting water, soil and sediment samples to determine if hazardous materials exist and/or have the potential to contaminate the environment upon the base.

Colonel M. G. Lilley, assistant chief of staff, facilities, stated, "While contractor personnel will rountinely wear personal protective equipment such as chemical resistant coveralls, we do not expect to expose anyone to any contaminants."

The results of the survey are due in August 1984. If any contaminants are discovered, a review of alternatives will determine action necessary to meet health and environmental standards.

Everything advertised in this publication must be made available for purchase, use or patronage without regard to race, creed, color, national origin, or sex of the publisher, user, or patron. A confirmed violation or rejection of the policy by an advertiser will result in the refusal to print advertising from that source.

7 JUNE 84

Doc. No.: CLET-00504-9.05-9/01/90

The following clipping appeared in the News and Observer

From Raliegh, N.C. Dated 16 FEB 82 Page 1C

Toxic waste sites are listed by EPA

By NASH HERNDON
Staff Writer

A list of 167 possible hazardous waste sites, including more than 100 that were unknown to state authorities before a 1980 federal law required waste dumps to be reported, was released Monday by state health officials.

"The locations of these sites range from the mountains to the coast and include industrial plants, military facilities, municipal and county landfills and abandoned garbage dumps," Dr. Ron H. Levine, state health director, said at a news conference.

State and federal Environmental Protection Agency officials said they did not know whether there were health or environmental problems at any of the locations or how serious such problems could be.

The sites are in 49 of the state's 100 counties; six are in Wake.

O.W. Strickland, head of the solid and hazardous waste branch of the Department of Human Resources, estimated that authorities had been aware of "about 25 percent" of the sites before the list was compiled.

Levin said many sites may have been reported by mistake or may not contain hazardous materials, while others may pose no health or environmental threat. A preliminary review of the list, he said, showed "more than 50 such sites" fall into those categories.

He said state and federal inspectors would examine the locations by next summer to determine whether they should be cleaned up or monitored.

"If we had any indication this morning (of a serious problem), we'd be out there instead of here," said R. Paul Wilms, enviornmental management assistant director of the N.C. Department of Natural Resources and Community Development.

"But with what we know right now, we don't have any information that gives us any undue concern," he said.

The list was turned over to the state this year, Levine said. It was compiled by the EPA in response to the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, which gave waste producers until last June to identify their potentially harmful waste dumps.

The law is commonly called the "superfund" because it created a $1.6 billion fund to clean up toxic waste sites when liability is unknown or dubious. The fund is based on fees paid by chemical and oil companies.

Sites to be investigated first will be determined by the type and volume of waste, distance from populated areas and possibility of fire or other hazards. Levine said.

EPA inspectors will investigate the 27 military waste sites on the list and any sites the state requests. N.C. Department of Human Resources and Natural Resources inspectors will examine the others.

The state had been aware of only three of six Wake County sites before receiving the list, state officials said in interviews. The new locations are:

- An unknown quantity of unknown substances buried by Burlington Industries at its Wake Finishing Plant on U.S. 1 North between 1967 and 1970. A Burlington spokesman in Greensboro said in a telephone interview that the substances apparently were used in textile dying and finishing.
- About 40,000 gallons of various solvents and other chemicals at the Mallinckrodt plant on U.S. 1 North produced between 1967 and 1973 and buried on three acres at the plant.
- A small quantity, about 10 cubic feet, of sodium cyanide salts, sodium carbonate and calcium carbonate at East Carolina Heat Treat Service on South Saunders Street. The chemicals were used to treat metal and were dumped on the property, according to EPA records.

The plant has stopped dumping the materials, and groundwater monitoring in the area has shown no contamination, EPA records show

The other sites in Wake are pentachlorophenol in sediment at Koppers Co. Inc. on N.C. 54 near Morrisville, about 15,000 cubic feet of various chemicals stored between 1972 and 1975 at the Cooper Industries' Lufkin Plant near

See EPA LISTS, page 12C

Doc. No.: CLET-00504-9.05-9/01/90

The following clipping appeared in the News and Observer

Raleigh, N.C. 16 FEB 82 1C

From Dated Page

EPA lists toxic waste sites; officials unsure of hazards

Continued from page 1C

Apex, and about 300,000 cubic feet of research chemicals from N.C. State University buried near Carter-Finley Stadium.

The list does not include PCBs illegally dumped along 210 miles of highways in more than a dozen counties in 1978. The spill is the only North Carolina waste problem previously identified in a national list of more than 100 hazardous waste problems targeted for cleanup under the superfund.

Here are the North Carolina sites released by state officials Monday where hazardous wastes might be located. The list includes the county in which the site is located, the site and chemical.

Alamance — Cone Mills Corp.-Granite Finishing Plant, Haw River, chemical unknown.

Beaufort — County landfill, Washington, listed for two sites, sludge and pesticide containers; Texasgulf landfill, Aurora, pesticide containers.

Bertie — Weyerhauser Co., Lewiston, pentachlorophenol.

Brunswick — Kerr-McGee Chemical Corp., Navassa, wood treatment sludge; E.I. Dupont-Cape Fear Plant, Phoenix, carbon tetrachloride, chloroform.

Buncombe — County landfill, Asheville, unknown; Grove Stone Landfill, Black Mountain, unknown; Fairview Landfill, Fairview, chemical unknown; Elk Mountain Landfill, Asheville, chemical unknown; Fishburne Landfill, Fletcher, chemical unknown; Swannanoa Landfill, Swannanoa, chemical unkown; American Enka Corp., Enka, fly ash, acid yarn residue; Sayles-Biltmore Bleacheries, Asheville, power plant cinders; Pond Road Landfill, Asheville, chemical unknown; Pathologists Medical Laboratory, Asheville, blood and urine; Hominy Creek Landfill, Asheville, chemical unknown; Amcel Propulsion Inc., Swannanoa, various chemical residues.

Cabarrus — Harrisburg Battery, Concord, sulfuric acid.

Caldwell — County Landfill, Lenoir, two sources for spray sludge; City Solid Waste Burial Site, Lenoir, spray sludge.

Catawba — Style Upholstering Inc., Hickory, sawdust and empty paint cans; Lackawanna Leather Co., Conover, toluene, methyl ethyl ketone.

Chatham — Southern Wood Piedmont, Gulf, possible arsenite, pentachlorophenol, copper chromic arsenic sludges; Allied Corp., Moncure, inorganic laboratory chemicals; Weyerhauser, Moncure, mostly waste oil; Chatham Novelties Co., Siler City, numerous solvents.

Columbus — Kaiser Acme Farmarket, Riegelwood, numerous pesticides; USS Agri-Chemicals Farm Service Center, Whiteville, fertilizer residue; LCP Chemicals, Riegelwood, two sites for sodium chloride, activated carbon, silicon dioxide, mercury and caustic materials.

Cumberland — Monsanto Co., Fayetteville, two sites for organic, heavy metals and chrome.

Davidson — Miller Tool Co., Gaither Division, Lexington, electroplating sludges; Municipal landfill, Lexington, nitro-based sludges; South[illegible] Thomasville, [illegible] acetate and oil chemicals.

[illegible] — IBM, Research Triangle Park, [illegible] sludges; Monsanto, Research Triangle Park, [illegible] sludge.

[illegible] County landfill, Fayetteville, chemical unknown; Mitchell Engineering Co., Rocky Mount, paint and paint sludge.

Forsyth — Beaunit Corp., Winston-Salem, organics; Johnson Controls-Globe-Union, Winston-Salem, two sites, lead oxide and sulfuric acid; Douglas Battery Manufacturing Co., Winston-Salem, two sites, acids, heavy metals, sludge; Chem-Dyne Corp., Kernersville, three sites, solvents.

Gaston — Lithium Corp. of America, Bessemer City, spodumen.

Graham — County landfill, Robbinsville, various sludges and polyvinyl acetate; Burlington Furniture, Robbinsville, sludges.

Guilford — Seaboard Chemical Co., Jamestown, four sites, various solvents; Cone Mills Corp., Greensboro, chemical unknown; Custom Finishers Inc., High Point, lacquers; Dow Corning Corp., Greensboro, PCB; City landfill, Greensboro, two sites, sulfuric acid, ethyl ether, ethanol, Vicks Nyquil; Hoover Universal Inc., High Point, solvents; Unitex Chemical, Greensboro, solvents; E.H. Glass County Landfill, Greensboro, Nyquil; City Landfill, High Point, listed for three sources, Nyquil, polyethylene plastic pellets, urea, solid latex paint, American Petrofina MKTG, Greensboro, gasoline, diesel fuel; Private farm, Route 1, Stokesdale, ethyl ether, ethanol; Gulf Oil Chemicals, McCleansville, nitrates, nitric acid and other chemicals; Duke Refining Co., High Point, chemical unknown; Monarch Furniture-Thaden Molding, Jamestown, sludge, cyanide, various metals.

Halifax — Helena Chemical Co., Enfield, pesticides.

Henderson — County landfill, Hendersonville, two sites, water-based paint; General Electric Co., Hendersonville, two sites, various metals; Carolina Log Buildings Inc., Fletcher, pentachlorophenol; Berkley Mills-Kimberly Clark Corp., Balfour, solvents, halogenated chlorides.

Hertford — Carolina Aluminum, Winton, various metals.

Iredell — Beaunit Corp., Statesville, organics; Overcash Machine Shop Inc., Statesville, no hazardous wastes; Southern Screw Co., Statesville, various metals, lime.

Johnston — Union Camp Corp., saw mill, Smithfield, mercury; American Petrofina MKTG terminal, Selma, gasoline, diesel fuel, lead.

Lee — County landfill, Sanford, sludge.

Lenoir — Du Pont Textiles Fiber Plant, Kinston, oil, solvents, acids and caustics.

Martin — Beaunit Corp., Hamilton, organics.

McDowell — Travenol Laboratories Inc., Marion, pyradine and nitrobenzene; American Thread Co., Marion, oils and dyes.

Mecklenburg — Swift Adhesives & Coatings, Charlotte, chemical unknown; Sinclair & Valentine Co., Charlotte, ink solvents; Crown Central Petroleum Corp., Thrift, petroleum; Koppers Co., Paw Creek, asphalt; Martin Marietta Corp., Charlotte, organics, acids; Lee Budd Paving Co., Charlotte, asphalt; Celanese Corp., Fibers Technical Center, Charlotte, acetone, methylene chlorine; city landfill, Charlotte, two sites, numerous chemicals; SCM Corp., Charlotte, vinyl acetate; Beaunit Corp., Charlotte, organics; American Petrofina MKTG terminal, Charlotte, gasoline, diesel fuel, lead; Daimar Co., Charlotte, 1,1,1-trichloroethane, methylene chloride.

Moore — Stanley Case Goods, West End, solvents; Carolina Galvanizing Corp., Aberdeen, calcium hydroxide sludge, metals.

Nash — County landfill, Spring Hope, methyl-iso-butyl-ketone; Unican Security Systems, Rocky Mount, nickle sludge.

New Hanover — County landfill, two sites, DMT; abandoned Dow Chemical Plant, ethyl bromide, freon 22, tetrahydrofuran, Hercofina, Wilmington, two sites, organics, metals, acids, lead; Basic Industries Plant, Castle Hayne, [illegible] arsenic sludges; Eaton General [illegible] Corp., Wilmington, paper waste; [illegible] Product Corp., Wilmington, [illegible] and chlorofluorocarbons; Corning [illegible] Corp., Wilmington, [illegible] toluene, xylene; Diamond Shamrock, Castle Hayne, chrome sludge; Northeast Chemical Co., Cape Fear Township, vanadium pentoxide; Castle Hayne Quarry, Castle Hayne, chrome.

Orange — University of North Carolina, Chapel Hill, two sites, numerous lab wastes, pesticides, heavy metals, PCBs; General Electric Co., Mebane, zinc, chromate and phosphates.

Person — Eaton Corp., Roxboro, acids, caustic soda, metals.

Pitt — David Starling property, Farmville, lead, mercury, chrome; Unnamed site on N.C. 11 near Ayden, pesticides; County landfill, Greenville, two sites, chemical plant fire residues, heavy metals; City landfill, Greenville, heavy metals; City Utility Dept., Greenville, heavy metals.

Randolph — High Point Furniture Industries Inc., High Point, solvents; Municipal landfill, Asheboro, heavy metals.

Richmond — County landfill, Rockingham, wood, dirt, cardboard.

Rowan — Owens-Illinois, Spencer, metals; County landfill, Salisbury, asbestos, lead; Proctor Chemical Co., Salisbury, textile wastes.

Sampson — Beaunit Corp., Clinton, organics.

Scotland — REA Magnet Wire Co., Laurinburg, enamels, copper; Helena Chemical Co., Laurinburg, pesticides.

Stanly — Caina Solite Corp.-Aquadale, Norwood, recycled solvents.

Stokes — R.J. Reynolds Tobacco Co., oil, dissolved lead, metals.

Swain — County landfill, Bryson City, sludge.

Transylvania — Olin Corp., Pisgah Forest, fly ash, paper; Du Pont, Brevard, cadmium chloride, hydrofluoric acid.

Union — Eaton Corp., Monroe, cardboard; County landfill, Monroe, sludge.

Wake — Koppers Co., Morrisville, pentachlorophenol; Mallinckrodt, Raleigh, solvents, acids and bases; East Carolina Heat Treat Service, Raleigh, sodium cyanide salts, sodium and calcium carbonate; Burlington Industries, Wake Finishing Plant, chemical unkown; Cooper Industries, Lufkin Plant, Apex, various chemicals, metals; N.C. State University, lab chemicals.

Wayne — Livewire Electric Co., Goldsboro, chloranated hydrocarbons, arsenic; County landfill, Goldsboro, asphalt, lime, fiberglass.

Wilkes — Radiation Physics Consultants, Purlear, toluene; County landfill, Ronda, urea formaldehyde, polyvinyl acetate, Burlington Furniture Home Chair Plant, Ronda, paint sludge.

Military sites — Wastes were unspecified, but generally include explosive materials, officials said. There are 12 sites in Craven County at Marine Corps Air Station, Cherry Point, two sites in Cumberland County at Fort Bragg and Pope Air Force Base, 12 sites in Onslow County at Marine Corps Base, Camp Lejeune and Marine Corps Air Station, New River, Jacksonville, and a site at abandoned Dow Chemical Plant in New Hanover.

Doc. No.: CLEJ-00504-9.03-9/01/9

The following clipping appeared in the Morning Star

From Wilmington, NC Dated FEB 82 Page

Area has its share of hazardous dumps

From staff and wire reports

Columbus, Brunswick and New Hanover counties are among those in North Carolina where potentially hazardous waste dumps exist, federal and state environmental agencies reported Monday.

Four sites in Columbus, two in Brunswick, 12 in New Hanover, 12 in Onslow and one in Sampson are among 167 scattered through half the counties of North Carolina and listed as potentially hazardous.

New Hanover County had the third largest number of sites listed, including the former landfill at Flemington.

Only Guilford County — which includes Greensboro and High Point — with 14 sites and Mecklenburg County — including Charlotte — with 13 had more sites listed. Wake County and Raleigh had only six sites listed.

Some of the listings may be duplications because they came from multiple sources.

In Columbus County, three of the listed sites were at Riegelwood: Kaiser Acme Farmarket, LCP Chemicals-Acme Plant and LCP Chemicals. The fourth site listed was the USS Agri-Chemicals Farm Service Center in Whiteville.

In Brunswick County, the sites listed were Du Pont's Cape Fear Plant at Phoenix and Kerr-McGee Chemical Corp. at Navassa.

New Hanover's sites include: county landfill, Flemington, listed twice; abandoned Dow Chemical Plant, Cape Fear Peninsula; Hercofina, Hanover Plant, Wilmington, listed for two sources; Ideal Basic Industries Plant, Castle Hayne; Southern Wood Piedmont Co., Wilmington; Estech General Chemical Corp., Wilmington; Container Products Corp., Wilmington; county and city landfills, Carolina Beach; Corning Glass Works, Wilmington; Diamond Shamrock, Castle Hayne; Northeast Chemical Co., Cape Fear [illegible] Hayne [illegible] ry, Castle Hayne.

Others in the region included Beaunit Corp.'s Clinton spinning and dyeing plant, in Sampson County, and 12 sites at Marine Corps installations in Onslow County.

The sites include dumping grounds for industrial plants and military bases, abandoned garbage dumps and city and county landfills still in use.

New Hanover County Commissioner Claud O'Shields Jr. heads a state commission studying hazardous waste handling. He said Mon-

MCBCL 5728/2

Doc. No.: CLET-00504-9.05-9/01/90

The following clipping appeared in the [illegible]

From Wilmington, NC Date 16 FEB 82 Page 1A

day the former landfill at Flemington is the only site that could be considered a serious problem. "Fifty percent of them contain absolutely nothing," O'Shields contended.

The Flemington landfill operated under a county franchise from 1973 to 1979.

The U.S. Environmental Protection Agency has blamed the landfill — and possible illicit deposits of industrial waste there — for polluting the wells of nearby residents. An EPA suit against the county and the landfill's owners and former operators is still pending in U.S. District Court.

Other locations listed included ammunition dumps and other sites at the state's largest military bases. In addition to the 11 sites at Camp Lejeune and one at New River Marine Corps Air Station, Jacksonville, the list includes Fort Bragg and Pope Air Force Base in Cumberland County and 12 sites at Cherry Point Marine Corps Air Station in Craven County.

EPA listed the sites as a result of a 1980 federal law which requires anyone with knowledge of past hazardous waste dumping to notify the government. Some of the sites date back as far as 1930.

Dr. Ron Levine, state health director, said many of the sites — more than 50 — "either don't contain hazardous wastes, were reported by mistake or are little or no threat to public health or the environment." In addition, several of the sites appear on the list several times for different problems.

But at some other sites, state officials say they don't know what kind of chemicals or other wastes have been dumped, how much has been dumped or whether the wastes threaten local water supplies.

"There are some sites on the list . . . that we either were not aware of or know little about," said Levine. "Some of these, we believe, will have to be monitored to determine if they are a potential environmental threat, and others may have to be

Please see DUMPS, 5A

MRCL 5728/2

Doc. No.: CLEJ-00504-9.05-9/01/90

The following clipping appeared in the Morning Star

From Wilmington, NC Dated 16 FEB 82 Page 1A

Dump

Continued from 1A

cleaned up. These sites are our main concern."

Levine, other state officials and EPA officials who released the list said about only about one-quarter of the sites had been known to them before they were reported.

State and federal officials declined to single out any of the sites as posing particular dangers and said they would begin immediately with on-site inspections to determine which needed the most attention.

Among those listed were sites:

- In Swannanoa in Buncombe County. Amcel Propulsion Inc. reported using an open pit to dispose of residue from military explosives and tear gas, and the state listed the dump as having "significant" impact on groundwater.
- In Thomasville. A company, Southern Resins, reported that the previous owner of its property buried 10,000 to 20,000 pounds of resins containing formaldehyde between 1960 and 1964.
- At three landfills in Greensboro and High Point. Richards-Vicks Inc. was listed as disposing of 15,100 gallons of Vicks Nyquil and Vicks nosedrops in small containers. They are 24 percent to 36 percent alcohol and "could be considered flammable," the state said.
- In Charlotte. A Martin Marietta Corp. plant reported earlier disposal of acids. The state said it has "signficantly contaminated" groundwater and the company has begun a water monitoring program.
- In Smithfield. Union Camp Corp. reported its property may have been contaminated by mercury under the previous owner, between 1963 and 1968.

Officials in Raleigh said none of the sites is thought to be dangerously close to homes.

"If we had any information this morning that led us to believe any was an imminent hazard, we would be out there this morning rather than here," said R. Paul Wilms, assistant director of the state Division of Environmental Management. "We don't have any information right now that gives us undue concern about a threat to public health."

Wayne Mathis, chief of site screening and engineering for the EPA's Atlanta regional office, said the agency invited reports from anyone with knowledge of dumping and that as a result, some of those listed were only "allegations" of hazardous sites.

Doc. No.: CLEJ-00504-9.05-9/01/9

APPENDIX C

INDUSTRIES IN ONSLOW COUNTY

Doc. No.: CLET-00504-9.05-9/01/90

INDUSTRIES IN ONSLOW COUNTY

ALTON PACKAGING CORPORATION
P.O. Box 1398
Jacksonville, NC 28540
455-5737
General Manager - Jim Hornbuckle

ATLANTIC INDUSTRIES
P.O. Box 5044
Jacksonville, NC 28540
455-8366
General Manager - Douglas Snyder

BARRUS CONSTRUCTION COMPANY
P.O. Box 905
Jacksonville, NC 28540
346-3224
Branch Manager - B.H. Chambers

BELLE-DREAM, INC.
P.O. Box 547
Jacksonville, NC 28540
455-0202
President - Alberto Weidlin
Manager - Lois Marshburn

CATHERINE LAKE FEED MILL
Route 1
Richlands, NC 28574
324-3226
Owner - Benford Cole

COSCO PRINTING COMPANY
408 Mill Avenue
Jacksonville, NC 28540
455-7070
Manager - Bob Scurry

DAILY NEWS
P.O. Box 196
Jacksonville, NC 28540
353-1171
Publisher - Michael McMillan

COOPERATIVE SAVINGS AND LOAN
P.O. Box 296
Jacksonville, NC 28541
347-4121
Manager - Ray Hemby

DEL-MAR GARMENTS, INC.
P.O. Drawer 1357
Jacksonville, NC 28540
347-7111
Manager - Mark Houston
Owner - Laran Houston

HOLLY RIDGE FOODS, INC.
P.O. Box 116
Holly Ridge, NC 28445
329-9061

LIBERTY INDUSTRIES
P.O. Box 5336
Jacksonville, NC 28540
346-8008
Fred Ruth, President

MARTIN-MARIETTA AGGREGATES
P.O. Box 90
Maysville, NC 28555
743-6471
Manager - W.H. Bailey

MINE SAFETY APPLIANCES COMPANY
352 White Street
Jacksonville, NC 28540
353-1540
Manager - Alan DiGiovanni
Personel - Jay Dustin

MURRAY CHRIS CRAFT
P.O. Box 68
Swansboro, NC 28584
326-1807
VP/General Manager - Steve Johnson

PROGRESSIVE SERVICE COMPANY
P.O. Drawer 1418
Jacksonville, NC 28540
353-4836
Manager - Bert Jones
Supervisor - Mike King

COOPERATIVE SAVINGS AND LOAN
P.O. Box 1353
Jacksonville, NC 28541
347-6444
Manager - George Lanvermeier

Doc. No.: CLEJ-00504-9.05-9/01/

INDUSTRIES IN ONSLOW COUNTY
(continued)

CAROLINA TELEPHONE
P.O. Box 98
Jacksonville, NC 28541
347-8011
Manager - Ty Hart

Doc. No.: CLEJ-00504-9.05-9/01/90

APPENDIX D

MEDIA LIST

Doc. No.: CLET-00504-9.05-9/01/90

MEDIA LIST

Newspaper

Daily News
660 Bell Fork Road
Jacksonville, NC 28540
(919) 353-1800

Wilmington Morning Star
P.O. Box 840
Wilmington, NC 28402
(919) 343-2312

The News and Observer
215 S. McDowell Street
Raleigh, NC 27601
(919) 829-4700

Television

WCTI CH-12 Broadcasting
305 Johnson Blvd
Jacksonville, NC 28540

WCTI-TV Heritage
P.O. Box 2325
New Bern, NC 28560
(919) 637-2111

WITN-TV (Channel 7)
411 Western Boulevard
Jacksonville, NC 28540
(919) 346-2655

WNCT TV-9
P.O. Box 898
Jacksonville, NC 28540
(919) 346-9999

WNCT-TV (Channel 9)
3221 Evans Street Ext.
Greenville, NC 27835
(919) 756-3180

Radio

WBTB-WZYC/BD Communication
Box 799
Beaufort, NC 28516
(919) 346-2837

WKOO
P.O. Drawer 1126
Jacksonville, NC 28540
(919) 455-5300

WIKS FM/KISS 102
207 Glenburnie Road
New Bern, NC 28540
(919) 633-1500

WJNC Inc.
904 Lejeune Boulevard
Jacksonville, NC 28540
(919) 455-2202

WLAS Radio
535 Bell Fork Road
Jacksonville, NC 28540
(919) 455-9528

WRCM Radio
307 Johnson Boulevard
Jacksonville, NC 28540
(919) 455-5300

WRNS Radio
824 Gum Branch Road, Suite I
Jacksonville, NC 28540
(919) 455-9501

WSFL Radio Station
Gum Branch Sq. II, #126
Jacksonville, NC 28540
(919) 455-6000

WXQR
10 Hargett Street
Jacksonville, NC 28540
(919) 347-6397

Doc. No.: CLET-00504-9.05-9/01/90

APPENDIX E

COMMUNITY INTERVIEW PARTICIPANTS

Doc. No.: CLET-00504-9.05-9/01/90

COMMUNITY INTERVIEW PARTICIPANTS

1. **Ray Hemby -- Chairman, Military Affairs Committee**

Interview Date: 5 February

Concerns: Had never heard of rifle range, fuel farm, HPIA sites but had heard something about waste of some sort being uncovered out at the Air Station a couple of years back. Major concerns about the potential for cross-over contamination from base sites into town. Questioned whether base may be continuing any practices such as toxin usage which may be affecting the air and whether mercury site was discharging anything into the New River. Also questioned whether there have been any analyses of fish tissue from the New River by the federal government.

Future Information: Had heard of the problem first through the Daily News and believes that is the most effective method to keep the public informed in the future.

2. **Lindy Cockman -- President, Military Affairs Committee**

Interview Date: 5 February

Concerns: No specific concerns aside from general concern about any issue that affects the environment. Thinks base is taking the right approach to dealing with the problem. Thinks proactive stance in relation to other county sites is admirable.

Future Information: Learned of the sites through the Daily News and believes this is the most effective medium.

3. **Cameron Lanier, Environmental Health Supervisor**

Interview Date: 5 February

Concerns: Major concern is the proximity of the sites to the New River. Questioned if any testing has been done on fish tissues in New River. Wanted to know what happens if problem is found with this issue and was told it would depend on amounts of toxins found. Believes problem will get worse the longer we go without testing fish. Also concerned about us nailing down the extent of contamination at the rifle range and Air Station sites specifically.

Future Information: Believes Daily News is the most effective medium for public to receive information.

Additional Information Requested: Background information on status of ABC Cleaner problem. Mrs. DelRe to furnish.

Additional Interview POC's: Dr. Jones, Chairman of County Board of Health. Richard Coonts, past health director for background on dumping on base (324-3626/2636). George Howard, owner of seafood market on Bellfork Rd.

Doc. No.: CLEJ-00504-9.05-9/01/90

4. Dr. Ronald Lingle, President, Coastal Carolina Community College

Interview Date: 6 February

Concerns: Is not as concerned about our approach to the cleanup or the fact of the problem itself but stressed that regular, vice sporadic new releases be made to follow up on the information we have already provided. Thinks we should stress to the public that Camp Lejeune's ranking on the NPL was not solely based on the severity of our HW problem but because of the potential impact the problems could have on the population and the surrounding environment.

Future Information: Heard about the problem through the commissioners office about 2 years ago and thinks the local paper is the most effective medium for the public to receive information.

Additional Interview Contacts: Ron McElhaney; Jones-Onslow Electric Cooperative, Woody Myers; Onslow Utilities (353-7711), State Representatives Billy Mills, and Bob Grady and Senator Martin Lancaster.

5. **Mayor George Jones, Mayor of Jacksonville**

Interview Date: 6 February

Concerns: Overall proximity of sites to the New River and overall drinking water quality are major concerns. Thinks that in the past the base hasn't publicized this issue enough and wants us to continue to take an active approach.

Future Information: Heard of the problem first through T.V. news reports and in talking in the past with General Gardner. Thinks active media promotion campaign is the approach we should take with the problem.

Additional Interview Contacts: Rotary Club, American Business Womens Association, Lions Club.

6. **Matt Hardimann, President, Jacksonville USO**

Interview Date: 6 February

Concerns: Did a good deal of background research after receiving information from us. Talked to local fishermen and hunters at the local "community centers" (i.e., Dunkin Donuts and Mister Donut) about any concerns they might have. Overall concern centered on the effect of leechate from these sites into the New River and the potential effect on fish and wildlife that may occupy these sites and be subsequently caught or eaten. One fisherman wanted to know if the decrease in size of the fish he has been catching over the years can be attributed to any hazardous waste being in the water.

Future Information: Heard of the problem through the Daily News and believes news releases to local media are the most effective way to keep the public informed.

Additional Interview Contacts: Mentioned possibility of a presentation on the problem at his monthly USO council meetings.

7. **Mr. M. Choate, City Councilman**

Interview Date: 6 February

Concerns: His prime concern is the safety of the New River for his children and grandchildren. Wanted to know the process of how we choose an alternative for cleanup method and do we take into account the potential effect of the alternative construction itself on the environment. Wanted to know how harmful "traces" alluded to in information packages really are. Wanted to know how harmful leaving the contaminants in the soil would be as opposed to digging it up and moving it somewhere else.

Doc. No.: CLET-00504-9.05-9/01/90

(Mr. M. Choate, cont.)

Future Information: Had heard about the problem through the Daily News and thinks that continued fact sheets are also an effective method of public information.

Additional Interview Contacts: Mr. Humphries, City Planning Board.

8. **Everett Walters, Onslow County Board of Education**

Interview Date: 6 February

Concerns: General concern about potential for contamination of New River. Specific concerns about the rifle range site and potential effect on new school that is planned for just across Route 210 from the range.

Future Information: Has read about the problem in the newspaper in the past and believes both fact sheets and news releases are the right approach to publicizing the problem.

Additional Information Requested: Requested additional information, when it becomes available, on the specifics of study results on the RR chemical dump. Mrs. DelRe also to receive information on construction plans for the school and will make a site visit to survey the area in relation to the dump.

9. **Carl Beacham, City Councilman**

Interview Date: 7 February

Concerns: General concern that the base conduct a thorough and proper cleanup. Especially interested in the air station mercury site, as he maintains a well behind Luigi's restaurant. Also concerned about the saltwater intrusion into the aquifer and the possible carryover of any contaminants to locations inland. Wanted to know the timeframe of the dumping that occurred and whether it was legal or illegal dumping. Also wanted explanation of various ways in which the base will dispose of the waste that is recovered. Was surprised that contamination was so localized at Lot 203, as he has visited the site many times to purchase property and has seen the large variety of waste products that are processed through the lot.

Future Information: Hasn't seen the issue publicized through the media but thinks it is the most effective method to continue to get information out.

10. **George Lanvermeier, Military Affairs Committee Member**

Interview Date: 7 February

Concerns: Major concern is what effect is going to be on groundwater (i.e., drinking water) and air, especially since his residence is near the air station. Also emphasized that we keep politicians informed of progress on cleanup along the way. Is more concerned about contamination from HW sites in Jacksonville than from on-base sites.

Future Information: Heard about the issue through the Daily News about a year ago and believes an active media campaign is important.

11. **A.D. "Zander" Guy, former Jacksonville Mayor**

Interview Date: 7 February

Concerns: Major concerns are in identifying what waste products we are dealing with and ensuring the safety of the public early on in the game. Is confident and supportive of base's efforts at rectifying the situation.

Doc. No.: CLEJ-00504-9.05-9/01/90

(A.D. "Zander" Guy, cont.)

Future Information: Heard of problem initially through the Military Affairs Committee and in speaking with the general. Liked the idea of a fact sheet but encourages an active media campaign be our focal point in the future.

Additional Interview Contacts: Marge Zima, Chairperson, Onslow County Council on Aging

12. **Mack McRorie, Director of Public Utilities**

Interview Date: 7 February

Concerns: No real concern in relation to impact on public utilities. Wanted to know how we were going to handle the waste products we find and where we are going to move it. Concerned that we not transfer the problem somewhere else. Have not been all that concerned because of the base's handle on the problem and the high level at which it is being executed.

Future Information: Heard of the problem in a meeting with officials from the base about a year ago and has read articles in the Daily News. Thinks publicizing through the media is the most effective method to reach the people.

Additional Interview Contacts: George Burke, Chairman of Water/Sewer Board.

13. **Dorothy Pullicino, City Councilwoman**

Interview Date: 7 February

Concerns: General concern about site cleanup. Wants to ensure steps are taken to ensure a prompt cleanup of those areas which pose a threat. Has full confidence in the base's effort and is surprised at how little concern the off-base community has about the town and the county's HW sites and environmental problems.

Future Information: Has worked on base for 30 years and has seen the problem publicized in the GLOBE and the Daily News. Thinks this good publicity should continue.

Additional Information Requested: Mentioned renovation/expansion of building 712 (NAFA office) into area behind the present building which was a former day care center. Area is contaminated with pesticides, and Mrs. DelRe interested in finding out about construction plans on an area which is contaminated. Will contact facilities for information.

14. **Barbara Buck, Chairperson, County Commissioners**

Interview Date: 7 February

Concerns: Overall safety of drinking water on and off base and health and welfare of citizens are primary concerns. Thinks we shouldn't disturb these areas until we know exactly what is there are thinks we should ensure a correct cleanup initially, so 20 years down the line we don't discover we had gone about the cleanup all wrong.

Future Information: Thinks the media campaign we have been conducting thus far is commendable. Thinks we should utilize the local cable channel for informational updates on the cleanup.

Additional Interview Contacts: Leena Ritter, Coastal Federation

15. Dr. E. Conrad Sloan, Superintendent, Base Schools

Interview Date: 8 February

Concerns: No real concerns because sites pose no apparent threat to any schools.

Future Information: Wants us to educate the high school students sometime during the cleanup process to increase awareness as to future disposal practices. Also suggested field trips.

16. **Ty Hart, Carolina Telephone**

Interview Date: 8 February

Concerns: Primary concern is the potential for hazardous material getting into the water system and polluting the air. Overall safety of the public, both on and off base, also a concern. Thinks the problem is off base as well as on base with respect to HW sites. Thinks our efforts thus far are great.

Future Information: Had not previously heard of problems on base with HW sites but believes our continued efforts at being up front with the issue constitutes the correct approach.

Additional Interview Contacts: Would like to see us take the issue to high school children to increase awareness to the overall issue.

17. **Bill Harvey, Jacksonville Director of Public Utilities**

Interview Date: 8 February

Concerns: Specific and immediate concern is the effect of the contaminants from these sites on the Castle Hains aquifer and any saline aquifers (Jacksonville is researching the possibility of tapping into these aquifers in the future). Also interested in what we are doing in the Hadnot Point area to clean up the water tables. Overall wants to obtain more information on the well drilling and groundwater studies. Thinks the base should share more information (data on aquifer, well drilling, etc.) of this sort with his department so as to avoid the city undertaking a project concerning groundwater that HW sites would impact on and possibly negate the need for.

Future Information: Thinks utilizing the news media is the most efficient way to reach the public.

Additional Information Requested: See concerns above.

18. **Jeff Downin, Executive Director, Chamber of Commerce**

Interview Date: 8 February

Concerns: His impression had been that the HW situation on base is not a serious problem but is one that has a need to be addressed. Only specific concern is the timeframe for cleanup.

Future Information: Heard about the problem initially through the local media. Brought up the possibility of running status ads in the local paper throughout the program.

Additional Interview Contacts: Martha Garrett, volunteer coordinator, Clean County Committee

Doc. No.: CLEJ-00504-905-9/01/90

19. Greg Johnston, City Councilman

Interview Date: 8 February

Concerns: Concerns deal with the nature of the contamination, what they are and where they come from. Also concerned about saltwater intrusion into aquifers and possible risk of contamination from base sites. Familiar with the process of cleanup and the legislation, as he bought ABC Cleaners before it was known that it was a contaminated site and is now liable for its cleanup.

Future Information: Heard about the problem through the media and thinks media should be used to the fullest extent possible.

20. **W.C. Jarman, County Commissioners**

Interview Date: 9 February

Concerns: No real concerns. Just happy we've made an effort at identifying the problem and are doing something about it.

21. **Warren MacDonald, Chairman, Military Affairs Committee**

Interview Date: 9 February

Concerns: No immediate concerns because he is happy that we've gone public and identified the problem.

Future Information: Became aware of the issue about one year ago through the media. Supports an active media campaign with emphasis on radio.

22. **Paul Starzynski, County Commissioners**

Interview Date: 9 February

Concerns: Main concern is that the quicker the cleanup begins, the better. Has concern about who will be bearing the cost of the cleanup. Also has concern with respect to drinking water safety and these sites effect on the fishing industry. Also commends our rational approach to dealing with the problem.

Future Information: Has known about the potential problems on base since the Superfund legislation took affect and Camp Lejeune was mentioned as a site for study, in addition to hearing news reports. Thinks the media, however slanted, is our best bet for publicity.

23. **Sara Humphries, Chairperson, Clean County Committee**

Interview Date: 9 February

Concerns: Was kind of expecting the Marine Corps and the base to "whitewash" this issue. The fact that Mrs. DelRe is a North Carolina native makes her feel more confident that the base is sincere in its efforts. As a former resident of the Tarawa Terrace housing area on base (where wells were closed for contamination), wanted to know if any plans were in the works for a medical survey of people who lived in that area prior to the contamination being discovered. Wanted to know if all the sites are capable of being remediated. Also concerned about potential effects on water quality and marine life.

Future Information: Thinks a CONCISE and simple fact sheet would go a long way to increasing public awareness in the future. Thinks targeting the senior citizens and garnering their support will benefit us.

Additional Interview Contacts: Jim Kennedy, Coastal Carolina Federation; representative from Agricultural Resources Branch from county.

Doc. No.: CLET-00504-9.05-9/01/90

24. Charles Hedgepath, County Planning Department

Interview Date: 9 February

Concerns: Concerned about placement of waste once we remove it (will it be disposed of in Onslow County), and where disposal sites would be located. Asked if frequent contact has been made with state agencies in coordinating cleanup. Asked if the base had any knowledge of any nuclear or chemical weapons being disposed of on base. Also asked about potential effects on water quality that the sites may pose.

Future Information: Although he thought the fact sheet was informational, he would like it to be more simple in its language. Also thinks the media is the best method of public information.

25. **Sybil Gandy, Chairperson, County Commissioners**

Interview Date: 9 February

Concerns: Understands that the problems on base are only a small part of overall HW problem in Onslow County. Concerned about salt water intrusion into Castle Hayne Aquifer and importance of keeping it contaminant free. Wants to know if we are aware of where all effluents from the base end up. Particularly interested in the timeline for cleanups. Is also concerned about potential effects of rifle range site on new school being constructed on Route 210.

Future Information: Has known for quite some time bout the contamination on base by nature of her position as chairperson. Thinks the media is effective vehicle for public information and doesn't think the average citizen would be interested in fact sheets such as we sent out.

Additional Interview Contacts: Thinks we should concentrate on informing senior citizen groups on the issue, as garnering their collective support would be helpful. Also mentioned Leena Ritter of the Coastal Federation as an interview candidate.

26. **Don Herman, Jacksonville Emergency Management Director**

Interview Date: 12 February

Concerns: Number 1 concern is possibility of crossover contamination into Jacksonville water supply from the base and any impact that may have on the community as a whole. Is concerned that we continue to provide timely updates during the program and not let our public information campaign lax.

Future Information: Heard about the issue through the media and through initial mailout last year to county/city officials. In initial mailout from JPAO about a year ago to ask for concerns, requested additional information from the base but no answers were ever provided. Wants to ensure the base follows through when it starts something. Also would like the base to present our problem to a meeting of the Emergency Planning Committee (meets quarterly; next meeting 3rd Thursday in March). Encourages mutual assistance be forged on HW issues between the base and the EPC.

Additional Interview Contacts: Mike Elsley, City Engineer

27. Rick Leary, County Manager

Interview Date: 12 February

Concerns: Not very concerned about groundwater contamination on the base because we are drawing from a different aquifer. Does not think the vast majority of citizens are concerned at all about the issue. Thinks problems off base are just as bad.

Future Information: Heard about the issue initially through meetings with Col. Dalzell (AC/S Facilities) and through the media. Thinks newspaper and radio are our most effective means of communication.

28. **Cary Van Winkle, Chairperson, SNCO Wives Club**

Interview Date: 12 February

Concerns: Major concern is continued quality of drinking water to prevent any negative effects on the community.

Future Information: Had not previously heard about the issue.

29. **George Barrow, Marine Corps League**

Interview Date: 13 February

Concerns: Few concerns because he has the perception that there won't or can't be any crossover contamination from base sites into Jacksonville. Is confident that the Marine Corps will abide by all laws and legislation governing the cleanup efforts on base. His only concern is with the transportation of waste materials once they are dug up (i.e., possibility of contamination or threat of contamination if material is transported over road to a disposal/treatment facility).

Future Information: Worked on the base from the 1940's through the 60's and was well aware of the problems occurring with respect to hazardous waste. Thinks the news media will serve our public information desires.

30. **Larry Fitzpatrick, County Commissioners**

Interview Date: 14 February

Concerns: Is less concerned with the cleanup than with ensuring control mechanisms are in place to prevent past HW practices from being repeated. Wants to know specifically what the base has done to improve upon preventive measures in dealing with hazardous substances. Has particular fears about how the base treats the mercury-monitoring devices on fuel tanks. Wanted to know who would be conducting monitoring of New River waters during RI/FS.

Future Information: Was past Sgt. Maj. of FSSG and has extensive knowledge of past practices on base. Thinks the public meeting process will be the most effective means of gauging community concern on issue. Thinks the media is our only recourse for means of effective public information.

Additional Interview Contacts: Thomas Pollard, Dept. of Transportation; Mr. Potts, Airport Manager; Pat Farmer, Airport Advisory Commission; Dick Carling, County Tourism Director; Reed Flinchum, Onslow Inn.

31. **Jerry Bittner, City Manager**

Interview Date: 14 February

Concerns: Overall concern is with groundwater contamination and with ensuring continued protection is provided to aquifer. Wants to ensure all possible means are taken to cleanup the sites. Wants full evaluation and recognition of events which lead to contamination and wants to ensure they be studied and learned from.

Future Information: Served on the initial Technical Review Committee two years ago and learned of these problems through Col. Dalzell. Supports an active media campaign as the way to gain support of the public.

Additional Interview Contacts: Mayor of Richlands.

32. William Russell, Swansboro Mayor

Interview Date: 5 March

Concerns: As a former Marine, has no concern because of confidence in Marine Corps with relation to the cleanup. Understands that project is money-driven and will take a great deal of time because he manages a tight budget as well.

Future Information: Thinks the Daily News is the most effective method of communication with the public even if some people do question its credibility sometimes.

Additional Interview Contacts: Julie Chambourne, city recycling program official.

33. **Roy Ormond, President, Onslow City, AARP**

Interview Date: 5 March

Concerns: Has known about fuel farms on base and potential for contamination for 40 years, as he is a former Marine. Has no concern because he knows the base is much further along as far as reacting to the problem than is the city of Jacksonville.

Future Information: Thinks the Daily News is an effective means for getting information out, although questions its reliability at times.

34. **Linda Blake, President, OWC**

Interview Date: 6 March

Concerns: Is just glad the base has identified a problem and is taking steps to rectify it. Just wants to be sure we reassure the on-base population as to the potential for risk to health when data in the next scope of work is made available. Especially wants prompt notice if any contamination is found in the New River (her son plays at the river frequently).

Future Information: Heard about the issue initially through the news media, and although skeptical as to the slant of the Daily News towards the military, thinks it is the most effective communications vehicle we have.

Future Interview Contacts: Brought up the idea of a group presentation of findings and a brief synopsis of the program to the OWC in a luncheon format.

35. **Gerald Griffin, President, American Legion**

Interview Date: 6 March

Concerns: Has no concern because problem on base has no effect on his business or him personally.

Future Information: Heard about the issue through the Daily News and believes it is the best way to get information out to the public in the future.

Future Interview Contacts: Bob Allison, Veteran's Council.

Doc. No.: CLEJ-00504-9.05-9/01/90

36. Herman Alberti, Holly Ridge Mayor

Interview Date: 6 March

Concerns: Thinks what we are doing is the right thing and sees no reason for concern because of his confidence in the Marine Corps holding to its word as far as the cleanup is concerned. Because of involvement with Land Expansion issue, has full confidence that the Marine Corps is more than thorough in issues of this sort.

Future Information: Daily News brought the issue to his attention within the past year and thinks it is our only affordable means of communication with the public.

37. **Maj. Gen. Herman Poggemeyer**

Interview Date: 7 March

Concerns: No specific concerns about sites or site cleanup. Does think that the IRP steps represent overkill in terms of the approval process.

Future Information: Read about hazardous waste issues on several occasions in the past and supports it as our main information line.

38. **Gil Grant, Stump Sound Environmental Group**

Interview Date: 24 March

Concerns: General concern as to extent of surface/groundwater contamination and effects these contaminants may be having on the New River, particularly with respect to the air station and rifle range sites. Mr. Grant's group is confident that the base has committed itself to implementing cleanup measures and is more concerned about the lack of planning and action on the part of the city and other civilian entities which has larger HW problems. (See enclosed questions for specific concerns.)

Doc. No.: CLET-00504-9.05-9/01/9

APPENDIX F

PROGRAM POINTS OF CONTACT

Doc. No.: CLEJ-00504-9.05-9/01/9

PROGRAM POINTS OF CONTACT

Federal Agency Officials

Victor Weeks
Remedial Project Manager
U.S. EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365
(404) 347-5059

Betty Winter
Community Relations Coordinator
U.S. EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365
(404) 347-3004

Program Officials

Shiela M. Ashton
Remedial Project Manager
Atlantic Division, NFEC
Code 1822
Norfolk, VA 23511-6287
(806) 445-1816

State Agency Officials

Rick Shriver
N.C. Dept. of Environment, Health and Natural Resources
Wilmington Regional Office
7225 Wrightsville Avenue
Wilmington, NC 28403
(919) 256-4161

Jack Butler
Environmental Engineer, Superfund Section
Division of Solid & Hazardous Waste, NCDEHNR
P.O. Box 27687
Raleigh, NC 27611-7687
(919) 733-2801

Ann Borden
Assistant Chief, Groundwater Section
Pollution Control Branch
Division of Environmental Mgmt, NCDEHNR
441 North Harrington
Raleigh, NC 27611
(919) 733-8486

Don Follmer
Director
Office of Public Affairs, NCDEHNR
P.O. Box 27687
Raleigh, NC 27611
(919) 733-4984

Camp Lejeune Officials

Commanding General
Assistant Chief of Staff, Environmental Management Department
Marine Corps Base Camp Lejeune
Camp Lejeune, NC 28542
(919) 451-5003

Captain Scott Campbell
Joint Public Affairs Office
Camp Lejeune, NC 28542
(919) 451-5655

Stephanie Del Re-Johnson
Installation Restoration Manager
Camp Lejeune, NC 28542
(919) 451-2471

Doc. No.: CLEJ-00504-9.05-9/01/90

APPENDIX G

RECOMMENDED LOCATIONS OF INFORMATION REPOSITORIES

Doc. No.: CLEJ-00504-9.05-9/01/9

RECOMMENDED LOCATIONS OF INFORMATION REPOSITORIES

Onslow County Library
58 Doris Avenue East
Jacksonville, NC 28540
(919) 455-7350

Richland City Library
Wilmington Street
Richland, NC 28574
(919) 324-5321

Swansboro City Library
Church Street
Swansboro, NC 28584
(919) 326-4888

Doc. No.: CLET-00504-9.05-9/01/9

APPENDIX H

RECOMMENDED LOCATIONS FOR COMMUNITY MEETINGS

Doc. No.: CLEJ-00504-9.05-9/01/90

RECOMMENDED LOCATIONS FOR COMMUNITY MEETINGS

Comfort Elementary School
Comfort, NC 28522
(919) 324-4249

Jacksonville Senior High School
1021 Henderson Drive
Jacksonville, NC 28540
(919) 346-9706

Jacksonville Middle School
401 New Bridge Street
Jacksonville, NC 28540
(919) 346-9504

Maysville School
6th Street
Maysville, NC 28555
(919) 743-5191

Northwoods Park Middle School
904 Sioux Drive
Jacksonville, NC 28540
(919) 347-1202

Onslow County High School
410 New Bridge Street
Jacksonville, NC 28540
(919) 346-3924

Swansboro Elementary School
502 Main Street
Swansboro, NC 28584
(919) 326-5350

Swansboro Middle School
Norris Road
Swansboro, NC 28584
(919) 326-3601

Trexler Middle School
Foy Street
Richlands, NC 28574
(919) 324-4414

Doc. No.: CLET-00504-9.05-9/01/9

APPENDIX I

ELECTED OFFICIALS

Doc. No.: CLEJ-00504-9.05-9/01/91

ELECTED OFFICIALS
(Past and Present)

Federal

Senator Jesse Helms
403 Dirksen Senate Office Building
Washington, DC 20510
(202)224-6342

District Office:
P.O. Box 2888
Century Post Office
Raleigh, NC 27602
(919) 856-4630

Senator Terry Sanford
716 Hart Senate Office Building
Washington, DC 20510
(202) 224-3154

District Office:
P.O. 10157
Raleigh, NC 27605-0157
(919) 856-4401

Representative H. Martin Lancaster
1417 Longsworth House Office Building
Washington, DC 20551
(202) 225-3415

District Office:
103 Federal Building
134 N. John Street
Goldsboro, NC 27530
(919) 736-1844
1-800-443-6847

State

Governor James G. Martin
The State Capital
Raleigh, NC 27611
(919) 733-2888

State Senator A.D. Guy
306 Woodland Drive
Jacksonville, NC 28540
(919) 455-7117

State Representative Robert Grady
107 Jen Circle
Jacksonville, NC 28540
(919) 455-9359

State Representative W.D. Mills
21 Belgrade Swansboro Road
Maysville, NC 28555
(919) 743-5226

Doc. No.: CLEJ-00504-9.05-9/01/9

ELECTED OFFICIALS
(Past and Present)
(continued)

Jacksonville

Carl Beacham, Jr.
Jacksonville City Council
Beacham's Apartments
Wilminton Hwy & Broadhurst Rd.
Jacksonville, NC 28540
(919) 347-7034

Jerry Bittner
Jacksonville City Manager
Jacksonville City Hall
P.O. Box 128
Jacksonville, NC 28540
(919) 455-2800

M.C. Choate
Jacksonville City Council
204 Deborah Street
Jacksonville, NC 28540
(919) 346-6178

Jeff Downin
Executive Vice President
Jacksonville-Onslow Chamber of Commerce
P.O. Box 765
Jacksonville, NC 28541
(919) 347-3141

A.D. "Zander" Guy
Former Jacksonville Mayor
A.D. Guy Insurance & Realty World
Box 340, 511 New Bridge Street
(919) 346-4171

Greg Johnston
Jacksonville City Council
P.O. Box 490
Jacksonville, NC 28540
(919) 347-1722

Mayor George Jones
Mayor of Jacksonville
1005 Summerbrook Place
Jacksonville, NC 28540
(919) 455-2600

Mack McRorie
City Utilities Director
P.O. Box 128
Jacksonville, NC 28541-0128
(919) 455-2600 ext. 233

Dorothy Pullicino
Jacksonville City Council
706 Christine Avenue
Jacksonville, NC 28540
(919) 451-2257

Onslow County

Barbara Buck
Chairman, Onslow Cty Commissioners
1700 Country Club Road
Jacksonville, NC 28540
(919) 353-4545

Larry Fitzpatrick
Onslow County Commissioners
8 Carol Court
Jacksonville, NC 28540
(919) 346-8686

Sybil Gandy
Onslow County Commissioners
Route 1, Box 322
Sneads Ferry, NC 28540
(919) 327-4146

Bill Harvey
Manager, Onslow County Water Dept.
222 Georgetown Road
Jacksonville, NC 28540
(919) 455-1370

Charles Hedgepath
Onslow County Planning Department
39 Tallman Street
Jacksonville, NC 28540
(919) 455-3661

Doc. No.: CLEJ-00504-9.0~~5~~-9/01/9

ELECTED OFFICIALS
(Past and Present)
(continued)

Donald Herman
Emergency Management Coordinator
Emergency Planning Committee
604 College Street
Jacksonville, NC 28540
(919) 347-4270

Sarah Humphries
Onslow Clean County Committee
25 Tallman Street
Jacksonville, NC 28540
(919) 455-4470

W.C. Jarman
Onslow County Commissioners
Route 1, Box 239
Jacksonville, NC 28540
(919) 346-2030

K. Cameron Lanier
Environmental Health Supervisor
Onslow County Health Department
612 College Street
Jacksonville, NC 28540
(919) 347-2154

Rick Leary
Onslow County Manager
521 Mill Avenue
Jacksonville, NC 28540
(919) 347-4717

Paul Starzynski
Onslow County Commissioners
8 Carol Court
Jacksonville, NC 28540
(919) 346-8686

Everett Waters
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, NC 28540
(919) 455-2211

E. Conrad Sloan
Superintendent, Camp Lejeune Dependent Schools
Building 855, Marine Corps Base
Camp Lejeune, NC 28540
(919) 451-2461

<u>Other</u>

Mayor Herman Alberti
Holly Ridge Mayor
P.O. Box 145
Holly Ridge, NC 28445
(919) 329-7081

Mark Bardhill
Richland Chamber of Commerce
116 West Hargett Street
Richlands, NC 28574
(919) 324-1262

Lindy Cookman
Military Affairs Committee
P.O. Drawer 676
Jacksonville, NC 28540

Roy Fogle
Nuese River Council of Governments
P.O. Box 1717
New Bern, NC 28560
(919) 455-2061

Lorraine Jenkins
Sneads Ferry Community Council
Route 1
Sneads Ferry, NC 28460
(919) 327-2541

Dr. Ronald Lingle
Coastal Carolina Comm. College
444 Western Boulevard
Jacksonville, NC 28540
(919) 455-1221

Mayor William E. Russell
Swansboro Mayor
P.O. Box 368
Swansboro, NC 28584
(919) 326-5808

Doc. No.: CLEJ-00504-9.05-9/01/9c

APPENDIX J

CIVIC AND COMMUNITY GROUPS

Doc. No.: CLEJ-00504-9.05-9/01/90

CIVIC AND COMMUNITY GROUPS

American Association of Retired Persons
P.O. Box 7404
Jacksonville, NC 28540
(919) 353-6218
Attn: Barbara Stencel

American Legion Post 265
P.O. Box 13
Jacksonville, NC 28541
(919) 455-4116
Attn: Gerald Griffin

Camp Lejeune Officers Wives Club
P.O. Box 8531
Camp Lejeune, NC 28542
(919) 577-3175
Attn: Linda Blake

Camp Lejeune SNCO Wives Club
P.O. Box 8067
Camp Lejeune, NC 28542
(919) 577-3175
Attn: Cary Van Winkle

Jacksonville Jaycees
1105 Lejeune Boulevard
Jacksonville, NC 28540
(919) 455-1151
Attn: Charles Kay

Kiwanis Club
P.O. Box 1606
Jacksonville, NC 28540
(919) 347-5360
Attn: Charles Lancaster

Knights of Columbus
P.O. Box 7241
Jacksonville, NC 28541
(919) 346-8174
Attn: Herman Davis

Marine Corps League
P.O. Box 7099
Jacksonville, NC 28540
(919) 455-6834
Attn: George Barrows

Military Affairs Committee
358 Jacksonville Mall
Jacksonville, NC 28540
(919) 353-2311
Attn: Warren MacDonald, Chairman

Onslow Cty Council of Veterans Org
P.O. Box 7353
Jacksonville, NC 28541
(919) 346-9659
Attn: John Vegass

Onslow Cty Env Action Network
Route 1, P.O. Box 339B
Sneads Ferry, NC 28460
(919) 327-3778
Attn: Carol Robinson

Onslow County Jaycees
P.O. Box 575
Jacksonville, NC 28540
(919) 353-1013
Attn: Frances Walker

Stump Sound Environmental Advocates
Route 2, Box 431
Sneads Ferry, NC 28460
(919) 327-2904
Attn: Gil Grant, President

United Services Organization (USO)
9 Tallman Street
Jacksonville, NC 28540
(919) 455-3411
Attn: Matt Hardiman, Director

Doc. No.: CLET-00504-9.05-9/01/9

APPENDIX K

REGIONAL SCHOOLS

Doc. No.: CLEJ-00504-9.05-9/01/

REGIONAL SCHOOLS

City of Dixon

Adult High School
Dixon, NC 28540
(919) 347-4911

Elementary School
Dixon, NC 28540
(919) 347-2738

Dixon High School
Dixon, NC 28540
(919) 347-2958

City of Jacksonville

Bell Fork Elementary School
500 Bell Fork Road
Jacksonville, NC 28540
(919) 347-4459

Bethel Christian Academy
401 Burgaw Highway (HWY 53)
Jacksonville, NC 28540
(919) 455-4110

Blue Creek School
400 Burgaw Highway
Jacksonville, NC 28540
(919) 347-1717

Calvary Luthern Pre-School
206 Pine Valley Road
Jacksonville, NC 28540
(919) 353-4016

Jacksonville Christian Academy
453 College Street
Jacksonville, NC 28540
(919) 347-2358

Jacksonville Middle School
401 New Bridge Street
Jacksonville, NC 28540
(919) 346-9504

Jacksonville Senior High School
1021 Henderson Drive
Jacksonville, NC 28540
(919) 346-9706

Early Learning Center
928 Henderson Drive
Jacksonville, NC 28540
(919) 346-3288

Early Learning Center
325 Winchester Road
Jacksonville, NC 28540
(919) 353-4923

Enon Baptist Church Pre-School
Highway 24 East
Jacksonville, NC 28540
(919) 353-5403

Erwin Clyde School
New River Drive
Jacksonville, NC 28540
(919) 347-1261

Ethell Nursery School
1201-A Country Club Road
Jacksonville, NC 28540
(919) 346-4219

First Presbyterian Pre-School
400 Bayshore Road
Jacksonville, NC 28540
(919) 455-2434

Grace Baptist School
114 Roosevelt Road
Jacksonville, NC 28540
(919) 455-5777

Northwoods Elementary School
Henderson Drive
Jacksonville, NC 28540
(919) 347-2808

Northwoods Park Middle School
904 Sioux Drive
Jacksonville, NC 28540
(919) 347-1202

Onslow-Camp Lejeune Dev. Center
231 York Court
Jacksonville, NC 28540
(919) 455-5427

Doc. No.: CLEJ-00504-9.05-9/01/9

REGIONAL SCHOOLS
(continued)

Living Water Christian School
123-B Henderson Drive
Jacksonville, NC 28540
(919) 346-1114

Morton Elementary School
Grants Creek Road
Jacksonville, NC 28540
(919) 353-0930

New River Baptist Pre-School
1310 Hargett Street
Jacksonville, NC 28540
(919) 346-2620

Northwoods Methodist Church Pre-School
Gum Branch Road
Jacksonville, NC 28540
(919) 346-9725

Southeastern Pre-School Center
1 Office Park Drive
Jacksonville, NC 28540
(919) 577-7576

Southwest High School
500 Burgaw Highway
Jacksonville, NC 28540
(919) 455-4888

St. Francis of Assisi School
7 East Drive
Jacksonville, NC 28540
(919) 353-1300

St. Francis Middle School
501 Bordeaux Street
Jacksonville, NC 28540
(919) 455-0838

Summersill Elementary School
Gum Branch Road
Jacksonville, NC 28540
(919) 455-2672

Thompson Walter Elementary School
440 College Street
Jacksonville, NC 28540
(919) 346-9325

Onslow County High School
410 New Bridge Street
Jacksonville, NC 28540
(919) 346-3924

Parkwood Elementary School
2900 Northwoods Drive
Jacksonville, NC 28540
(919) 347-6711

Pine Valley Christian School
304 Western Boulevard
Jacksonville, NC 28540
(919) 353-6701

Saint Anne's Day School
711 Henderson Drive
Jacksonville, NC 28540
(919) 347-3774

<u>City of Maysville</u>
Maysville School
6th Street
Maysville, NC 28555
(919) 743-5191

Silverdale School
20 Smith Road
Maysville, NC 28555
(919) 743-0447

Tabernacle Elementary School
Maysville, NC 28555
(919) 743-7131

<u>City of Richlands</u>
Comfort Elementary School
Comfort, NC 28522
(919) 324-4249

Praise Tabernacle Christian School
Highway 258
Richlands, NC 28574
(919) 324-4394

Richlands Elementary School
210 East Foy Street
Richlands, NC 28574
(919) 324-4142

Doc. No.: CLET-00504-9.05-9/01/9

REGIONAL SCHOOLS
(continued)

White Oak High School
1950 Piney Green Road
Jacksonville, NC 28540
(919) 455-1541

Trexler Middle School
Foy Street
Richlands, NC 28574
(919) 324-4414

City of Swansboro
Early Learning Center
Highway 24
Swansboro, NC 28584
(919) 326-3386

Swansboro Elementary School
502 Main Street
Swansboro, NC 28584
(919) 326-5350

Swansboro High School
Swansboro, NC 28584
(919) 326-4050

Swansboro Middle School
Norris Road
Swansboro, NC 28584
(919) 326-3601

Swansboro Middlegrade School
Highway 24 West
Swansboro, NC 28584
(919) 326-5101

Swansboro Primary School
128 School Road
Swansboro, NC 28584
(919) 326-4574

White Oak Elementary School
Highway 24 East
Swansboro, NC 28584
(919) 393-2578

Richlands High School
401 Woodson Street
Richlands, NC 28574
(919) 324-4191

Universities and Colleges
Coastal Carolina Community College
444 Western Boulevard
Jacksonville, NC 28540
(919) 455-1221

James Sprunt Community College
Highway 11 South
Kenansville, NC 28349
(919) 296-1341

Doc. No: CLEJ-0050A-9.05-9/01/90

APPENDIX L

COMMUNITY RELATIONS SCHEDULE

Doc. No.: CLEJ-00504-9.05-9/01/90

COMMUNITY RELATIONS SCHEDULE

The Community Relations Schedule will be submitted for inclusion in this document upon availability.