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CLEAN II Program
Bechtel Job No. 22214
Contract No. N68711-92-D-4670
File Code: 0210
IN REPLY REFERENCE: CTO-0142/0410
CTO-0161/0092

June 16, 1998

Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 57CS1.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

Attention: T. Broussard, Contract Specialist
Code 56MC.TB

Subject: Amendments to CTO-142 Quality Assurance Project Plan to Support the Site 2
Compliance Well Work Plan, Marine Corps Air Station El Toro, California

Dear Mr. Selby:

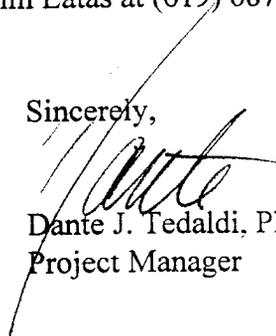
This document presents amendments to the Site 24 Quality Assurance Project Plan to support the Site 2 compliance well work plan for the Marine Corps Air Station (MCAS) El Toro, California. This review was prepared under Contract Task Order (CTO) 0161 and Contract No. N68711-92-D-4670.

The amendments are to be made to the Quality Assurance Project Plan that was prepared for the Site 24 Groundwater Pilot Test (CTO-0142) at MCAS El Toro. These amendments are required so that this plan can support analyses of groundwater samples to be collected at Site 2 (Magazine Road Landfill). All laboratory analyses for the Site 2 groundwater samples are contracted under CTO-0142.

We have submitted the appropriate number of copies of this letter to individuals listed on the attached transmittal.

We appreciate the opportunity to be of service to you on this project. If you have any questions or would like further information, please contact Tim Latas at (619) 687-8848, or myself at (619) 687-8780.

Sincerely,


Dante J. Tedaldi, Ph.D., P.E.
Project Manager

DJT/sp
Attachments



Bechtel National, Inc. Systems Engineers-Constructors

Southwest Division
Naval Facilities Engineering Command
Contracts Department
1220 Pacific Highway, Building 127, Room 112
San Diego, California 92132-5187

Contract No. N68711-92-D-4670

**COMPREHENSIVE LONG-TERM ENVIRONMENTAL
ACTION NAVY
CLEAN II**

**AMENDMENTS TO CTO-142 QUALITY ASSURANCE PROJECT
PLAN TO SUPPORT THE
SITE 2 COMPLIANCE WELL WORK PLAN
MARINE CORPS AIR STATION
EL TORO, CALIFORNIA**

CTO-0142/0410

CTO-0161/0092

June 1998

Prepared by:

BECHTEL NATIONAL, INC.
401 West A Street, Suite 1000
San Diego, California 92101



Signature: _____

Timothy W. Latas

Timothy W. Latas, R.G., CTO Leader

Date: _____

6/15/98

M60050.002216
MCAS EL TORO
SSIC # 5090.3

DRAFT FINAL
QUALITY ASSURANCE PROJECT PLAN
GROUNDWATER REMEDIATION PILOT TEST

DATED 16 JULY 1997

IS ENTERED IN THE DATABASE AND FILED AT
ADMINISTRATIVE RECORD NO. **M60050.002019**

AMENDMENTS TO CTO-142 QUALITY ASSURANCE PROJECT PLAN

This technical memorandum presents the amendments to the Quality Assurance Project Plan (QAPP) for Contract Task Order (CTO)-0142 to support work for completing remedial action compliance monitoring wells at Site 2, the Magazine Road Landfill, at Marine Corps Air Station (MCAS) El Toro (Figure 1-1). The technical memorandum was prepared by Bechtel National, Inc. (BNI), on behalf of the U.S. Department of the Navy (DON), Southwest Division Naval Facilities Engineering Command (SWDIV), in accordance with CTO-0161. This CTO was issued under the Comprehensive Long-Term Environmental Action Navy (CLEAN) II Program, contract No. N68711-92-D-4670.

This technical memorandum documents several administrative changes are needed to successfully implement the CTO-142 QAPP in support of the CTO-161 work. Specific modifications to the CTO-142 are made in the following sections in order to support the compliance well effort at Site 2:

- purpose of work at Site 2,
- data usage of Site 2 compliance well results,
- project team organization,
- data quality objectives, and,
- sample labeling.

There are no changes to the CTO-142 QAPP in regard to data measurement objectives, sample handling, sample collection, field and analytical quality control procedures, and quality assurance oversight.

With the inclusion of the following modifications, the CTO-142 QAPP will be used as the reference document for maintaining quality assurance and quality control of all analytical samples collected.

PURPOSE OF WORK AT SITE 2

The DON has issued direction under CTO-161 to proceed with installation of two new compliance monitoring wells as recommended the Site 2 Draft Final Feasibility Study (BNI, September 1997). These compliance monitoring wells will complete the groundwater monitoring network of the proposed site remedial action and will be specifically used to provide information on the groundwater quality and assure early detection of releases from the landfill. To optimize well placement, SWDIV has requested that a series of direct push Hydropunch[®] groundwater samples be collected at Site 2 which will be followed by compliance well installation at areas of highest volatile organic concentrations (VOCs) in groundwater. Groundwater from these two new compliance wells will be sampled following installation.

A work plan for this effort was prepared under CTO-161 (CLEAN Remediation Support Services [CRSS] for MCAS El Toro). The work plan was issued on May 20, 1998 in its final form to SWDIV and regulatory agencies. This plan outlines the roles of regulatory

Section 1 Introduction

agencies, background of investigations at Site 2, and proposes 10 cone penetrometer test (CPT)/Hydropunch locations where three Hydropunch samples will be collected at different depths (Figure 1). The CPT/Hydropunch sample results will be used to optimize the location of the two new compliance monitoring wells as shown on Figure 1 which will be installed and sampled. All samples to be collected will be groundwater samples or QA/QC samples to support groundwater sampling.

The work plan references the following plans for inclusion in this project:

- Final Work Plan Phase II Remedial Investigation/Feasibility Study MCAS El Toro (BNI 1995 CTO-059)
- Final Field Sampling Plan Phase II Remedial Investigation/Feasibility Study MCAS El Toro (BNI 1995 CTO-059)
- Final Quality Assurance Project Plan Phase II Remedial Investigation/Feasibility Study MCAS El Toro (BNI 1995 CTO-059)
- Draft Final Quality Assurance Project Plan Groundwater Remediation Pilot Test MCAS El Toro (BNI 1997 CTO-142)

At the direction of the SWDIV Contract Specialist, no analytical work can be performed on CTO-161. However, SWDIV requested that CLEAN II provide laboratory analyses which consists of analysis of low concentrations of volatile organic compounds (VOCs) using U.S. EPA CLP methods under CTO-142 (Site 24 Groundwater Pilot Study at MCAS El Toro). Therefore, the QAPP developed under that CTO is referenced for analytical work and all subcontracting for laboratory analyses will be performed under a CTO-142 delivery order.

OHM Remediation Services Corporation will be subcontracting CPT and drilling contractors and will provide for field oversight of these subcontractors. CLEAN II personnel will observe the OHM subcontractors and provide recommendations on locations of sampling intervals. All samples collected by the OHM subcontractors will be submitted to CLEAN II personnel who will submit the samples for analysis.

The CPT/Hydropunch sampling is expected to last for approximately four weeks, followed by approximately three weeks of well drilling, development, and sampling.

DATA USAGE OF SITE 2 COMPLIANCE WELL RESULTS

The CPT/Hydropunch sample results will be used to optimize the location of the two new compliance monitoring wells which will also be installed and sampled under CTO-161. The set of groundwater samples collected from the compliance wells will be used to establish a baseline condition for VOCs in these wells.

Section 1 Introduction

PROJECT TEAM ORGANIZATION

The organization chart shown on page 2-2 of the CTO-142 QAPP should include the following changes:

- K. Kapur - Operations Manager
- S. Waide - Safety and Health Manager
- T. Kuzmack - Database Supervisor
- J. Jordan - Laboratory Services Supervisor
- T. Latas - CTOL for support work on CTO-161

The revised organization chart is attached.

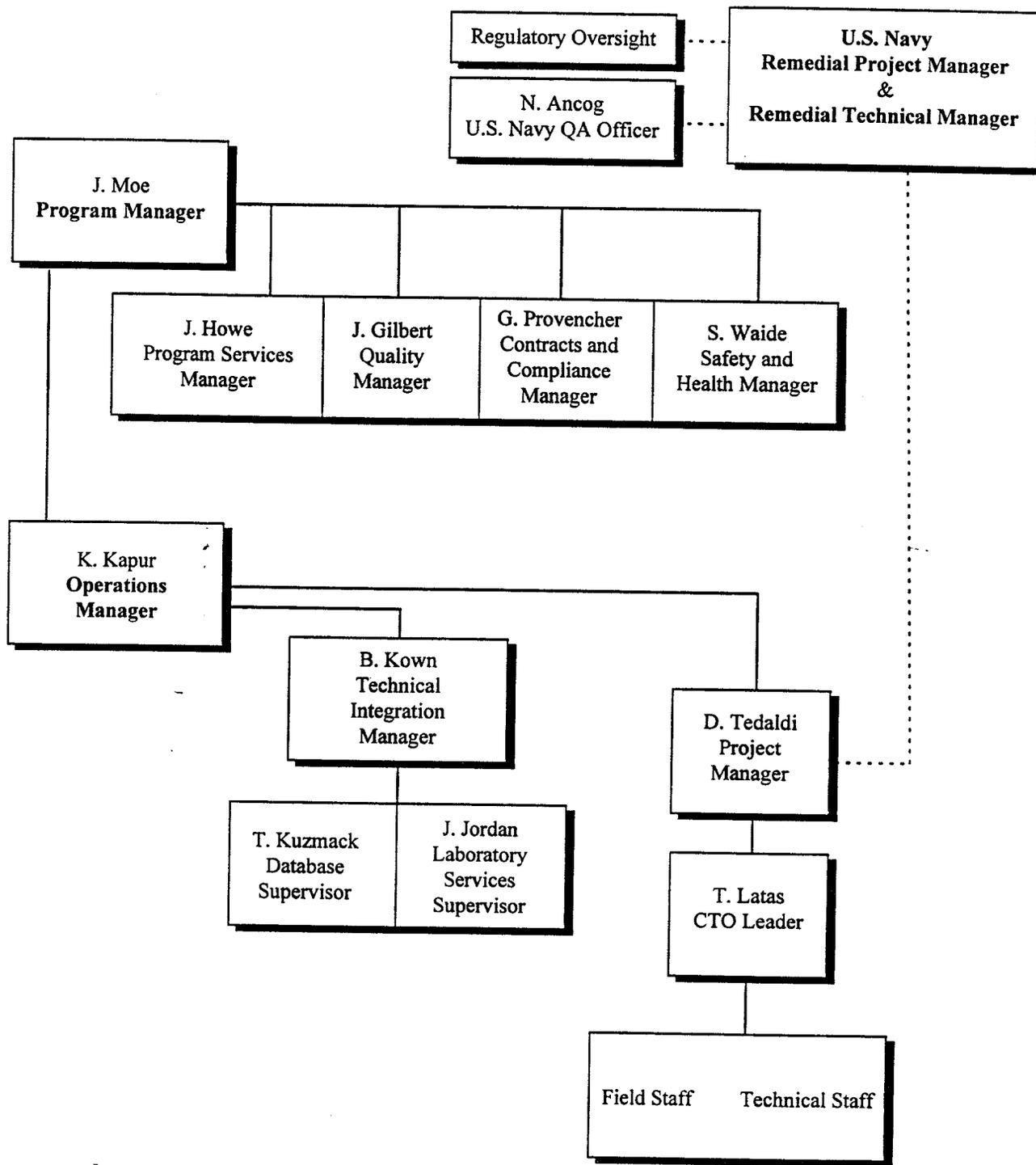
The QAPP is also amended through this memorandum to include a description of the DON Quality Assurance Officer (QAO). The DON QAO provides government oversight of the QA program, including review and sign-off on QAPPs and Field Sampling Plans. The QAO provides quality-related direction through the Contract Technical Representative to the Quality Manager. The QAO has authority to suspend affected project or site activities if SWDIV-approved quality requirements are not adequately adhered to.

DATA QUALITY OBJECTIVES

This work is conducted for remedial action support and the locations of the proposed compliance well locations are established with concurrence with regulatory agencies. The proposed 10 CPT/Hydropunch locations were laid out in a systematic pattern to provide supporting evidence and optimization for the placement of the two new monitoring wells (Figure 1). Well locations were based on professional judgment and agreed by Navy and regulators. All regulatory agencies received copies of the work plan only the California Department of Toxic Substances Control had five minor comments which were addressed in the final version of the plan.

SAMPLE LABELING

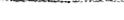
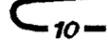
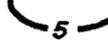
The section on sample custody/documentation requires a change on sample labeling. These samples collected at Site 2 will be given a different sampling event number, 142005, to distinguish them from the Site 24 groundwater pilot study work and samples will also have a different 9-digit sample ID number beginning with "161" for query purposes rather than "142".

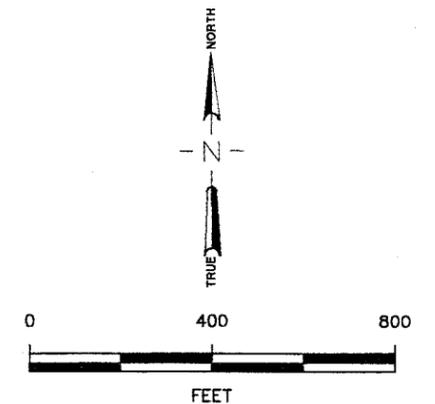


Project Organization Chart

FIGURE 2-1

LEGEND

-  PROPOSED CPT/HYDROPUNCH LOCATION
-  EXISTING MONITORING WELL
-  PROPOSED LYSIMETER LOCATION (SHOWS ANGLE DIRECTION)
-  PROPOSED GAS MIGRATION MONITORING PROBE LOCATION
-  MCAS EL TORO BOUNDARY
-  EXISTING TOPOGRAPHY
-  PROPOSED GRADED TOPOGRAPHY
-  PROPOSED DRAINAGE DITCH AND FLOW DIRECTION
-  PROPOSED FENCE LINE (TO BE INSTALLED AS PART OF EMERGENCY RESPONSE ACTION IN 1996)
-  APPROXIMATE OPERATIONAL LANDFILL WASTE BOUNDARY
-  APPROXIMATE LIMIT OF UNCONTROLLED DUMPING
-  INLET
-  DOWNDRAIN
-  IMPACT BASIN
-  APPROXIMATE 5 ug/L CONTOUR (MCL) FOR PCE
-  APPROXIMATE 10 ug/L CONTOUR FOR PCE
-  APPROXIMATE 5 ug/L CONTOUR (MCL) FOR TCE
-  APPROXIMATE AREA OF TCE CONCENTRATIONS GREATER THAN 50 ug/L

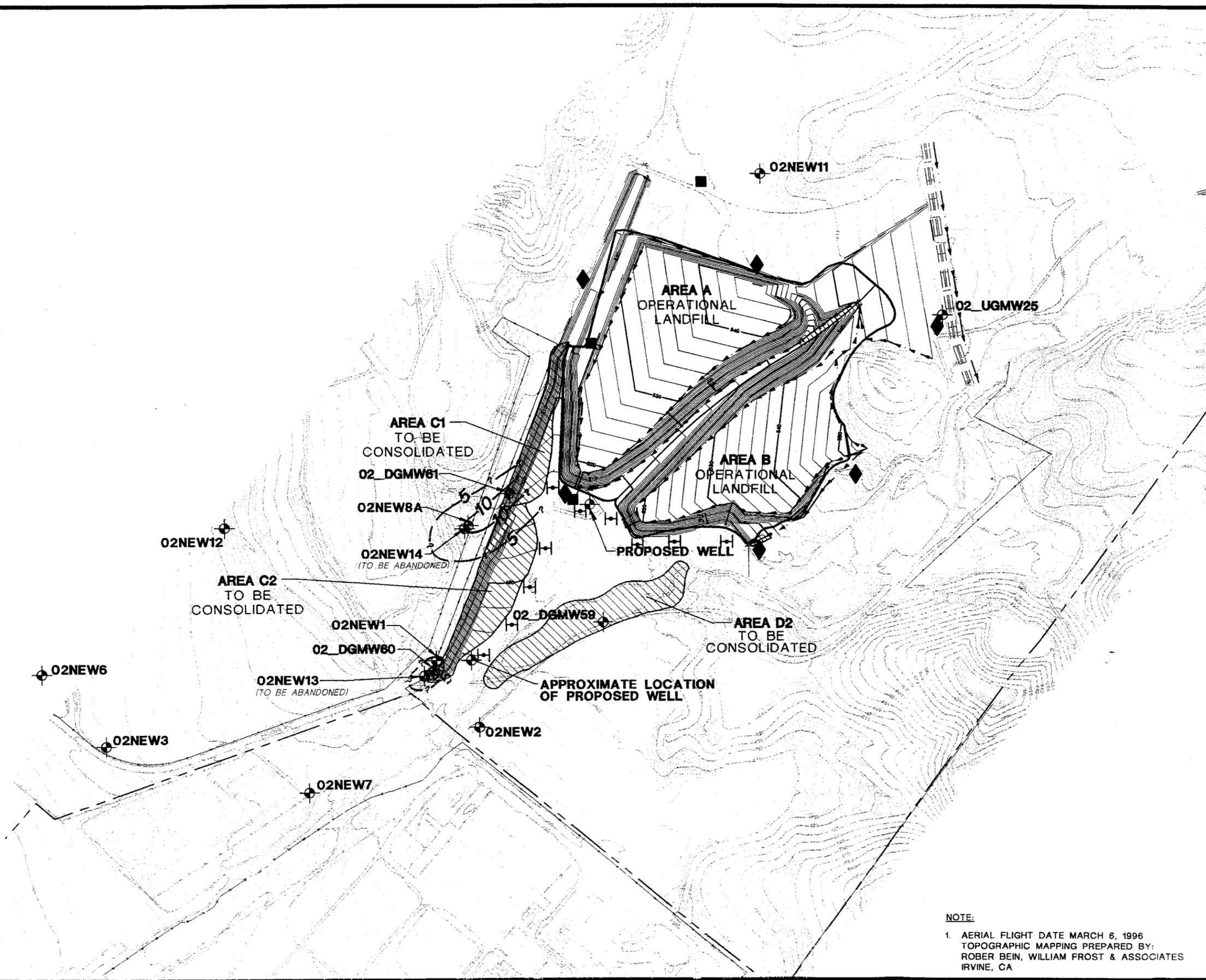


Compliance Monitoring Wells Work Plan
Figure 1
Conceptual Grading Plan
Site 2 - Magazine Road Landfill

MCAS, El Toro, California

	Bechtel National, Inc. CLEAN II Program	Date: 6/10/98 File No: 161J3313 Job No: 22214-161 Rev No: A
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NOTE:
 1. AERIAL FLIGHT DATE MARCH 6, 1996
 TOPOGRAPHIC MAPPING PREPARED BY:
 ROBER BEIN, WILLIAM FROST & ASSOCIATES
 IRVINE, CA





BECHTEL NATIONAL INC.

CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. N-68711-92-D-4670

Document Control No.: CTO-0142/0410 & CTO-161/0092

File Code: 0210

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 57CS1.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: June 16, 1998
CTO #: 0142 & CTO 161
LOCATION: MCAS El Toro

FROM: [Signature]
D. J. Tedaldi, Ph.D., P.E., Project Manager

DESCRIPTION: Amendments to CTO-142 Quality Assurance Project Plan to Support the
Site 2 Compliance Well Work Plan, DTD June 1998

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NUMBER OF COPIES SUBMITTED: 10/4C/4E

COPIES TO (Include Name, Navy Mail Code, and No. of Copies):

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A. Piszkin, Code 56MC.AP (1C/1E)

- BECHTEL (Distributed by Bechtel):
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P. Brooks (1C/1E)
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D. Tedaldi (1C/1E)
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- OTHER (Distributed by Bechtel):
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O = Original Transmittal Sheet
C = Copy Transmittal Sheet
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Date/Time Received