



CITY OF SACRAMENTO

DEPARTMENT OF PUBLIC WORKS

SOLID WASTE DIVISION

JOHN F. BOSS
Solid Waste Division Manager

July 15, 1986

Transportation and Community Development Committee
Sacramento, California

Honorable Members in Session:

SUBJECT: MCCLELLAN AIR FORCE BASE STUDY OF NORTH AREA WATER WELLS - QUARTERLY
REPORT

SUMMARY:

The 2nd Quarter 1986 analytical results are presented and their significance is discussed. Only one well exceeded the state action level for volatile organic compounds (VOC's) in the 2nd Quarter, however, this was attributable to an increase in the action level for 1,1 dichloroethylene in April 1986, rather than a reduction in VOC concentrations in off-base domestic wells.

McClellan's intent to pay for public water connections in the off-base areas currently monitored under the quarterly program is contingent upon the discontinuation of the quarterly program, upon connection of all residences in these areas, and a prohibition on future wells. The County and the City are being asked by McClellan to take an active role in not only constructing the water mains and service connections, but in developing an institutional infrastructure to mandate 100% public water service in these off-base areas.

BACKGROUND

The McClellan Air Force Base Off-Base Quarterly Well Sampling and Analysis Program began in the summer of 1983 and has continued, essentially uninterrupted, through the 2nd Quarter of 1986. The program has expanded significantly since its conception when 30 wells were earmarked for sampling each quarter. In the 2nd Quarter of 1986, 116 wells, most within 2000 feet of the Base boundary, were sampled and analyzed for volatile organic compounds (VOC's), extractable organics and heavy metals.

The results of the 2nd Quarter 1986 sampling program are contained in Attachments 1 and 2. The biggest difference between this sampling round and the 1st Quarter 1986 round is that only 1 well exceeded the action level for VOC's while in the 1st Quarter, 5 wells violated action levels. However, this was not due to a reduction in VOC concentrations in the wells, but rather a change in the action level by the Department of Health Services. Specifically, in April 1986, the 1,1 dichloroethylene action level was elevated to 6 ppb from 0.1 ppb.

McClellan's contractor for the Quarterly Sampling Program has analyzed all available quarterly VOC data and has determined that VOC contamination is limited to the following three off-base areas:

An area immediately west of McClellan on 20th Street between Ascot Avenue and E Street.

An area in the Robla District extending from Raley Boulevard west to Dry Creek Road; along Santa Ana, Claire and Vinci Streets.

An area immediately southwest of McClellan near the intersection of Bell and North Avenues.

McClellan's contractor recommends that, based upon historical data, the sampling program be reduced to include only those domestic wells within 500 feet of the contaminated areas described above.

In early May, McClellan announced that they would pay for water connections for off-base residences currently monitored under the quarterly sampling program. The areas included in this connection program is outlined in Attachment 3

McClellan has met several times with City staff (Department of Public Works and City Attorney) regarding the terms of an agreement whereby the City would do the work of installing the water mains and service connections with McClellan providing the funding. Negotiations are continuing between McClellan, the County, the City, and the State and Federal Regulatory Agencies on the McClellan Ground Water Contamination Task Force, on how to proceed with the connection program. McClellan's goal is to connect all residences within the off-base area delineated in Attachment 3 and thereby eliminate the necessity to conduct the quarterly sampling program.

If negotiations go smoothly and if institutional procedures can be implemented to encourage, if not mandate, 100 % public water service including a prohibition on future wells in this area, then the initial connections along Santa Ana Avenue can begin this fall.

Action by the City Council to provide the institutional controls on the use (both existing and future) of wells in this area is being evaluated by the City Attorney's office. These measures may be brought before the City Council late this year if deemed appropriate.

RECOMMENDATION

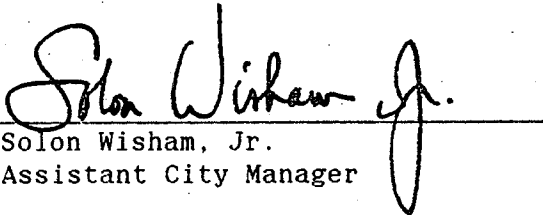
This report is for Committee information only.

Respectfully submitted,



John Tomko
Senior Engineer, Solid Waste

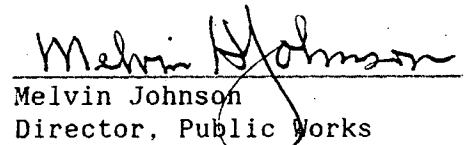
APPROVED FOR COMMITTEE INFORMATION:



Solon Wisham, Jr.
Assistant City Manager

JT:tc

APPROVED:



Melvin Johnson
Director, Public Works

Attachment:

- 1 VOC 2nd Quarter Results
- 2 Extractable Organic/Heavy Metal 2nd Quarter Results
- 3 Map of a Water Service Area proposed

TABLE 1-1.

McCLELLAN OFF-BASE WELL SAMPLE AND ANALYSIS, SECOND QUARTER, 1988

SUMMARY OF RESULTS FOR PURGEABLE HALOCARBON ANALYSIS [EPA METHOD 601]

1) 116 Wells Sampled (114 Residences)

87 Wells = Nothing Detected
28 Wells = Contained Halocarbons Below DHS Action Levels
1 Well = Contained 1,1-DCE Above DHS Action Level*

2) Results by Sampling Area

| Southwest Area (5 Wells Sampled) | Roble Area (47 Wells Tested) | Area D (62 Wells Tested) | Northeast Area (2 Wells Tested) |
|-------------------------------------|---|---|------------------------------------|
| 5 Wells = Nothing Detected | 30 Wells = Nothing Detected 11 Wells = Contained Halocarbons Below DHS Action Levels | 50 Wells = Nothing Detected 11 Wells = Contained Halocarbons Below Action Levels 1 Well = Contained 1,1-DCE Above DHS Action Level* | 2 Wells = Nothing Detected |

* The well at 5933 20th Street contained 14 ug/l of 1,1-DCE (DHS action level = 8 ug/l). This residence is currently hooked up to the Rio Linda Municipal water system.

TABLE 1-2.

OTHER SAMPLING RESULTS, MCCLELLAN OFF-BASE WELL SAMPLING AND ANALYSIS PROGRAM, SECOND QUARTER, 1986

| <u>Phenols/EPA Method 604</u> | <u>Purgeable/EPA Method 624 (includes acetone and total xylenes)</u> | <u>Base/Neutral and Acid Extractables/EPA Method 625</u> | <u>Priority Pollutant Metals</u> |
|---|--|--|--|
| 6 Wells Tested | 2 Wells Tested | 2 Wells Tested | 3 Wells Tested |
| 6 Wells = Above DHS Action Level for Phenol.* | 2 Wells = Nothing Detected | 2 Wells = Nothing Detected | 2 Wells = Below EPA MCL 1 Well = Above EPA MCL for Silver.** |

* The DHS action level for phenol is the taste and odor threshold for chlorinated systems. No sampled residential wells are chlorinated. All samples contained less than 5 ppb of phenol, well below the federal standard of 3500 ppb for phenol in drinking water based on human health criteria.

** The well at 1524 Santa Ana, contained 67 ppb of silver; EPA MCL for silver is 50 ppb. The well, which is not presently used as a drinking water supply, is being resampled by McClellan AFB Office of Environmental Management.

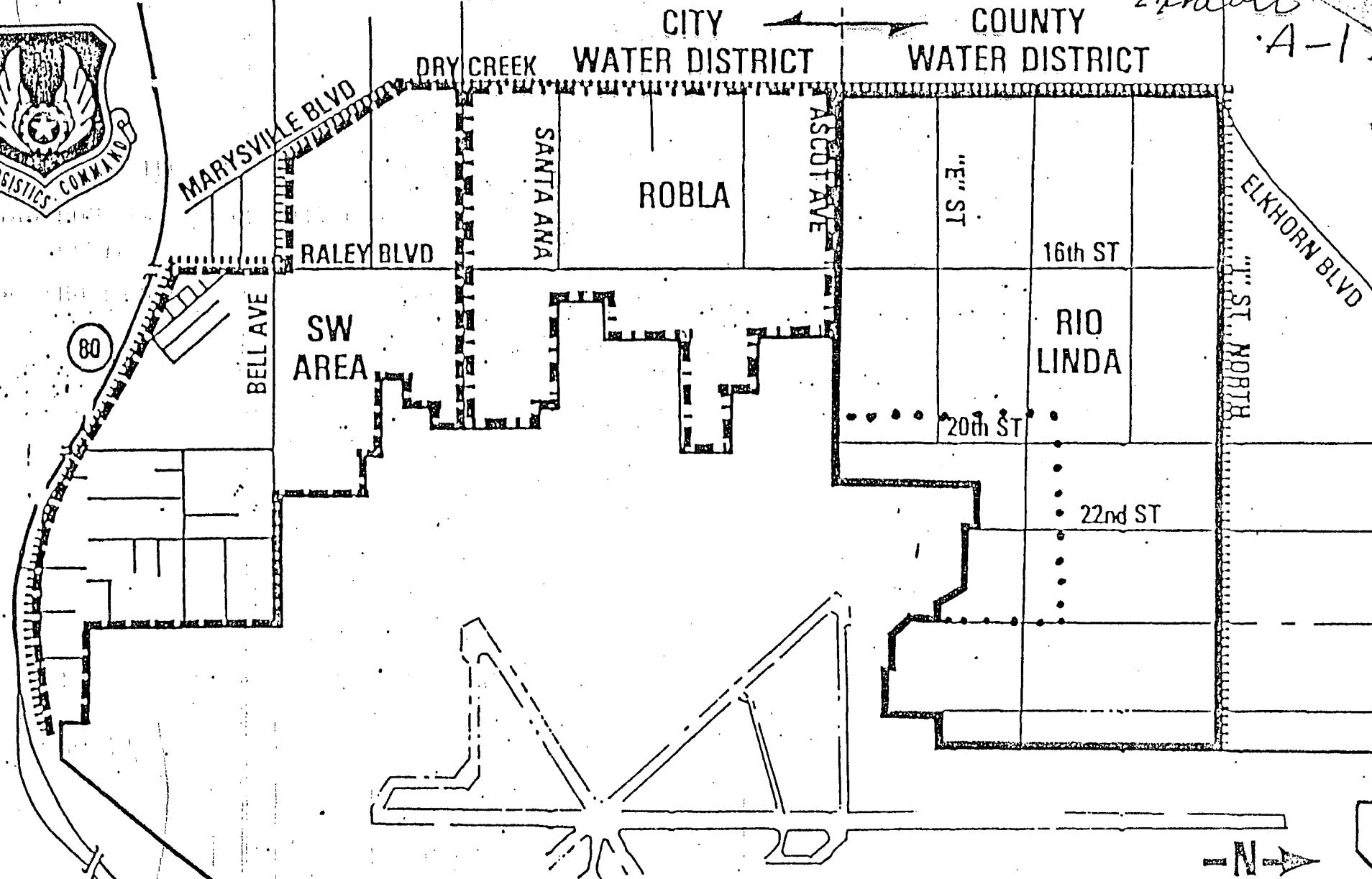
I-4

ATTACHMENT 2



Sheet
A-1

ATTACHMENT 3



LEGEND

- BOUNDARY OF CONCERN (ALL AREAS)
- ▬ RIO LINDA AREA
- ▬ ROBLA (MESS) AREA
- SW AREA
- CONNECTED BY A.F. (1985)

McCLELLAN AIR FORCE BASE

ATTACHMENT 3