



TO THE HONORABLE MAYOR AND COUNCIL

DATE: Oct. 24, 1989

SUBJECT: STATUS UPDATE OF EARTHQUAKE 1989

On Tuesday, October 17, 1989, at 5:04 pm, a 7.0 magnitude earthquake struck the State of California. The earthquake was located on the San Andreas Fault in Santa Cruz County.

This is a report summary of the steps taken by the City of Sunnyvale in response to the earthquake.

Immediately following the earthquake, Public Safety Command Officers gathered at the Emergency Operations Center (EOC), located at Public Safety Headquarters. The priority at that time was to quickly assess the City's preliminary condition in terms of damage. A radio link was set up with the Santa Clara County Office of Emergency Services. At the same time, the Commander in charge of the Dispatch Center was stationed in the Dispatch Center to make time-critical decisions and to provide advice to Dispatchers. A Public Safety Officer charted the status of events. All power and telephone service was out in the City. The Public Safety building went on emergency power and the emergency radio system stayed operational.

Personnel who had not left work before the earthquake were stationed in the EOC to answer non-emergency telephone calls and gather information to answer those questions. The City Manager immediately assumed responsibility as Director of Emergency Services, reporting to the EOC at approximately 5:30 pm. EOC Section Chiefs and other EOC assigned personnel quickly reported to the EOC.

Shortly after Public Safety officials gathered at the EOC, Sunnyvale Amateur Radio Emergency Services (SARES) personnel arrived to assist with damage assessment of crucial City buildings. Since the Public Works radio frequency was inoperable, SARES became the dispatch system for Public Works. SARES personnel reported on damage from pre-planned locations throughout the City, including school sites, fire stations, businesses and City buildings. A SARES person was also sent to PG&E to relay the City's position in terms of damage and its specific needs. Another SARES member was sent to Lockheed Missiles and Space Company to establish radio contact with the Emergency Preparedness Coordinator. Since telephone lines were overloaded immediately after the earthquake, SARES members were used for a number of emergency communications services.

Sunnyvale City Councilmembers were contacted and advised of a briefing to be held at 8:00 pm.

At approximately 7:30 pm Tuesday evening, the City Manager met with Public Safety officials to determine the City's general status. At that time, it appeared the damage that had been done could be addressed and mitigated by the City without the need for external resources. However, because vital City utility services had been severed, it appeared that problems would soon accumulate. At that time, the City Manager declared a local state of emergency, and emergency preparedness officials notified the City Attorney and Santa Clara County Office of Emergency Services of this step. The City Council passed the resolution at the emergency Council meeting later in the evening.

At 8:30 pm, a meeting of Department Directors and key EOC personnel was held to clarify response priorities. The City Manager received status reports from the Directors and Section Chiefs. Also discussed was what new damage might occur as a result of aftershocks.

The following is a brief description of the specific problems encountered by various City departments, and how these situations were addressed and remedied. This summary is on a Department by Department basis (not chronological) with actions resulting from directions and decisions made at the Tuesday meeting noted above, standard operating procedures, and as decisions were made by command personnel in the hours and days that followed.

PUBLIC SAFETY

Public Safety reported that power lines were down, gas leaks and tree fires were occurring and traffic lights were out. As a result, Public Safety's Dispatch Center received a large influx of telephone calls from residents about these problems. The number of telephone calls was triple that of a busy day at the Dispatch Center. In the first 11 hours after the earthquake, Public Safety personnel responded to over 180 emergency calls for service such as electrical wires down, and gas leaks, etc. As a result of this unusual activity, the Commander in charge of the Dispatch Center assigned two extra Dispatchers for the evening. The Commander prioritized calls by responding to telephone calls in the following order: life safety, hazardous materials leaks, traffic control, and gas leaks. An extra six public safety units were assigned to respond to calls. Of these, three units were specifically assigned to checking gas leaks. A surprisingly large number of residents who rely on life support systems in their homes (such as dialysis machines, respirators, etc.) called to ask when electrical power would be restored. All reserve fire apparatus were placed into service.

Cadets and Explorer Scouts were used to assist with delivering barricades, portable stop signs, flares, and other supplies to the areas of the City that required these materials.

X Sunnyvale's Neighborhoods Actively Prepare (SNAP) personnel called to report the results of damage assessments in their neighborhoods. These people were asked to check on surrounding neighborhoods. SNAP members responded quickly and efficiently to the disaster by forming their pre-assigned committees and checking for gas leaks, water line ruptures, and conducting damage assessments of their neighborhoods. A neighborhood distribution center was also organized for providing flashlights, batteries, and blankets to those residents who needed them.

A 50,000 gallon water tank at Westinghouse was damaged and had to be drained, causing the closing of California Street between Fair Oaks and Sunnyvale Avenue. The Hazardous Materials Unit responded to two calls of toxic material spills.

A fire started at the Kentucky Fried Chicken outlet. It was later determined that the fire was not caused by the earthquake.

A water heater exploded and caused a two-alarm fire response at a three-story apartment complex. The fire was quickly extinguished.

There were 10 or 11 traffic accidents due to downed power lines and inoperable traffic signals.

The worst injury reported as a result of the earthquake was a broken arm sustained by a man who had attempted to turn off his gas meter.

Public Safety officials have concluded that there were a sufficient number of officers and personnel to address the concerns and problems immediately following the earthquake.

Public Safety Fire Prevention Bureau staffing was augmented by reassigning trained Officers within the Department. In the two days following the earthquake, 296 high-hazard facilities, due to contents or processes, were inspected. No facilities were found to be damaged to the extent that they had to be shut down.

Inspection priorities were divided into two categories: fire prevention and hazardous materials inspections. The priorities were as follows: fire prevention facilities, private schools, nursing homes, residential care facilities; and child care facilities; hazardous materials: toxic gas facilities, bulk above-ground tanks, plating operation and laboratories, and underground tanks.

PUBLIC WORKS

The Public Works Department responded to watermain breaks (5) and several reports of sewer backups. Immediate inspection of key "infrastructure" facilities were undertaken including all City and County bridges and grade separations, water pumping stations and sewer lift stations, the downtown parking ramp, and the Water Pollution Control Plant. Portions of the Water Pollution Control Plant became temporarily inoperable, however, all discharges met required standards. The City lost one of its three sources of water (Santa Clara Valley Water District) due to the closing of the Riconada Treatment Plant. Engineers immediately began the process of placing in service City operated wells not presently in service. For a period of time, the Southwestern portion of the City had low water pressure, however, engineering modifications raised the pressure by Wednesday. Streets Division personnel responded throughout the City and put up portable stop signs at intersections as designated necessary by Public Safety.

COMMUNITY DEVELOPMENT

The Director of Community Development reported to the EOC and obtained preliminary reports of damage. The damage assessment priorities were established by the City Manager. These top priorities were to inspect the following buildings: City Hall, Public Safety, Library, and fire stations. The second priority was to inspect other City buildings, such as the Parks and Recreation buildings, including the Community Center. By 11:30 pm Tuesday evening, most City facilities had been preliminarily inspected by

a team of five Inspectors. The inspections revealed minor problems such as broken ceiling tiles and fallen shelves. Other damage appeared to be of a cosmetic nature.

The next priorities were to complete detailed inspections of City buildings, and begin inspections of dependent population facilities including private schools, convalescent homes, child care facilities, and hospitals (public schools are under the jurisdiction of the State). The next priority was to inspect buildings of unreinforced masonry construction. Earlier this year the City completed research on the subject identifying 133 unreinforced concrete buildings. These were all inspected. A priority was placed on immediate inspection of all buildings that had been reported to the City as significantly damaged. Calls for inspection for damage which did not sound serious were queued and later responded to.

Community Development personnel teamed with Fire Prevention personnel to conduct inspections. Fire prevention personnel reported any signs of structural damage to Community Development, which allowed Community Development inspectors to save time by only going to those buildings that were identified as possibly damaged.

The damage to buildings was minimal, due in part to the City's seismic building requirements and relatively new construction.

On Thursday and Friday, the Community Development inspectors continued with inspections, and by Thursday afternoon, had resumed their normal inspections.

The Community Development Department received about 35 calls from individual residents concerning questions regarding structural assessments of their homes. The questions referred to new cracks in walls or ceilings. Residents were advised to call engineers or architects to survey any damage and make recommendations.

PUBLIC INFORMATION OFFICE

Telephone calls from the local media were responded to by a Public Safety Public Information Officer and by the Community Relations Officer. On Wednesday, about 10 telephone calls were received. A large number of inquiries were made regarding the City's SNAP Program.

On Wednesday, Thursday, and Friday, Public Safety, Library, and Employment Development personnel staffed an earthquake information hotline. A hotline telephone number was established for the specific purpose of answering residents' questions and making referrals to appropriate agencies. After regular business hours (8am to 5pm) an update of occurrences and conditions was given to Desk Officers, and the telephone line was transferred to them. During the first full workday after the earthquake (Wednesday), 200 telephone calls were received. On Thursday, 50 calls were answered, and on Friday, 42 calls were received. A total of 102 earthquake related calls were handled by Public Safety over the weekend.

On Thursday, the City developed a "Sunnyvale Earthquake News" newsletter for distribution to residents. The newsletter contained information regarding the City's general condition in terms of damage, utility services, and structural damage to City buildings, as well as a telephone number for residents to call for transportation information. The newsletter was printed overnight and was ready for distribution by 7:00 am Friday morning. By noon Friday, Neighborhood Resource Officers and Explorer Scouts had delivered 17,850 newsletters to public and private schools, 4,450 to SNAP

Captains and groups, 4,700 to businesses, and 600 to fire stations. A total of 27,400 newsletters were distributed. In addition, newsletters were distributed at the front counters of Public Safety Headquarters, City Hall, Library and the Community Center. All Public Safety Beat Officers were given copies to distribute to businesses and other appropriate locations. On Saturday, the United States Mail delivered the newsletters to all Sunnyvale residents.

FINANCE

A method for reporting personnel time and resources utilized was required for proper future reimbursement claims. Fortunately, this process had been developed by the finance section of the EOC before the earthquake occurred. The result was a smooth recording of information that will coincide with state and federal categories for reimbursement.

OUTSIDE PROVISIONS/REQUESTS FOR ASSISTANCE

As noted earlier, the City did not require outside assistance.

To date, the City of Sunnyvale has been asked to host a Disaster Assistance Center (DAC). The center was opened Monday morning at the sports facility of the Community Center, and is staffed by the State Office of Emergency Services and Federal Emergency Management Agency personnel. A Parks and Recreation supervisor is acting as a staff liaison for the City of Sunnyvale.

The Library Program Meeting Room will be used as a training facility on Wednesday and Thursday for a State OES training class of approximately 80 to 90 building inspectors.

Public Safety Officers were requested, and provided mutual aid for the City of Santa Cruz (10) and the Town of Los Gatos (4).

Building Inspectors were provided to assist in Los Gatos over the past two days.

The Library received and processed library materials from the Mountain View and Santa Clara City Libraries (neither are yet open).

A Civil Engineer and Public Works Inspector have been provided to the Town of Los Gatos to assist with infrastructure damage assessment.

Staff from the Emergency Preparedness Unit reported to and assisted the Santa Clara County Emergency Operations Center over the weekend.

SUMMARY

Preliminary damage assessment information indicates that dollar losses may be as follows:

\$20 million	Industrial/Commercial
\$ 1 million	Public Facilities/Utilities
\$250,000	Residential

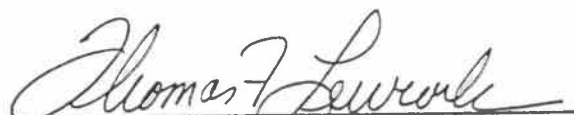
All City Departments have resumed normal operations as of Tuesday, October 24, 1989.

Sunnyvale has committed substantial resources and energy to emergency preparedness including a seven person Emergency Preparedness Unit in the Public Safety Department.

Substantial training has been conducted for EOC staff. The SNAP Program was established with over 5,000 households now participating. The SARES group (amateur radio) provided communication links not otherwise available. Significant training for emergencies has been provided by the City to residents, businesses, and industries. Most key City facilities have been seismically reinforced and others are scheduled in the ten year plan.

At this point, it would appear that this investment was material in allowing operations to move forward in a smooth and coordinated fashion. It would be unwise and unfair not to say, however, that Sunnyvale was also very, very lucky.

Throughout this emergency, Sunnyvale employees responded with professionalism and caring, whether immediately engaged in emergency activities, later assigned, or simply carrying out their normal functions. Personnel immediately needed, responded without necessity of callout. Literally, all City employees responded to work on Wednesday, again without need to be told, even though several suffered considerable property loss. City employees knew their responsibilities and responded splendidly!



Thomas F. Lewcock
City Manager

rmj

Attachments

DUANE A. SNIDER
1075 PLYMOUTH DR.
SUNNYVALE, CA. 94087

RECEIVED

OCT 24 1989

CITY COUNCIL

OCTOBER 22, 1989

THE HONORABLE LARRY STONE,
MAYOR, SUNNYVALE, CA.
DEAR SIR,

I WISH TO TAKE THIS OPPORTUNITY TO
COMMEND THE OUTSTANDING RESPONSE OF
THE NEIGHBORHOOD S.N.A.P. ORGANIZATION,
IMMEDIATELY AFTER THE EARTHQUAKE, IN THE
NEIGHBORHOOD OF PLYMOUTH DRIVE,

WITHIN 5 MINUTES OF THE QUAKE, A MAN
CAME DOWN PLYMOUTH WITH A WRENCH OFFERING TO
CHECK FOR GAS LEAKS AND ASSIST IN TURNING OFF
GAS LINES WHERE NECESSARY.

APPROXIMATELY 5 MINUTES LATER ANOTHER MAN
CAME TO CHECK WATER HEATERS AND GENERAL SITUATION
OF THE HOUSE HOLD,

RIGHT AFTER THIS A MAN CAME BY TO ADVISE
TO TURN OFF ~~FOR~~ ELECTRIC POWER AT FUSE BOX
AND OFFERED ASSISTANCE. HE ALSO ADVISED TO TURN UTILITIES

FINALLY AFTER ABOUT 1/2 HOUR A MAN AND
LADY CAME BY WITH A CHART OF HOUSES AND
CHECKING IF WE NEEDED ANY ASSISTANCE OR HAD
ANY PROBLEMS. THEY REALLY WERE WELL ORGANIZED.

WE WERE ALSO PROVIDED WITH A LIST OF INSTRUCTIONS,
ASSISTANCE PHONE NUMBERS AND A CARD POSTED ON
OUR HOUSE INDICATING WE WERE O.K.

THESE VOLUNTEERS SHOULD CERTAINLY BE REWARDED
FOR THEIR QUICK, PROFESSIONAL RESPONSE TO WHAT COULD
HAVE BEEN A DISASTER HERE. WE WERE FORTUNATE, BUT
IT WAS CERTAINLY COMFORTING TO HAVE THIS QUICK
RESPONSE HAD IT BEEN NEEDED.

I'M THANKFUL TO BE LIVING IN SUNNYVALE WHERE
THE CITY HAD PLANNED WELL IN ADVANCE FOR ANY
EMERGENCY HAD THE SERVICE BEEN REQUIRED.

MY THANKS FOR THE S.N.A.P. VOLUNTEERS AND
THEIR ORGANIZERS.

Duane A. Snider
36 YEAR RESIDENT.

CITY OF SUNNYVALE
CALIFORNIA

October 23, 1989

TO: All City Employees
FROM: City Manager
SUBJECT: Thanks —

There is no better time to know what kind of an organization you're working for than during times of emergency. The earthquake of last Tuesday reinforced the quality, professionalism, and caring that has long defined the City of Sunnyvale.

From the first responses immediately following the earthquake to the ongoing return to normalcy here in Sunnyvale and support provided to other agencies in need, Sunnyvale employees have shown a true commitment to excellence.

At the risk of not being comprehensive, I'd nonetheless like to acknowledge some of the activities by Sunnyvale staff. My thanks and appreciation —

*To the Department of Public Safety whose on-duty personnel immediately responded to various earthquake events within the community and whose off-duty personnel responded to duty without the need of any contact. Whether it was dealing with gas leaks, downed wires, toxic material releases, or emergency medical responses, the Public Safety Department responded quickly and professionally.

*To members of the Emergency Preparedness staff in the Department of Public Safety. The ongoing planning and training for an event such as this truly paid handsome dividends and the assistance provided by this unit throughout the past days have been instrumental in allowing us to return almost to normalcy.

*To those members of the Public Works Department who responded early in the event to deal with water main breaks, sewage backups, areas that had dramatically dropped water pressure due to the loss of water from the Santa Clara Valley Water District, and to those who kept the Water Pollution Control Plant functioning in spite of damage.

*To Building Inspectors in the Department of Community Development, Engineers and Inspectors in the Department of Public Works, and Fire Prevention and Hazardous Material unit staff in the Department of Public Safety — my thanks for quickly inspecting all major City facilities, private schools, high hazard locations, unreinforced concrete buildings, day care centers, nursing homes, and other high priority buildings throughout the City to assure safety.

*To those from the Department of Employment Development and Library who rapidly responded to the need to establish an information line to our community, setting up and staffing the "earthquake line" in the Training Room of the Public Safety building.

*To the Emergency Dispatch personnel who became the key emergency communication link between those in need of help and City emergency staff.

*To Community Relations and IMS personnel for quickly developing an information newsletter for citywide distribution, and for the assistance of Public Safety to get that newsletter distributed so that those in the community had an up-to-date status of events in Sunnyvale.


*To those who have served other communities — Officers in the Public Safety Department who have assisted in the Town of Los Gatos and Santa Cruz County, the Public Works Inspectors who have assisted in the Town of Los Gatos, to Emergency Preparedness staff who have assisted in the County Emergency Operating Center, to Building Inspectors assisting the Town of Los Gatos, to those who have assisted in opening the Indoor Sports Center at the Community Center as a Federal Emergency Management Agency Disaster Assistance Center.

*To all City employees who were not called nor needed immediately following the earthquake, but who reported to work promptly the following day in spite of the traumas, and for some — losses that came with the earthquake. Sunnyvale employees were at work while many others in the private sector stayed home.

*A special thank you to those City employees who, in spite of tremendous personal loss, reported for duty.

The effects of the earthquake will linger on for weeks and months to come, and we will all continue to be affected by it. We can be proud, however, that the response to this emergency was one of caring, quality and professionalism.

For those in the City family that have suffered extraordinary losses, we are working with employee associations to put a relief fund together. You will be hearing more about this as it evolves. Again, thanks.


Thomas F. Lewcock
City Manager

cm0

cc: Mayor Stone
Vice Mayor O'Toole
City Councilmembers