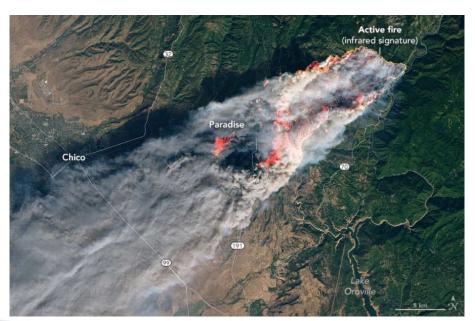


When a City Burns Down – The Tragedy of Paradise





Introduction

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Butte County Camp Fire Deputy IC, Debris Removal

Tom Henderson – Supervisor, UST Leak Prevention/Licensing Unit California State Water Resources Control Board



Recent Disaster History in Butte County

2008

- Humboldt and Ophir Fires June; 95 Properties
- June Lightning Complex June; 189 Properties

2017

- Lake Oroville Dam Spillway Failure February
- Wall Fire July; 78 Properties
- Ponderosa Fire September; 30 Properties
- La Porte/Cherokee Fires (Wind Complex) October; 68 Properties First OES/Cal Recycle Cleanup Program

2018

- Camp Fire November
 - Government Program Properties 10,907
 - Alternative Program Properties 1707

2020

- North Complex Fire September
 - Government Program Properties 1097
 - Alternative Program Properties 132





CUPA Staff During Camp Fire

Program Supervisor – First year as supervisor
Two Senior Hazardous Materials Management Specialists
Two Hazardous Materials Management Specialists; one hired the previous month (not ICC Certified)
One Hazardous Materials Management Specialist hired in June, 2019 (not ICC Certified)

EH Staff lost homes during fire:

- New CUPA Inspector
- EH Division Director
- Land Use Program Manager



Camp Fire Response

Repopulation

- Health and Safety Notifications
- Twice Daily Re-Population Meetings
- Drive By Recon for Public Health and Safety Hazards
- Approval of reducing Evacuation Zones from Order to Warning
- Health and Safety Packets for first day of re-entry;
 20K Packets made and staffed re-entry locations
- Shelter Assessments



Health and Safety Precautions for Re-entry

YOU ARE ENTERING A HAZARDOUSAREA ENTER AT YOUR OWN RISK

In the burn area, you will encounter dangerous conditions and will be exposed to toxic materials that may include but are not limited to:

- · Embers /hot ash
- Hazardous materials, including: ash, asbestos, heavy metals, oils, fire retardants, pesticides and other hazardous materials
- Puncture hazards, including: broken pipes, exposed nails, broken glass, damaged structural elements
- Potential explosive hazards including: propane tanks, ammunition, and solvents
- Slippery surfaces
- Toxic airborne particles
- Uneven ground
- Unstable structures

Wear protective gear and minimize time of exposure





Phase I

 Assisted DTSC and EPA with Phase I Emergency Response Household Hazardous Waste Assessment and Removal – Staffed by EH specialists via Mutual Aid

Phase II

- Government Program 10,907 Properties
- Alternative Program 1707 Properties
- Self-Cleanup Authorization for Properties with structure less than 120 ft2

Federal Disaster Debris Removal Funding included Commercial Properties

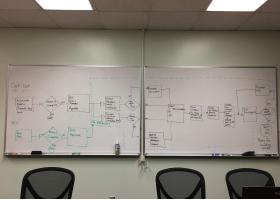


Data Management

- Previously used excel for fire cleanup oversight
- Developed system in Trakit from Development Services
- Document Government Program and Alternative Program steps

and issue completion notices efficiently

• Put a hold on Property for any Permits





Government Program

- Right of Entry Center and Approval
- Staffing Public Outreach Events
- County Representatives for Cal OES Debris Removal Operations Center (DROC) – Three rotating CUPA staff, 6 days a week
- Completed January/February 2020







Alternative Program

- Created Alternative Cleanup Program Requirements and Application – Mirrored Government Program Requirements
- Staff CUPA Staff, CAEHA/extra help, Yuba County CUPA
- Work Plan Review and Approval
- Final Report Work Plan and Approval
- Completed August 2021



Abatement – 43 Properties

- Investigation/Evidence
- Posted Notices
- Warrants







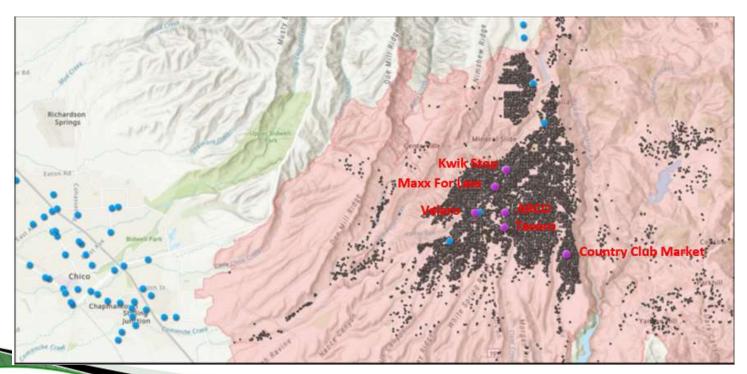
UST Facilities Destroyed in Camp Fire

- Kwik Stop 8226 Skyway, Paradise
- Maxx For Less 7575 Skyway, Paradise
- Valero Station #3681 6490 Skyway, Paradise
- ARCO 07036 5987 Clark Road, Paradise
- Tesoro (Mobli) 58306- 5734 Clark Road, Paradise
- Country Club Market 5531 Pentz Road, Paradise

All facilities had double walled UST systems



Location of Destroyed UST Facilities





Effects of Camp Fire on UST Program

- Repair Permits Prioritized
- Inspections When we could

2018 UST Inspections

- UST Facility Inventory, November 2018; 99
- Completed Jan. 1 Nov. 7; 80
- Completed Nov. 8 Dec. 31; 10
- Not inspected; 9



Effects of Camp Fire on UST Program

2019 UST Inspections

- UST Facility Inventory; 98
- Completed 2019; 83
- Jan April; 11
- May Dec; 72
- Not inspected; 15
- One staff allowed to focus more on CUPA during May 2019. To catch up, scheduled and performed annual inspection during the monthly Designated UST Operator Inspection



Effects of Camp Fire on UST Program

2020 UST Inspections

- UST Facility Inventory, November 2020; 100
- Completed 2019; 71
- Not inspected; 29
- Contributing Factors COVID-19 and North Complex Fire







Destroyed UST Facility Response

- Remove Fuel
- Temporary Closure
- Permanent Closure
- Rebuild and Permit





Damage to UST Systems Due to Fire

- Convenience Store Destroyed
 - Monitor Console
 - o Vent piping if attached to store
- Canopy, Dispensers, Piping and Tanks
 - Contacted SWRCB regarding previous fires and potential issues regarding tanks/piping
 - Previous wildfires indicated no damage to these structures
 - Camp Fire visual observation and testing for re-opening facilities confirmed this





Permanently Closed UST Facilities

Valero Station #3681

- Permanent Closure May 13-16, 2019
- Debris Removal Completed: March 20, 2020 (Alternative Program)

TESORO (MOBIL) 58306

- Temporary Closure December 19, 2018
- Debris Removal Completed: April 2, 2020 (Alternative Program)
- Permanent Closure August 11, 2020





Rebuilt and Permitted UST Facilities

ARCO 07036

- Fuel Removed January 7, 2019
- Temporary Closure January 7, 2019
- Debris Removal Completed: October 10, 2019 (Alternative Program)
- Operating Permit Issued: June 4, 2021

Maxx For Less

- Fuel Removed January 9, 2019
- Temporary Closure December 31, 2020
- Debris Removal Completed: September 17, 2019
- Operating Permit Issued: July 13, 2022







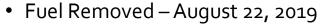
Testing Requirements to Re-Open

- Monitoring Certification, Spill Bucket and LLD Testing
- Secondary Containment Testing
- Overfill Prevention Testing



UST Facilities Under Temporary Closure

Kwik Stop



- Temporary Closure Permit August 30, 2019
- Last facility to remove fuel. Owner had difficulties so Cal Recycle was prepared to remove fuel. Owner ended up removing the fuel.
- Debris Removal Completed: December 4,2019
- UST Repair Permit Issued July 19, 2022
- Town of Paradise Building Permit Issued November 2022

Country Club Market

- Fuel Removed May/June 2019
- Debris Removal Completed: October 29, 2019
- Temporary Closure Permit November 6, 2019
- Town of Paradise Use Permit under review



Delays Affecting Rebuild and Reopening

- Debris Removal
- Insurance/Financing
- Building Permits
- Construction
- Electricity









Temporary Closure Requirements

CCR Title 23, Division 3, Chapter 16, §2670(b)

The temporary closure requirements of section 2671 shall apply to those underground storage tanks in which the storage of hazardous substances has ceased but the underground storage tank will again be used for the storage of hazardous substances within the next 12 consecutive months. At the end of 12 consecutive months during which the tank is temporarily closed, the local agency may approve an extension of the temporary closure period for a maximum additional period of up to 12 months. Owners and operators shall complete a site assessment in accordance with section 2672(d) before an extension may be granted by the local agency. The temporary closure requirements of section 2671 do not apply to underground storage tanks that are empty as a result of the withdrawal of all stored substances during normal operating practice prior to the planned input of additional hazardous substances.



Issues with Temporary Closure Requirements for Wildfire Disasters

- Regulations were not intended for the event of wildfire disaster
- 12 months is not nearly enough time for a facility to remove fire debris, rebuild and put the tanks back in service
- A 12 month extension may still not provide adequate time to put the USTs back in service and an expensive site assessment may additionally hinder financial resources which may be needed to rebuild and put the USTs back in service



Critical Decisions Made for UST Program During Camp Fire Recovery

- Prioritized on demand UST Repair Permits
- Inspect UST facilities during monitoring certification when possible
- Catch up on missed UST inspections using DO monthly inspections
- Remove fuel from tanks as soon as possible Work with Cal Recycle if difficulty removing fuel
- Allow for tanks with fuel removed to complete Temporary Closure requirements at a later date
- Did not require an extension for additional 12 months which would require site assessment
- Kept in contact with facility owners to ensure progress
- Began annual inspections in 2022 and sent Notice to Comply for two facilities
- Did not pursue formal enforcement



Results from Decisions Made for UST Program During Camp Fire Recovery

- Removing fuel as soon as possible provided best protection for environment and public health
- Patience and working with facility owners allowed the rebuild of two facilities with two more on the way for a community with few remaining services for residents
- Received Deficiencies during 2020 CUPA Evaluation
 - UST Inspection Frequency
 - UST Return to Compliance
 - UST Closure Sampling Requirements
 - UST Temporary Closure Requirements



Advice for CUPA's

- It is tough! It takes a toll physically, mentally and emotionally
- Have mutual aid set up in advance (regional, neighboring CUPA's, ect.)
- Hire extra help/other staff for fire recovery
- Try to keep as many staff as possible working on the CUPA Program
- If possible do not re-invent the wheel for a cleanup program
 - Butte Co. has a database with everything we had to use/produce during the Camp Fire



UST Program Since Camp Fire

- All UST Facilities inspected during 2021 and 2022
 - Still deficient on inspection frequency for other programs
- New policies created for UST Closure, Temporary Closure and Return to Compliance
- Two inspectors ICC Certified Aug. and Sept. 2021
- Hired additional CUPA Inspector Sept. 2021, ICC Certified June 2021
- Participated in preparation of the EPA Wildfire Guide: Preparation And Recovery For Underground And Aboveground Storage Tank Systems, September 2021 which included a Camp Fire Case Study



State Water Resources Control Board

- We understand the magnitude of the tragedy
 - Provide support as needed
 - Often shows as empathy rather than relief



Federal UST Regulations

- Temporary closure requirements (section 280.70)
 - 12 months requirement
 - 12-month extension with a site assessment
 - If UST system does not meet the construction and monitoring requirements at the end of temporary closure, the UST must be permanently closed.



California UST Requirements

- State timeframe requirements consistent with Federal requirements
 - (12 months + 12-month extension)
- Inspection performed annually
 - SWRCB developed inspection methods for Abandoned UST that may be appropriate for some other types of facilities



Current Discussions

- Make disaster associated issues an Incidental Finding
- Keep them as Deficiencies with caveats
- Additional support from the State Water Board
 - Evaluation assistance
 - Inspection assistance



Options

- Propose new language for H&SC
 - There are limitations to this approach
- UST Regulations can be more restrictive
 - Never less restrictive
 - There are limitations to this approach



Options

- Chapter 16 Rewrite Abandoned UST
 - There are concerns with this approach
 - Proposed VPH requirements





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