

Item 11

Conditional Waiver of Waste Discharge Requirements for Management and Disposal of Solid Waste from Wildfires

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South Lake Tahoe, CA



Outline

- Round Fire
- 2007 Southern California Wildfires
- Applicable regulations
- Waiver requirements
- Future issues
- Comments received
- Staff Recommendations



Round Fire – Mono County

- Fire began February 6; 7,000 acres burned
- 40 homes burned; 5 structures damaged
- Debris from houses may include hazardous waste such as asbestos, metals, pesticides, solvents, etc.
- Soils beneath homes may also contain concentrated residues from typical household hazardous waste



Pumice Valley LF

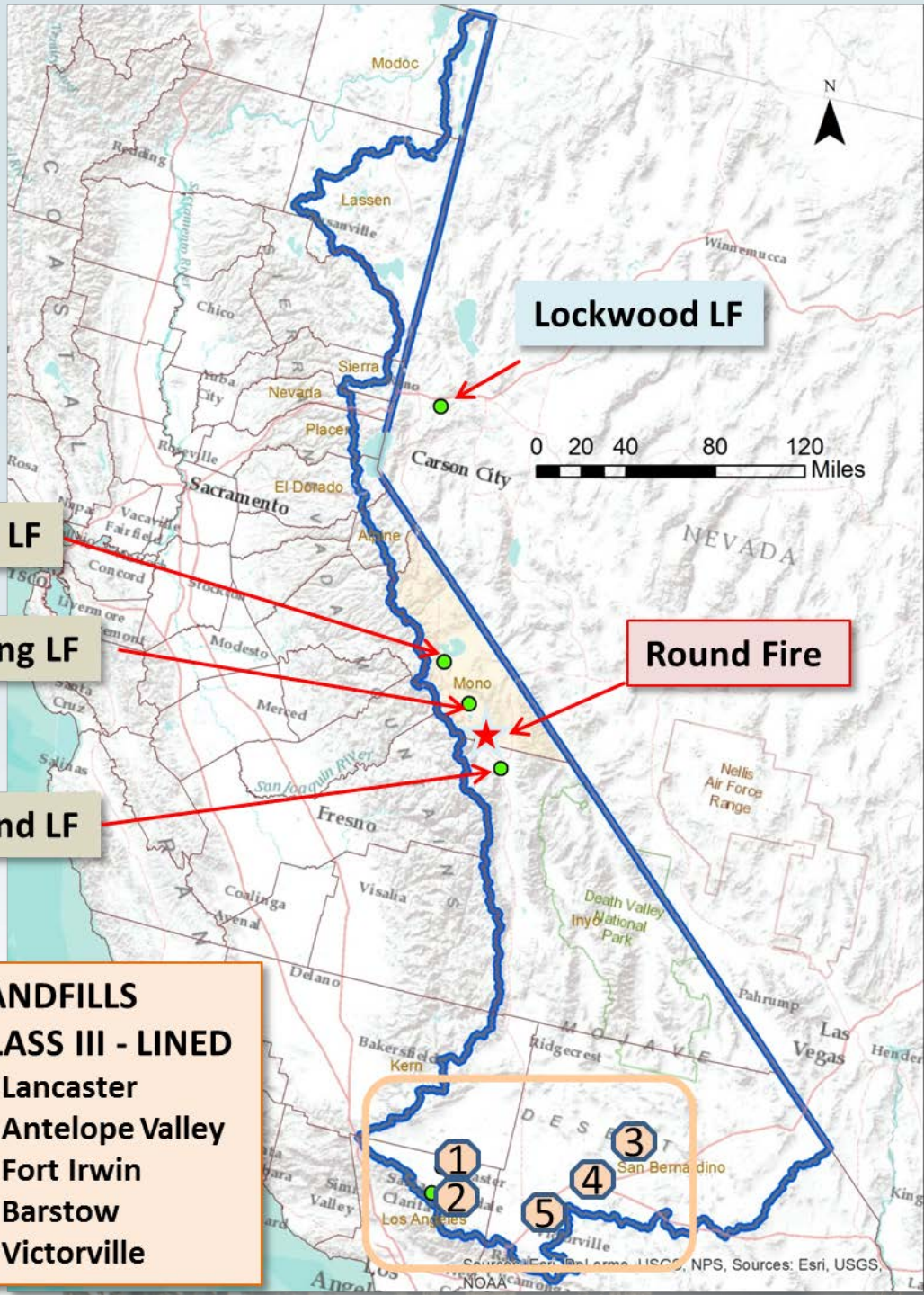
Benton Crossing LF

Bishop Sunland LF

Lockwood LF

Round Fire

- LANDFILLS
CLASS III - LINED**
1. Lancaster
 2. Antelope Valley
 3. Fort Irwin
 4. Barstow
 5. Victorville



Assessment of Burn Debris

2007 Southern California Wildfires

- DTSC conducted an assessment of burned residential areas associated with the Slide Fire in San Bernardino County and the Witch Creek Fire in San Diego County, both of which occurred during October 2007
- Objective was to characterize the residual burn debris and ash from these fires and determine the presence of hazardous constituents exceeding human health screening levels

Assessment of Burn Debris

2007 Southern California Wildfires

- San Bernardino and San Diego 2007 fires burned over 350,000 acres, destroyed over 2,200 structures, and over 2,000 vehicles.
- Residential fire debris may include:
 - Asbestos
 - Heavy metals
 - Pesticides and herbicides
 - PAHs (dioxins and furans)
 - PCBs



2007 Average Burn Debris & Ash Sample Metal Concentrations

	TOTAL mg/Kg	TTLC mg/kg	STLC mg/L
• Cadmium:	25.2	100	1.0
• Copper:	4,210 – 4,730	2,500	25
• Lead:	445 – 1,640	1,000	5
• Zinc:	3,640 – 8,250	5,000	250

Metals: Sb, As, Ba, Cr, Ni and Zn exceeded USEPA Region IX soil screening levels for potential impacts to surface water, shallow groundwater, and areas underlain by fractured rock aquifers in both the San Bernardino and San Diego County sites

- Source: *Assessment of Burn Debris, 2007 Wildfires, San Bernardino & San Diego Counties, CA, pgs 37 & 38*

Assessment of Burn Debris 2007 Southern California Wildfires

- Researchers conducted this assessment using a statistically-based random sampling approach and avoided hot spots to ensure representative samples were collected
- Study concluded that expeditious removal of fire debris and ash was warranted and in the best interest of the public



California Code of Regulations

- Hazardous Waste, CCR, title 22, division 4.5: Characterization, handling, and disposal of waste to Class I Units
- Non-Hazardous Solid Waste, CCR, title 27, division 2: Characterization, handling, and disposal to Class II and Class III Units



California Water Code

- Section 13172 provides the authority to ensure adequate protection of water quality and uniformity of waste units
 - Waste classification – level of threat to water quality
 - Disposal unit classification – level of protection for water quality

This Resolution would, if adopted:

- Waive the filing of a report of waste discharge and prescribe reporting requirements
- Apply only to fire debris derived from the cleanup of burned areas under a Governor-declared State of Emergency



This Resolution would, if adopted:

- Allow discharge to five, lined, Class III Municipal Solid Waste (MSW) Landfills in the Lahontan Region
 - (2) two in Los Angeles County, and
 - (3) three in San Bernardino County
- Allow for fire debris handling at designated temporary waste staging areas

This Resolution would, if adopted:

- Provide a streamlined approach to cleanup efforts
- Protect groundwater by ensuring that cleanup is conducted safely
- Expire on March 12, 2020, unless the Water Board extends it



Issues to consider for the future

- Handling and disposal of wildfires debris from areas that have not been declared under a State of Emergency
- Handling and disposal of wastes and debris from other natural and man-made disasters



Issues to consider for the future

- Improvements needed to portions of currently unlined landfills in rural areas to allow disaster debris disposal (to reduce transportation costs)



Conclusions

- Burn debris and ash from residential fires is appropriate to be disposed in **lined** Class III landfills
- Our fire waiver, as proposed, is protective of water quality



Comments Received

Mono County Board of Supervisors

- Comment (1) - Difference of perception between the agencies involved regarding where fire debris and ash may be disposed



Comments Received

Mono County Board of Supervisors

- Comment (2) – the term “normal fires” needs to be better defined in the waiver



Comments Received

Mono County Board of Supervisors

- Comment (3) - Transportation to lined landfills may have other environmental impacts as well as severe financial hardship for rural counties



Comments Received

Mono County Board of Supervisors

- Comment (4) - As a contingency measure, develop standards for 'emergency cells' at unlined landfills

Recommendations

- **Adopt the Resolution as proposed**
- **Give direction to staff regarding future changes to the waiver**

