

## **CLOVER FLAT LANDFILL INSPECTION SUMMARY – ATTACHMENT**

### **9/1/2017 FOCUSED INSPECTION DUE TO GREEN/WOOD MATERIAL FIRE**

#### **GPIRIE/PEX**

**General Summary:** Fire started at Clover Flat Landfill on September 1, 2017 at approximately 3:00am. Involved approximately 5,000 cu yd of green and wood material covering 2 acres. Location was on a lower pad away from the working face. New grinder was burned and lost. Four methane wellheads and piping were burned. Gas extraction in the area was closed-off from rest of gas field. Cal Fire/Napa County Fire, Clover Flat Landfill both assisted in containing the fire. Limited water available on-site.

**Violation:** Title 14: Section 17867(a)(9) – Adequate water supply for fire suppression. Water was on site with various tanks and volumes, but not available for use during wood/green storage fire response.

Recommendation:

- Available use of 55,000 gal tank on top above landfill. Tank to be full or at 90% of capacity at all times. Install delivery pipe and connection availability to hydrant (or similar) for immediate access for water tender or Cal Fire equipment – to meet specs of Cal Fire.
- New Water truck available full time.

**Area of Concern:** Title 14, Section 17867(a)(3), JTD Section 2.2.2 Table 2, 2.8.3 Green Waste Storage and Composting Operations, 5.5.3 Green Waste Handling. -All handling activities shall be conducted in a manner that minimizes...hazards, nuisances...

Recommendation:

- Adhere to storage limit times.
- No further increase in Green/Wood volume until existing material is managed so as not to be a risk of further re-ignition, landfilled, or transferred off-site, and adequate usable water capacity is available.
- All Green/Wood storage areas maintain total cumulative volume limits, but also no more than 1000cuyds in any one pile (i.e. 20yd x 20yd x 2.5 yd high). Thus, one material type of 3000 cu yd total – separate into 3 x 1000 cu yd piles.
- All Green/Wood storage areas maintain firelanes between any one pile.

## **Fire Prevention and Standards (Title 14, 17857.1(a)(2)(A)(4) & 17867(a)(9):**

In addition to the Area of Concern identified in the inspection report (Section 17867(a)(9)), below are regulations and mitigation measure of concern identified by Cal Fire. Please contact Garrett Veyna, Cal Fire/Napa County Fire, NCFD Fire Marshal, Battalion Chief for further direction from Cal Fire. He can be contacted at (707) 299-1461.

### Mitigation measures:

1. 4 inch water line for fire fighting operations.
2. Separation of piles. (CFC 2808.4)
3. Piles kept to required size. (CFC 2807.2)
4. Completed emergency plan with fire mitigation measures. (CFC 2808.10)
5. Equipment staffed/available during firefighting operations. (CFC 2808.9)
6. Pile monitoring. (CFC 2808.6)

All references below are from the 2016 CA Fire Code.

#### 301.1

##### ***[California Code of Regulations, Title 19, Division 1, §3.14] Fire Hazard.***

*No person, including but not limited to the State and its political subdivisions, operating any occupancy subject to California Code of Regulations, Title 19, Division 1 regulations shall permit any fire hazard, as defined in this article, to exist on premises under their control, or fail to take immediate action to abate a fire hazard when requested to do so by the enforcing agency.*

**Note:** “Fire Hazard” as used in California Code of Regulations, Title 19, Division 1 regulations means any condition, arrangement, or act which will increase, or may cause an increase of, the hazard or menace of fire to a greater degree than customarily recognized as normal by persons in the public service of preventing, suppressing or extinguishing fire;

**2807.2 Size of piles.** Piles shall not exceed 60 feet (18 288 mm) in height, 300 feet (91 440 mm) in width and 500 feet (152 m) in length. Piles shall be separated from adjacent piles or other exposures by approved fire apparatus access roads

**2808.4 Pile separation.** Piles shall be separated from adjacent piles by approved fire apparatus access roads.

**2808.5 Combustible waste.** The storage, accumulation and handling of combustible materials and control of vegetation shall comply with Chapter 3.

**2808.6 Static pile protection.** Static piles shall be monitored by an approved means to measure temperatures within the static piles. Internal pile temperatures shall be monitored and recorded weekly. Such records shall be maintained. An operational plan indicating procedures and schedules for the

inspection, monitoring and restricting of excessive internal temperatures in static piles shall be submitted to the fire code official for review and approval.

**2808.7 Pile fire protection.** Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system.

**2808.8 Fire extinguishers.** Portable fire extinguishers complying with Section 906 and with a minimum rating of 4-A:60-B:C shall be provided on all vehicles and equipment operating on piles and at all processing equipment.

**2808.9 Material-handling equipment.** Approved material handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

**2808.10 Emergency plan.** The owner or operator shall develop a plan for monitoring, controlling and extinguishing spot fires and submit the plan to the fire code official for review and approval.

