

## APAC-KS, Inc. C&D Landfill – KDHE Permit Decision – Fact Sheet



### 167<sup>th</sup> and Metcalf, Overland Park

**Original Permit:** Issued August 13, 1986; 50 acre disposal area; 1000 ft final elevation; Zoning by JoCo Planning Director – “Legal non-conforming use”

**Permit Modification #1:** Approval to include composting operation; April 10, 2001

**Application to Expand:** Requested May 18, 2004; expand area to 82 acres (already used some of area); increase elevation to 1024 ft above sea level; projected useful life – 2020.

### Landfill History:

1. Population in vicinity grew after the landfill was initially permitted
2. Landfill has a low-permeability shale bottom that holds water
3. Large volumes of gypsum wallboard was disposed in low levels of the landfill
4. Poor stormwater management practices caused water accumulation in landfill
5. Waste sitting in water is generating H<sub>2</sub>S and methane
6. Gas monitors were installed along the landfill perimeter and a gas collection and destruction system has been installed.
7. Water is being slowly removed from the landfill and treated for H<sub>2</sub>S

Public Comment Period (Oct 22 to Dec 3, 2007): Public concerns and opposition

- H<sub>2</sub>S (rotten egg) odor and health concerns; methane gas hazard
- Proximity to schools and residences
- Impacts property values and future economic development (not a KDHE issue)
- Traffic, muddy roads, and litter
- Landfill security
- Compliance history (operated outside permitted area and unauthorized waste)

### Health Risks Associated with Hydrogen Sulfide Exposure

The risks from long-term low-level exposure may result in respiratory and neurological health effects. The respiratory health effects can be manifested as breathing abnormalities and nose bleeds. The neurological effects can appear as fatigue, loss of appetite, nausea, vomiting, irritability, poor memory, depression, impaired motor skills, and dizziness.

## **KDHE Permit Decision**

**A modified permit allowing limited expansion will be issued to APAC-KS, Inc. The permit requires expedited closure of the landfill as compared to the request set forth in the permit application. This decision was made to reduce public health risks and nuisances to citizens living and working near the landfill. APAC-KS, Inc. must also enhance the current corrective measures designed to minimize the generation and potential for release of hydrogen sulfide and methane gas.**

### **Specific Permit Requirements**

- Waste disposal must cease on or before December 31, 2010.
- Construction of a low-permeability final cover must be completed by June 30, 2011.
- The maximum final elevation of the landfill, including the cover is 1,010 feet above mean sea level.
- The water level in the bottom of the landfill must be reduced to less than 12 inches by December 31, 2008 and maintained below that level.
- Documents to be submitted to KDHE include a revised final cover design; a new fill sequencing or phasing plan; a plan to enhance access controls including fencing; an enhanced landfill dewatering plan; a landfill gas collection, treatment and monitoring plan; and a mud control plan to minimize tracking of mud onto public roads

### **Benefits of Decision**

- The low permeability landfill cap will minimize stormwater infiltration and expedite the dewatering of the landfill; thus, there will be a reduction in hydrogen sulfide gas production sooner than under the applicant's projected operating period through 2020.
- By allowing three more years for disposal of C&D waste, APAC-KS will be able to use waste rather than clean soil to achieve final site contours that effectively manage stormwater following closure.
- On-site presence of APAC-KS over three more years of operation should improve management of the various corrective actions and the gas monitoring and alarm system.
- The requirement to enhance the landfill dewatering project will reduce hydrogen sulfide and methane gas production sooner than the current rate of dewatering.
- Nuisance caused by odor and the tracking of mud onto public roads should be reduced.

### **Acceptance of Permit**

The permit general conditions state that the permit does not go into effect until APAC-KS, Inc. signs the certification page. Failure to accept the conditions and sign the certification page means the existing permit remains in effect.