

Filename: S:\wp11\PERMITS\Permit.V\Apache Junction LF\V20629R1.tsd.wpd
From: Barbara Cenalmor
Date: July 11, 2008

**Technical Support Document
Apache Junction Landfill
Permit# V20629.R01**

1. BACKGROUND 2
1.1 Applicant 2
1.2 Attainment Classification 2
1.3 Permitting History 2
1.4 Compliance/Enforcement History 2
2. PROCESS DESCRIPTION 2
3. EMISSIONS 3
3.1 Net Change in Emissions 3
4. REGULATORY REQUIREMENTS AND MONITORING 4
4.1 PSD Review 4
4.2 NSPS/Other Regulatory Emission 4
4.3 COMPLIANCE ASSURANCE MONITORING (CAM) 4
5. AMBIENT IMPACT ASSESSMENT 4
6. COMPLIANCE REPORTING 4
7. LIST OF ABBREVIATIONS 4

Technical Support Document
Title V Permit Revision
Apache Junction Landfill
Permit# V20629.R01

1. BACKGROUND

1.1 Applicant

The application has been submitted by Apache Junction Landfill Corporation, 4050 S. Tomahawk Road, Apache Junction, Arizona 85219. Apache Junction Landfill is a Delaware corporation.

1.2 Attainment Classification

The Apache Junction Landfill is located in a non-attainment area for the 8-hour ozone standard, and in attainment for all other pollutants.

1.3 Permitting History

The facility began operation during the 1960's is currently owned and operated by Apache Junction Landfill Corporation, a wholly owned subsidiary of Allied Waste Companies (Arizona) Inc., which is a wholly owned subsidiary of Allied Waste Industries, Inc. The landfill was acquired from Pinal County in October 1993. Pinal County owned and operated the facility, formerly known as Tomahawk Landfill, from approximately 1971 through October 1993.

Permit #	Date Issued	Description
???	1999	21.6 acre expansion approved
V20614.000	10/16/01	Initial TV
V20614.R01	8/26/03	Incorporates Asbestos NESHAP
V20629.000	12/14/06	Renewal TV
V20929.R01	2008	17.5 acre/13,031,809 yd ³ expansion

This most recent revision, V20629.R01 approves an expansion of 17.5 acres and a new design capacity of 13,031,809 cubic yards of gross air space.

1.4 Compliance/Enforcement History

There is no history of Notices of Violation or enforcement actions against this facility.

2. PROCESS DESCRIPTION

The Apache Junction Landfill ("AJL") is a regional municipal solid waste treatment and disposal facility. It presently incorporates a state-of-the-art landfill that serves the communities of Phoenix, Mesa, Gilbert, Queen Creek, Chandler, Apache Junction, and Superior. Acceptable wastes may also be received from locations outside these communities. No hazardous or infectious medical wastes are accepted for disposal. Incineration of wastes is not performed.

AJL is located at 4050 S. Tomahawk Road, Apache Junction, Arizona. The site is located in the southeast

quarter of Section 4, Township 1 South, Range 8 East, Gila and Salt River base and meridian, Pinal County, Arizona.

After this revision is issued, the AJL will consist of approximately 128.9 acres of land of which 96.3 acres will be permitted as landfill area. The remainder consists of ancillary facilities, storm water management structures, container storage, and fire breaks and buffer zones around the perimeter of the facility.

AJL accepts residential wastes, commercial wastes, construction debris, industrial special wastes and other acceptable non-hazardous wastes from the areas it serves. Wastes acceptable for landfilling at AJL include:

- o Municipal refuse (garbage, paper products), pesticide containers (clean, rinsed, and punctured), and other wastes from households or commercial facilities;
- o Construction debris (wood, concrete, dirt, rocks, and gypsum);
- o Demolition material;
- o Dead animals;
- o Non-friable asbestos-containing materials;
- o Shredder residue;
- o Incinerator ash;
- o Non-infectious medical wastes;
- o Water and wastewater treatment sludges which pass the pain filter test;
- o Industrial waste; and,
- o Other non-hazardous special wastes (i.e. petroleum contaminated soils) as approved by the Arizona Department of Environmental Quality.

3. EMISSIONS

The increase in design capacity approved by this revision will only affect the generation of landfill gas. Using AP-42 approved factors and a landfill gas model that mimics the output of USEPA’s LandGEM 3.02, the permittee has estimated the net change in emissions discussed below. The net emissions change reflects the use of a flare as a control device, which is required by 40 CFR 60, Subpart WWW once the emissions of non-methane organic compounds reach the 50 Mg/yr threshold.

3.1 Net Change in Emissions

Pollutant	Potential to Emit (tpy)		
	Post Expansion	Pre-expansion	Net Change
VOCs	5.31	13.27	-7.97
CO	29.51	--	29.51
NOx	8.85	--	8.85

SO2	2.24	--	2.24
PM10	2.47	--	2.47
HAPs	2.99	4.64	-1.64

4. REGULATORY REQUIREMENTS AND MONITORING

4.1 PSD Review

The potential emissions of any criteria pollutant are below that which would require a PSD review.

4.2 NSPS/Other Regulatory Emission

There are no additional federal or local regulatory requirements due to the expansion. The requirements of 40 CFR 60 Subpart W, already applicable, are already included in the permit.

4.3 COMPLIANCE ASSURANCE MONITORING (CAM)

The requirements of 40 CFR 64 do not apply to this facility, since this facility is not a major source and no single emission unit satisfies the criterion of §64.2(a)(3). No single unit has pre-control device emissions of 100 tpy or more.

5. AMBIENT IMPACT ASSESSMENT

For the initial Title V permit of this facility, PCAQCD performed an ISCST3 modeling analysis to assess the emission ambient impacts of particulate matter, volatile organic compounds and hazardous air pollutant from this facility and concluded that this facility will not itself cause a violation of the ambient air quality standards or the Arizona Air Quality Guidelines.

No additional modeling has been conducted for this revision since the none of the emissions increases are above the significance threshold for any of the pollutants. A cursory review indicates that emissions of CO, SO2 and NOx will not violate any ambient standards.

6. COMPLIANCE REPORTING

The actual dumping rate records, dust suppression records and other NSPS-required records will be used to determine the PM10, VOC and other emissions required by the periodic report.

7. LIST OF ABBREVIATIONS

- AJL Apache Junction Landfill
- AP-42 “Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources”, 5th Edition
- CAA Clean Air Act
- CAM Compliance Assurance Monitoring
- CFR Code of Federal Regulations
- CO Carbon Monoxide
- hr Hour
- lb Pound
- MACT Maximum Achievable Control Technology
- Mg Megagrams
- MMBTU Million British Thermal Units

NOX Nitrogen Oxides
 NSPS New Source Performance Standard
 NSR New Source Review
 PCAQCD Pinal County Air Quality Control District
 PGCAQCD Pinal-Gila Counties Air Quality Control District
 PM10 Particulate Matter nominally less than 10 Micrometers
 PSD Prevention of Significant Deterioration
 SIC Standard Industrial Code
 SOX Sulfur Dioxide
 tpy tons per year
 TSD Technical Support Document
 VOC Volatile Organic Compound
 yr year