



# Industrial Water Extraction for Dust Control

The Mathematical Reality of the Proposed  
Burnet Quarry Operations

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An Audit of Proposed 14-Hour, 7-Day Operations

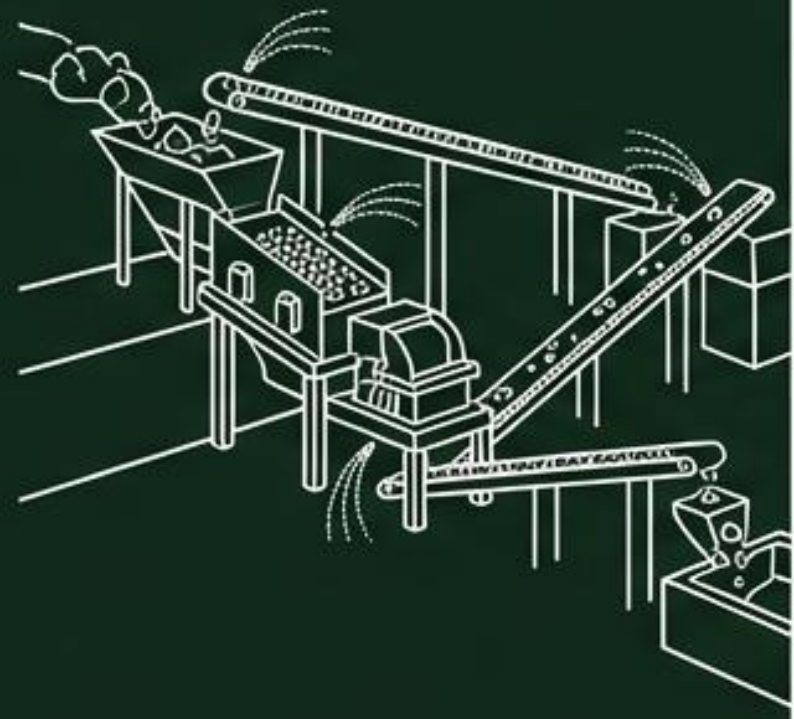
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# The Anatomy of the Drain: Two Primary Water Sinks

## Zone 1

### The Plant (EPNs)

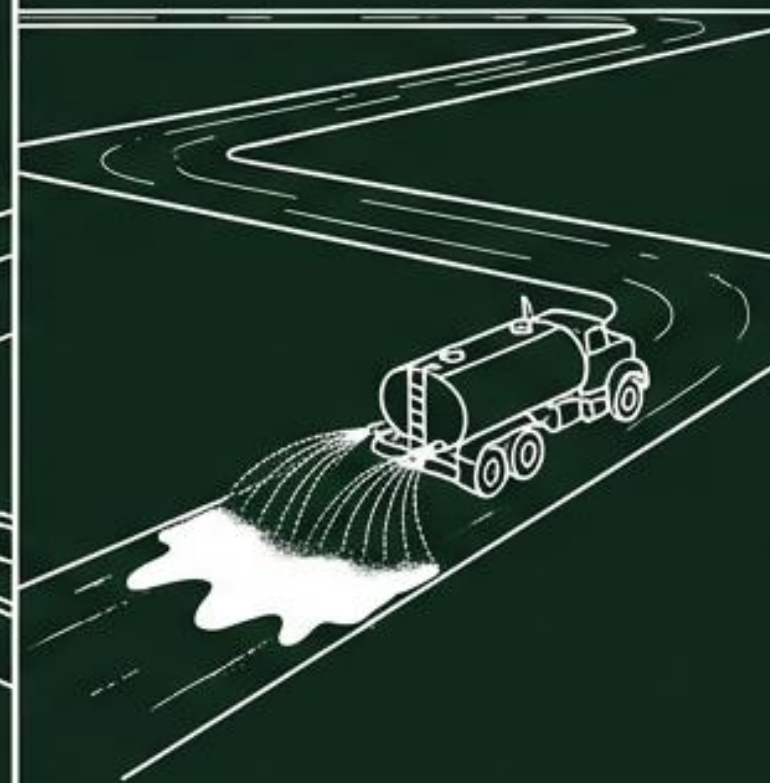
- Emission Point Numbers dictated by TCEQ air quality permits.
- **Equipment:** Primary Crushers, Shaker Screens, and Conveyor Transfer Points.
- **Mechanism:** Continuous localized water spray to suppress airborne particulate matter during rock processing.



## Zone 2

### The Perimeter (Haul Roads)

- The 350-acre unpaved internal road network.
- **Equipment:** 4,000-gallon water trucks making continuous passes.
- **Mechanism:** Combating severe Texas evaporation by constantly soaking road surfaces to bind dust under heavy truck traffic.



AQUIFER GAUGE: 100% FULL

# The Baseline Flow: Hourly Water Consumption Rates

The Plant / EPNs

**1,860 – 29,700**

Gallons per Hour (gal/hr)

Variance depends on material moisture and equipment load.

The Perimeter / Haul Roads

**4,000 – 12,000**

Gallons per Hour (gal/hr)

Variance driven by Texas heat, humidity, and evaporation rates requiring constant re-application.



AQUIFER GAUGE: 90% FULL

# The Standard Multiplier: A Typical 10-Hour Shift



## The Standard Daily Total

Combined Usage: 58,600 – 417,000 gallons per day.

Contextual Note: Even under standard operational hours, the extraction footprint places a severe daily tax on local groundwater reserves.



AQUIFER GAUGE: 70% FULL

# The Extreme Reality: Continuous 12-14 Hour Operations

Asphalt Inc.'s proposed schedule (7 days a week) pushes water extraction into critical territory.

## Standard 10-Hour Shift

EPNs: Up to 297,000 gal/day

Roads: Up to 120,000 gal/day

Peak Total: 417,000 gal/day

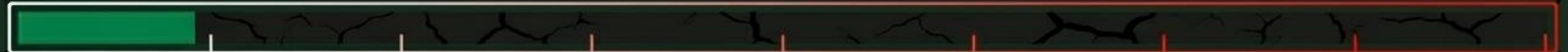
## Extended 12-14 Hour Shift

EPNs: 22,320 – 415,800 gal/day

Roads: 144,000 – 168,000 gal/day

### The Aggressive Reality

**Total Combined Usage:**  
**166,320 – 583,800** gallons per day.



AQUIFER GAUGE: 15% FULL

# The Ultimate Drain on Burnet's Aquifer

EPN High-End  
(415,800 gal/day)

Depending on operational intensity and weather, combined water usage ranges from a baseline of 58,600 gallons per day up to a staggering maximum.

**583,800**  
**Gallons Per Day**

Haul Road High-End  
(168,000 gal/day)

This is not a vague environmental concern. It is a precise, undeniable mathematical reality.