Heartland DATA CENTER

CITY OF EDGERTON PLANNING COMMISSION · JUNE 9, 2026

Responding to the Commission's Request

DAMAC is here to build a world-class data center in Edgerton — responsibly, with real safeguards, and as a genuine partner to this community.

You Raised These Questions. Here Are Our Answers.

At the May 12 hearing, the Commission and staff raised real questions. We took every one seriously — and here, we answer them in plain terms.

“Is a data center even right for this site?”	→	**The Site**
“Could it drain our water — or risk Hillsdale Lake?”	→	**Water & Cooling**
“How loud will the facility actually be?”	→	**Noise**
“Will the generators pollute our air?”	→	**Air**
“What happens to all the old equipment and e-waste?”	→	**Equipment**
“Who is DAMAC — and will they be a real partner?”	→	**Community**

An Existing Building in an Established Industrial Park

This isn't new industrial development on open land. It's the adaptive reuse of an existing, vacant warehouse in an established industrial park.

378,000
sq ft — existing warehouse, built 2016

53.79 ac
the entire site in this application

Logistics Park KC
a master-planned industrial park

The full site is before you: The plan uses the entire property. The only adjacent land the applicant owns is constrained by floodway and floodplain, and it owns no other neighboring property. If circumstances ever changed, any expansion would require its own application — back before this Commission.

Site: 31800 W. 196th St., in Logistics Park Kansas City. Zoned L-P (Logistics Park); existing 378,038 sq ft warehouse developed in 2016. This application covers the entire site. Per the City staff report.

The Cooling System Is Filled Once — Then Sealed

After a one-time fill, the system recirculates the same fluid in a sealed loop — without drawing additional public water or discharging cooling fluid.

615,000

gallon one-time fill

Filled one time, then recirculated continuously — the system draws no ongoing public water. Everyday domestic use is covered separately.

CLOSED-LOOP, EXPLAINED

Fill it once and it recirculates the same fluid continuously — heat is carried outside and released to the air, then the cooled fluid returns. No top-ups from the public supply.

WHAT'S IN THE LOOP

A one-time fill of about 615,000 gallons — roughly 65% water and 35% propylene glycol, the same low-toxicity fluid used in food, medicines, and home winterizing.

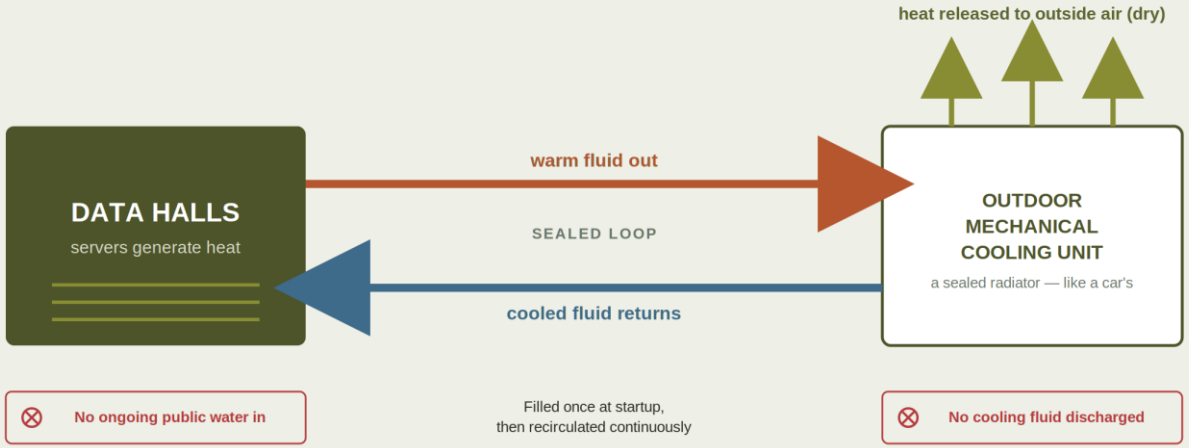
WHY IT MATTERS HERE

A comparable evaporative system would draw **on the order of 30 million gallons a month** from the public supply — and never stop. Our loop is filled once with about 615,000 gallons and recirculated.

The loop is never dumped or flushed; fluid chemistry is monitored regularly so the original fill lasts.

How a Closed-Loop Cooling System Works

This is NOT a cooling tower, and NOT an evaporative or adiabatic system.
No steam plume · no spray · no water evaporated to cool · no continuous water consumption.



WHAT THIS MEANS

- Heat is rejected to the outside air mechanically — by fans moving air across a sealed coil, the same principle as a car radiator. Cooling towers and evaporative systems, by contrast, cool by evaporating large volumes of water into the air.

- Because nothing evaporates, the same fluid stays in the loop — filled once and recirculated, with no ongoing draw on public water. That design is built into the approved site plan: a switch to water-cooling would need a different layout — and a return to the Planning Commission.

ABOUT PROPYLENE GLYCOL

Propylene glycol is a low-toxicity fluid the FDA recognizes as safe in food, medicine, and personal-care products — and it's the same antifreeze used to winterize homes and RVs.

Source: U.S. CDC / ATSDR.

If Something Goes Wrong: Detect, Isolate, Contain

The cooling system is sealed, so there is no routine discharge — and layered safeguards keep the fluid contained if anything goes wrong.

1

DETECT

Spot and rope leak sensors throughout the cooling equipment, monitored 24/7 by the building management system.

2

ISOLATE

Shut-off valves stop flow once a leak is detected; redundancy isolates a unit without disrupting operations.

3

CONTAIN

Drip pans and curbing beneath the cooling equipment catch any escaping fluid locally — keeping it off the floor and away from drains.

4

REMOVE

Captured fluid is recovered and hauled offsite by a licensed handler — never washed to a drain.

The system is sealed — no routine discharge, and no pathway to Hillsdale Lake or local groundwater.

Any incidental loss is small and dilute (the fluid is about two-thirds water), caught locally by drip pans and curbing, and removed by a licensed waste hauler. Any discharge to the public sewer is governed by the City and Sewer District's regulations — and Heartland operates within them.

Everyday Water Use Is Just Bathrooms and Irrigation

Separate from the one-time cooling fill, the facility's only routine water use is ordinary domestic demand — restrooms for a small on-site crew, plus modest seasonal irrigation.

≈ 2,500

gallons per day

Less than a third of a single 200-seat chain restaurant — about 8,000 gallons a day at 40 gallons per seat.

About the same as 5–8 family homes on a typical street (EPA: ~82 gal/person/day).

WHAT THE WATER IS FOR

Ordinary restroom use — the sinks and toilets used by staff. This is the facility's only routine, everyday water demand.

A LIGHTLY STAFFED SITE

The building runs on a small crew — about 25 people across a 24-hour day — so domestic demand stays low, calculated by standard plumbing-code methods.

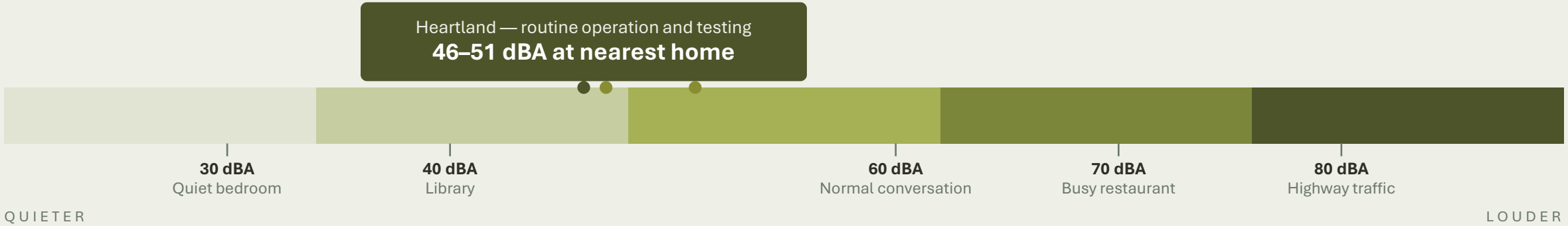
THE COOLING SYSTEM ADDS NOTHING

The sealed cooling loop is filled once and recirculated, so it places no ongoing demand on the public supply. Everyday use is domestic only.

This domestic demand is the facility's only routine water use. It also includes modest seasonal irrigation.

Quieter Than the Sounds We Live With Every Day

Barr Engineering Co. models 46 dBA at the nearest home on a hot summer day — and 51 dBA even during the once-a-year generator test. These are conservative estimates; real-world levels are likely lower.



The nearest home sits about 500 feet from Interstate 35 but roughly 1,500 feet from the facility — nearly three times closer to the highway than to the project.

SOUND IS CONTAINED AT THE SOURCE

The generators include built-in attenuation — insulation that keeps sound from traveling — and both chillers and generators sit behind screening walls up to 35 ft tall, so the loudest sound stays on site.

COMFORTABLY BELOW RELEVANT BENCHMARKS

The City's noise rule is qualitative, with no numeric threshold. For context, the project measured itself against the strictest numeric figure anywhere in the City's code — 70 dB(A) at an industrial boundary — and comes in roughly 20 dB under even that reference.

TESTING ON A NEIGHBORLY SCHEDULE

Beyond outages, testing is brief — monthly and annual — and stays well within the limits set by permit. DAMAC voluntarily commits to routine testing **on weekdays only, 8 a.m.–6 p.m.** The generators will of course run whenever needed during an actual outage.

Modeled sound levels per Barr Engineering Co. using the ISO 9613-2 propagation method (iNoise modeling platform); full Noise Screening Analysis, including contour maps, included with this presentation.

What the Facility Sounds Like, by Operating Condition

Three scenarios, from a hot summer day to the once-a-year generator test. In every case, no more than 51 dBA at the nearest home.

All three conditions cluster between 46 and 51 dBA — below normal conversation

Library 40 — **46–47 dBA** — **51 dBA** — Conversation 60

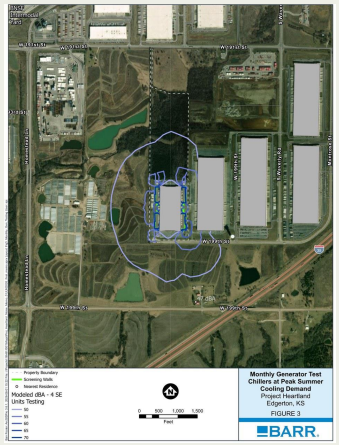
HOT SUMMER DAY

46 dBA at nearest home

Only the cooling system runs, on a hot summer day — the loudest a normal day gets.

MONTHLY TEST

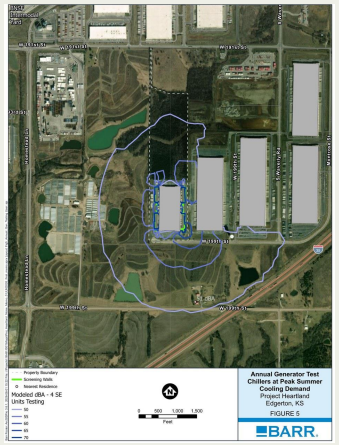
47 dBA at nearest home



A brief monthly generator check, run with peak cooling — just above a normal day.

ANNUAL TEST

51 dBA at nearest home



Once a year, a longer full-load test — the loudest case, still below conversation.

⌕ Click any map to view it full-size.

Testing follows a standby-power protocol (consistent with NFPA 110): brief monthly checks, a longer annual load test. Per Barr Engineering Co.; 50 dBA ≈ a quiet office.

Backup Power for Outages — Permitted by the State

The generators exist for one reason — to keep the facility running during a power outage. Apart from outages, they run only for brief scheduled testing.

99%+

of the year — off

The engines sit idle almost all year. Apart from actual outages, testing is brief and strictly capped by permit — and real testing runs well below that limit.

WHY THEY'RE HERE

A data center is built so a power loss never interrupts the services running on it. The generators are that safeguard — if the grid ever goes down, they carry the facility until power returns. Rarely needed, but essential when they are.

CLEAN AND LOW-SULFUR BY DESIGN

All 61 standby engines — sixty Caterpillar 3516C units plus one C32B — are EPA Tier 2 certified and run on ultra-low-sulfur diesel.

PERMITTED AND REGULATED BY THE STATE

Filed with the Kansas Department of Health and Environment (KDHE) in May 2026 under EPA-delegated authority. Permitted as a “synthetic minor” — DAMAC accepts binding, enforceable limits that keep emissions below the federal “major-source” threshold.

These are Tier 2-certified engines burning ultra-low-sulfur diesel, and enforceable permit limits hold facility-wide emissions below major-source thresholds — so their effect on local air quality stays minimal, consistent with the State's air-permitting review.

Secure, and Circular by Design

Because servers hold sensitive data, retired equipment can't simply be thrown out — data security requires that every unit move through a controlled, documented chain of custody. That same process is what keeps the hardware out of the landfill.

1

SECURE DATA DESTRUCTION

Every drive is wiped or physically destroyed to recognized data-sanitization standards, with documented certificates of destruction.

2

REFURBISH & REUSE

Sanitized hardware that still has useful life is tested, refurbished, and returned to service — extending the life of the equipment rather than discarding it.

3

RECOVER MATERIALS

What can't be reused goes to certified electronics recyclers, where metals and components are recovered and fed back into the supply chain.

4

ESSENTIALLY CIRCULAR

The result is a closed loop: data stays secure, value is recovered, and decommissioned equipment goes to certified recyclers — not to a landfill.

Always improving: as technology advances, the facility can adopt more efficient equipment over time — efficiency that benefits everyone.

Decommissioning is an operator function; described here as the standard, certified industry process the facility's operator will follow.

A Long-Term Partner in Edgerton

We're not just here to build — we want to invest in Edgerton's people, starting with the skills that will define the next generation of work.

A PROPOSED COMMUNITY PROGRAM

The Edgerton Coding Initiative

Free, and open to all ages — students and adults alike would gain access to coding and computer-skills training, building the skills that define the next generation of work.

Through the DAMAC Foundation, DAMAC has backed large-scale coding-education programs reaching hundreds of thousands of students — and proposes to bring that same focus to Edgerton. The Initiative would sit alongside DAMAC's broader support for the local causes and organizations that matter to the community.

500+
construction jobs during the build

15–30
permanent on-site jobs once operating

$700M
estimated total project investment

$5M+
for Edgerton streets and stormwater

Job, investment, and streets and stormwater figures are current estimates; the Coding Initiative's goals and structure would be shaped to the community's needs.

You Asked. We Answered.

The questions the Commission and staff raised at the hearing — and our answer to each.

WHAT YOU RAISED	OUR ANSWER
THE SITE *Is a data center right for this site?*	Yes — it reuses **an existing 378,000 sq ft warehouse** in an established industrial park.
WATER & COOLING *Will it drain our water or risk Hillsdale Lake?*	A sealed loop, filled once — almost no ongoing public water, nothing discharged, and **no pathway to Hillsdale Lake or local groundwater**.
NOISE *How loud will the facility be?*	Modeled at 46 dBA at the nearest home — **quieter than normal conversation**; 51 dBA at the once-a-year test.
AIR *Will the generators pollute our air?*	Tier 2 engines on ultra-low-sulfur diesel, state-permitted below major-source limits, and **idle almost all year**.
EQUIPMENT *What happens to all the e-waste?*	Securely wiped, then refurbished or recycled by certified handlers — **kept out of the landfill**.
COMMUNITY *Will DAMAC be a real partner?*	Local jobs through build and operation, plus **a proposed free coding and skills program** for Edgerton.

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APPENDIX

Supporting Material

Equipment at a Glance How the Water Figures Are Calculated City Sewer Code Project Renderings Sound Modeling Detail

Equipment at a Glance

A plain-language summary of the major equipment. Complete manufacturer data sheets are provided in Appendix C of the permit application.

Backup generators — data halls	Sixty Caterpillar 3516C-HD units, 2,500 kWe (3,125 kVA) each at 0.8 power factor · 480 VAC, 60 Hz · EPA Tier 2 · ultra-low-sulfur diesel · permanent-magnet excitation · UL2200 listed and seismically certified · Modbus TCP/IP to the building management system.
Backup generator — house load	One Caterpillar C32B-class unit, 1,500 kWe (1,875 kVA) at 0.8 power factor · 480 VAC, 60 Hz · EPA Tier 2 · ultra-low-sulfur diesel · serves house/critical building loads in an outage.
Cooling units	Vertiv CoolLoop Thermal Wall (CA60) · sealed closed-loop, chilled-water configuration · EC variable-speed fans · Liebert iCOM controls with 65 kA short-circuit rating · Liqui-tect leak detection · BACnet/Modbus to the building management system.
Cooling fluid	One-time fill of about 615,000 gallons · roughly two-thirds water, one-third propylene glycol (freeze protection to about –13.8°F) · no corrosion inhibitors or biocides · no ongoing public-water draw.

See Appendix C-1 and C-2 (Manufacturer Specifications) of the permit application for complete equipment data sheets.

How the Water Figures Were Calculated

The facility's only routine water use is ordinary back-of-house (restroom) demand — calculated using standard engineering and plumbing-code methods.

≈ 25

people on site

across a 24-hour period (a lightly-staffed facility)

×

100

gallons / person / day

standard sanitary rate per Kansas & Johnson County design criteria

=

2,500

gallons per day

projected sanitary wastewater flow

CAPACITY & FIXTURES

- The 2,500 gpd flow is well within the capacity of the existing 8-inch sewer connection (rated for 1,400 drainage fixture units per IPC 2018 §710.1). No water or sewer upgrades are required.
- Fixtures are sized to the same occupancy per IPC 2018 §403.1: about 31 water closets, 25 lavatories, 10 urinals, and additional fixtures (266 drainage fixture units total).
- Cooling adds no routine demand: the closed loop is filled once (≈ 615,000 gallons) and recirculated. Modest seasonal irrigation adds a few thousand gallons on average.

Managing the Fluid — Within the City's Sewer Code

Edgerton's Sewer Use Regulations (City Code Ch. XV, Art. 2) govern what may enter the public sewer. The facility manages its cooling fluid within these rules.

WHAT THE CODE GOVERNS

§ 15-227	Cooling and unpolluted process water are kept out of the sanitary sewer.
§ 15-228/229	The superintendent may prohibit or regulate discharges that could harm the system — including oxygen-demanding wastes (Biochemical Oxygen Demand, or BOD).
§ 15-231	Any discharge above a 5-day BOD of 300 ppm needs the superintendent's review, approval, and pretreatment if required.
§ 15-232/233	The City may require sampling and enter special agreements for industrial waste — at the user's expense.

HOW THE FLUID IS MANAGED

1. **Normal operation**
   Nothing is discharged — the sealed loop recirculates the same fluid.
2. **Routine maintenance**
   Any fluid removed is captured and hauled offsite by a licensed waste hauler — the primary pathway, no sewer involved.
3. **Incidental release**
   Caught by secondary containment, then recovered — not washed to any drain.
4. **Any sewer discharge**
   Only with the superintendent's review and approval under §§15-231/233.

In short: there is no discharge of cooling fluid in normal operation; the primary pathway is offsite hauling by a licensed handler, and any discharge to the public sewer is governed by the City's code.

Project Renderings

Overall Site Aerial

Aerial at Main Entrance

View — Northeast of Site

View — Southeast of Site

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Sound Modeling — Normal Operation

46 dBA at the nearest home · chillers at peak summer cooling demand

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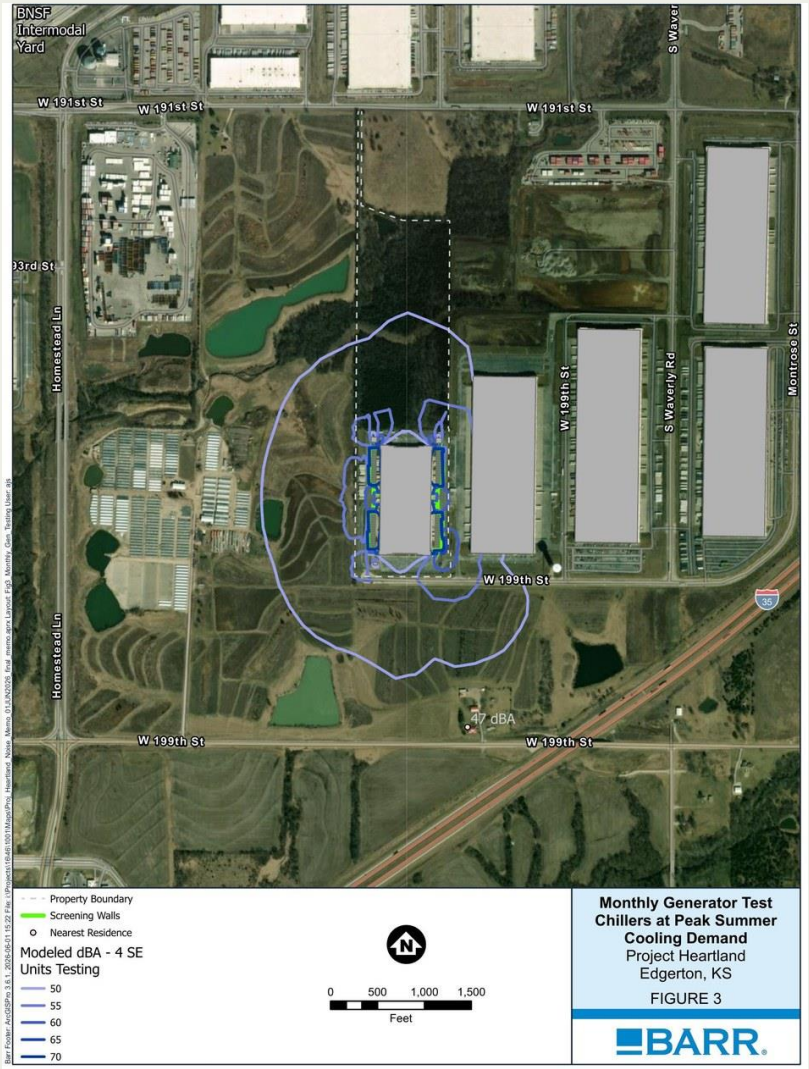
Sound Modeling — Monthly Generator Test

47 dBA at the nearest home · brief monthly test, plus peak cooling



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Sound Modeling — Annual Generator Test

51 dBA at the nearest home · once-a-year full test (loudest case)