

DAVID B. CARTER, Ph.D.
SIXTH DISTRICT
NEW CASTLE COUNTY COUNCIL
Office: (302) 395-8346



LOUIS L. REDDING CITY COUNTY BUILDING
800 N. French Street
Wilmington, DE 19801
David.Carter@newcastlede.gov

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Via Email and U.S. Mail

CZA Program
DNREC Division of Climate, Coastal & Energy
100 W. Water St., Suite 7B
Dover, DE 19904
CZA_Program@delaware.gov

Re: Comments on Starwood Digital Ventures CZA Status Decision Request – Project Washington (CZA-448SD)

Dear Secretary Patterson and Coastal Zone Act Program Staff:

I am writing to offer comments on the Starwood Digital Ventures CZA Status Decision Request for Project Washington (CZA-448SD). I have received an outpouring of concerns from my constituents, as well as residents from across the State, regarding the potential impacts of this proposed project within Delaware's Coastal Zone. I appreciate the opportunity to comment on the applicant's request for a Coastal Zone Act (CZA) Status Decision and thank DNREC staff for their continued dedication to upholding the intent and integrity of the Coastal Zone Act.

After reviewing the application materials, I have significant concerns about both the substance of the project and the legal theory under which the applicant seeks exemption. In my view, the proposed project is functionally a new heavy industrial complex within the coastal zone and, at minimum, requires a full CZA permit review rather than an exemption as a "use not regulated." In fact, I believe that a hyperscale data center is functionally a heavy industrial use, which is a prohibited use in the Delaware Coastal Zone.

Below are my key concerns and recommendations. Also, attached please find a matrix that compares the CZA and its Regulations with the Starwood Status Decision Application and an analysis of key regulatory concerns that should be considered in this review.

The Project Is Functionally Heavy Industry, not a "Use Not Regulated"

Starwood proposes an approximately 6.1-million-square-foot campus on 579 acres, consisting of:

- 11 data-center buildings
- 5 substations and a regional switchyard
- 504 diesel generators and 12 house generators (totaling **516**)
- A peak electrical demand of **1.2 gigawatts**

This large scale of required infrastructure, energy consumption, and backup generation is comparable to major heavy-industrial installations, not to incidental “warehousing” or “backup power” uses. The applicant attempts to fit this project into three exempt categories under the CZA, data “storage,” electrical transmission, and emergency backup generation, but these exemptions under the Coastal Zone Act were clearly intended for supporting or incidental activities, not for an entire hyperscale industrial campus.

If DNREC were to accept such a narrow reading, the Coastal Zone Act’s prohibition on new heavy industry could be circumvented simply by characterizing industrial complexes as “warehouses with backup generators.” This would undermine the intent of the CZA, and as a matter of fact and matter of law, violate the law.

Air-Quality Impacts Are Substantially Understated

The application uses 20 hours per year of generator operation to present emissions as minimal, producing approximately:

- 25 tons/year NOx
- 17 tons/year CO
- Approximately One (1) ton/year PM

However, the same application also provides a 500-hour-per-year scenario, consistent with EPA guidance, which produces:

- More than 600 tons/year of NOx
- Over 400 tons/year of CO
- Roughly 25 tons/year of particulate matter

These are major-source-level emissions.

Critical gaps include:

- The 20-hour limit is not enforceable under the requested CZA status.
- No modeling of cumulative emissions from 516 generators.
- No diesel particulate matter (DPM) or air toxics analysis.
- No assessment of startup spikes or simultaneous testing.
- No assessment of the very high likelihood of extended generator use during peak operations in future years due to inadequate energy generation on the PJM grid.

Given the area’s existing refinery, chemical operations, and freight-related emissions, DNREC must evaluate cumulative impacts, not idealized assumptions.

Noise Impacts Have Not Been Properly Evaluated

Starwood relies on a single data point, 70 dBA at 23 feet per generator, and states that not all units will run simultaneously. There is no quantitative modeling of cumulative noise, low-frequency noise (dBC), or nighttime impacts. There is no discussion of other noise impacts such as compressors and fans associated with the cooling systems.

Large data-center campuses across the country have generated persistent, community-disrupting noise even when individual components appear compliant. Without comprehensive modeling, including worst-case scenarios, the assertion of “minimal noise impact” lacks credibility.

Water Use, Stormwater, and Spill Risks Are Minimally Addressed

The application estimates approximately 12–13 million gallons per year in total water use, an unusually low figure for a hyperscale campus of this size and thermal load.

Concerns include:

- Total water use is likely understated, especially under full build-out.
- No meaningful analysis of spill scenarios involving diesel, transformer oil, or coolant in proximity to Red Lion Creek and within a Groundwater Management Zone.
- “No surface-water discharge” assumes perfect stormwater performance for decades.
- No resilience analysis for flooding or climate-driven storm intensity.

These omissions warrant a full permit review.

Habitat, Land Conversion, and Environmental-Justice Concerns Are Downplayed

While the application mentions some threatened species, the analysis is superficial. It does not meaningfully address:

- The permanent conversion of hundreds of acres of open land along a tidal creek.
- Light pollution impacts on bats, migratory birds, and nocturnal species.
- Cumulative environmental burdens already carried by nearby communities living near refineries, chemical plants, a Superfund site, and heavy truck traffic.

These issues fall squarely within the Coastal Zone Act’s protection intent and require rigorous evaluation.

Off-Site Infrastructure Impacts Are Barely Discussed

Major electrical grid upgrades, likely including new transmission lines or substations, are vaguely acknowledged but not analyzed. Traffic impacts from construction, diesel deliveries, and 24/7 staffing are also omitted.

The short-term impacts of an influx of construction workers on both temporary and long-term housing demands is not considered, despite Delaware current affordable housing crises.

CZA review is intended to capture all reasonably foreseeable project impacts, not only those within the fenced boundary.

Economic Benefits Are Speculative and One-Sided

The application provides optimistic projections of jobs and economic output but:

- Does not show methodology,
- Does not identify net benefits to Delaware taxpayers, and
- Ignores public costs for infrastructure, emergency services, and environmental management.
- Ignores the pressures added on housing stock and pricing to accommodate construction workers.

The “net environmental effects” analysis required by the CZA necessitates a balanced, not one-sided, evaluation.

The Unprecedented Scale of This Facility in the Coastal Zone Raises Serious Statutory Concerns

One of the most consequential aspects of this proposal is its sheer size. Project Washington represents the largest new heavy-industrial-scale development proposed within Delaware’s Coastal Zone since the construction of the Tidewater (now PBF) refinery, long before the Coastal Zone Act was passed in 1971.

Nothing in the half-century since adoption of the CZA has approached this level of industrial intensity:

- 1.2 gigawatts of energy demand, rivaling a utility-scale power plant;
- 516 diesel generators, capable of producing power and emissions on the scale of major industrial complexes;
- Over 300 acres of disturbed land, plus five electrical substations and a switchyard;
- A 6.1-million-square-foot industrial footprint, the size of multiple regional warehouses combined.

This scale of development was never envisioned or contemplated by the General Assembly when the Coastal Zone Act was enacted specifically to prevent new heavy industry from expanding along Delaware’s fragile shoreline.

If a project of this magnitude, one of the largest heavy industrial proposals in Delaware throughout history, can be deemed “not regulated,” the core protections of the CZA would be effectively nullified.

This unprecedented scale alone warrants DNREC's highest level of scrutiny, and strongly supports a determination that this is a prohibited heavy industry. If not, it must at a minimum requiring a full CZA permit review.

Recommendation and Request

For the reasons outlined above, I respectfully request that DNREC:

1. Decline to classify Project Washington as a "use not regulated" under the Coastal Zone Act.
2. Determine that the project:
 - (a) constitutes prohibited new heavy industry under the Act; or
 - (b) at minimum, requires a full CZA permit application and review, including comprehensive environmental analyses and enforceable conditions.
3. Schedule a formal public hearing accessible to affected communities in New Castle County for both this status decision, and any future permits.

Delaware's Coastal Zone Act has protected our coastal communities, waterways, and environment for more than fifty years. Project Washington represents exactly the type of large-scale industrial encroachment the Act was designed to prevent. I urge DNREC to uphold both the letter and the spirit of the CZA in reviewing this unprecedented proposal.

Thank you for your consideration and for your ongoing service to the people and environment of Delaware. I welcome the opportunity to participate further in any hearings or technical reviews.

Sincerely,

A handwritten signature in blue ink, appearing to read "David B. Carter", with a long horizontal flourish extending to the right.

Councilman David B. Carter, PhD

Attachment: CZA Status Decision Review Matrix-Application CZA-448SD

CRITICAL REVIEW OF THE STARWOOD CZA STATUS APPLICATION

Classification Under CZA: Heavy Industry, Manufacturing, or “Use Not Regulated”

CZA / Regulatory Criterion	Starwood’s Position	Key Regulatory Concerns
Is the project “manufacturing”? Manufacturing = mechanical or chemical transformation of substances into new products. If yes → CZA permit required and new manufacturing may be prohibited in the coastal zone.	Starwood checks “No” to the manufacturing definition and emphasizes that no mechanical/chemical transformation or assembly occurs. They describe the project as data storage and digital services, not product manufacturing.	May be correct in the narrow sense, but does not end the analysis and is misleading. CZA also covers heavy industry and nonconforming uses. The application almost entirely avoids the “heavy industry” lens and focuses only on “manufacturing vs. not manufacturing.”
Is the project a new “heavy industry use”? CZA prohibits new heavy industry in the coastal zone and expansions beyond non-conforming boundaries.	The application never squarely analyzes whether a 1.2 GW, 516-generator, 579-acre campus is functionally comparable to heavy industry. Instead, it leans on the “uses not regulated” list (storage, transmission, backup generation) to claim it falls entirely outside heavy industry/manufacturing.	A hyperscale campus with massive energy demand, hundreds of industrial generators, substations, and switchyard looks and behaves like heavy industry even if it doesn’t “manufacture” a product. DNREC can reasonably find that the overall use is a new heavy industrial complex, not just a collection of exempt sub-activities.
Does the site qualify as an existing non-conforming use (Appendix B)? – If yes, limited expansion may be allowed; if not, new heavy industry is barred.	Starwood confirms the facility is not an Appendix B nonconforming site and has no prior CZA permit.	This admission means they cannot rely on “grandfathered” industrial status. If DNREC deems the campus “heavy industry,” it would be a brand-new heavy use in the coastal zone, which the Act seeks to prevent.
“Uses Not Regulated” (Section 5.0) – Warehousing, transmission of electricity, and backup emergency power may be exempt <i>when incidental/non-industrial in scale</i>.	Starwood argues the project is just three exempt uses: (1) data “storage” (warehouse), (2) transmission/distribution of electricity via substations, and (3) backup power via emergency generators.	This is the core legal gambit. Section 5 was clearly written to exempt <i>incidental</i> warehousing, power lines, and backup generators associated with other uses, not to authorize an entire 6.1-million-sq-ft power-intensive campus as “just warehousing and backup power.” DNREC can find that using these exemptions to cover the entire project is inconsistent with the CZA’s purpose and would effectively create a loophole for new heavy industry.

Size, Location, and Land-Use Conversion

CZA / Regulatory Focus	What Starwood Says	Key Regulatory Concerns / Gaps
Total scale and land disturbance – CZA and regs are particularly wary of large-scale new industrial development in the coastal corridor.	Project occupies 579 acres, with 187 acres disturbed in Phase 1 and 135 acres in Phase 2. They note open space will be “two to three times” NCC code minimums.	The application doesn’t compare this footprint to other coastal-zone facilities nor acknowledge that this is one of the largest new industrial-type developments in the Delaware coastal corridor since the refinery. The massive scale is treated as routine.
Zoning consistency vs. CZA protections – Being zoned industrial does <i>not</i> override CZA prohibitions.	Notes that 4AN-2 is mostly HI and 4AN-1 is Suburban; 4AN-1 will be rezoned Industrial. The County 2050 Plan labels area “Business Flex,” which allows industrial uses, and they claim consistency with that Plan.	Application implies that if NCC zoning allows it, CZA should treat it as acceptable. But the CZA is an independent, overlay protection; local zoning support does not answer whether it’s prohibited heavy industry in the coastal zone. That conflict is never addressed.
Context of nearby residential and sensitive uses	They list nearby industrial uses (refinery, logistics centers, chemical plants) and emphasize the area’s “historically industrial and commercial” character.	The discussion downplays nearby neighborhoods north and west of the site and doesn’t address schools, daycares, or environmental-justice considerations. It frames the landscape as purely industrial when it is in fact mixed industrial–residential.

Environmental Impacts (Air, Water, Habitat, Waste, Aesthetics)

Air Quality		
Regulatory Concern	Starwood's Claims	Regulatory Concerns/Application Short Fallings
Direct emissions from facility operations	Emissions "primarily" from Tier IV diesel emergency generators, operated about 20 hrs/year for maintenance/testing, not for peak-shaving. They also show a 500-hr/year "worst case" scenario based on EPA guidance.	The 20-hour assumption is not enforceable in the CZA context; yet it is used to make impacts seem "minimal." The 500-hour table itself shows major-source-level emissions (e.g., ~616 tpy NOx), but the narrative never grapples with what happens if real-world needs exceed 20 hours. No cumulative analysis for simultaneous startup of many units.
Cumulative and regional air impacts	Suggests ozone attainment won't be affected; emphasizes limited truck traffic and employee commutes.	There is no modeling of cumulative criteria pollutants under worst-case operation, no air toxics analysis (diesel particulate), and no discussion of additive impacts with nearby refinery, chemical plants, logistics hubs, and existing units. For CZA "net environmental effect," that omission is significant.
Fuel storage / tanks emissions	Uses EPA Tanks 5.1 to estimate 0.12–0.67 TPY VOC from 516 belly tanks, depending on runtime.	Assumes relatively low fuel turnover; does not address accidental releases, venting, or spill scenarios. Again, worst-case and upset conditions are minimally considered.

Water Quality & Use		
Regulatory Concern	Starwood's Claims	Regulatory Concerns/Application Short Fallings
Surface-water discharge / stormwater	States "no discharges to surface waters," with all sanitary flow to NCC sewer; stormwater to be managed per Delaware regs/NCC review.	"No discharge" is technically true only if all stormwater BMPs work perfectly and there are no spills. CZA review typically demands failure-mode analysis , including what happens if diesel, transformer oil, or coolant reaches Red Lion Creek. That is not provided.
Water withdrawals / supply stress	No groundwater withdrawals; all process and potable water from regional utility (Veolia). Total annual use cited ~ 12.7 million gallons/yr (humidification + potable).	For a 1.2-GW hyperscale campus , this water use looks unusually low and likely underestimates cooling needs at full build-out. No analysis of drought conditions, competing regional demands, or cumulative draw from the same system by other users.
Groundwater protection	Notes the site is within a DNREC Groundwater Management Zone and that no onsite wells will be drilled.	That helps, but they do not discuss how spills, leaks, or long-term infiltration from generator yards and substations might interact with the existing GMZ contamination.

Habitat, Wildlife, and Aesthetics		
Regulatory Concern	Starwood's Claims	Regulatory Concerns/Application Short Fallings
Wetlands / riparian areas	Says site plan avoids wetlands and uses directional drilling for utilities; riparian buffers will comply with NCC 100/50-ft rules.	Mentions permits may be needed, but does not quantify indirect impacts (e.g., altered hydrology, runoff temperature, construction sedimentation). "Avoidance" is presented as solved because lines are drilled rather than trenched.
Threatened & endangered species	Identifies tri-colored bat, monarch butterfly, northern long-eared bat; notes timing restrictions for tree clearing and negative bog turtle survey.	This is very high-level. Light pollution, building collision risk, and long-term habitat fragmentation are unexamined. Mitigation is described as "voluntary" and future-permitting-dependent, not concrete commitments.
Aesthetic quality / visual impacts	Asserts the area is a long-standing industrial/commercial corridor and that the campus is consistent with surrounding uses; cites nearby refinery, logistics warehouses, etc.	This ignores the scale jump (11 massive buildings, 5 substations, 516 generators) and the visibility from scenic byways, adjacent communities, and Route 1/13. No visual simulations or analysis of night-glow/lighting are provided.

Other Impacts: Economy, Neighboring Uses, Supporting Facilities

Regulatory Consideration (6.3 a–d)		Starwood's Answer	Regulatory Concerns/Critical Observations
Economic benefits vs. costs		Projects ~3,800 construction jobs, \$2.9B labor income, \$10B total output, 226 permanent on-site jobs + 300–600 induced. Average salaries \$69k–\$130k. Tax impacts left vague because “Delaware has no data-center category.”	Benefits are heavily quantified; costs are not . No analysis of infrastructure costs (grid upgrades, roads, emergency services), potential impacts on electric reliability or rates, or environmental remediation liabilities. For a CZA “net effect” test, this is one-sided.
Consistency with county/municipal plans & zoning		Asserts alignment with NCC 2050 “Business Flex” designation and industrial zoning; notes parcel 4AN-1 will be rezoned to Industrial.	Again, local plan consistency is presented as sufficient , but CZA is a higher-level protection. The application never discusses what happens when a locally permitted use conflicts with the Coastal Zone’s anti-heavy-industry mandate .
Effect on neighboring land uses		States the project is consistent with surrounding industrial and commercial uses; doesn’t identify specific residential neighborhoods beyond “0.5 miles to nearest residential.”	Overlooks nearby homes, potential EJ concerns, and cumulative impacts on communities already affected by refinery, Metachem Superfund, logistics truck traffic, etc. Noise, air, and visual impacts on these neighbors are not robustly assessed.
Impacts of supporting facilities (utilities, roads, etc.)		Notes that water/sewer/fiber upgrades will be in existing rights-of-way and claims minimal impacts. Offsite electrical upgrades by Delmarva Power are “being developed” and not yet described.	For CZA, offsite power-grid changes can be a major environmental and land-use impact . None of that is analyzed here—no new lines, substations, or ROW expansions are described. This is a major gap in assessing full project impacts.

Risk, Safety, and Accident Scenarios

Regulatory Focus			Starwood's Discussion		Regulatory Concerns/Critical Observations	
Potential to pollute under malfunction / human error (6.2 j)			Claims there are no industrial processes; notes double-walled diesel tanks, spill containment for equipment containing FR3 or sulfuric acid batteries, installation by certified personnel.		This is minimal and qualitative only . No quantitative risk assessment, no discussion of generator fires, battery thermal runaway, substation oil fires, major storm/flood events, or long-term contamination from repeated minor spills. For a facility of this magnitude, this falls well short of what a cautious CZA review would expect.	