ATTACHMENT A

Chapter 14.830 – Zoning Ordinance

Data Center Facilities

14.840.100: Purpose and Intent

The Data Center Facilities chapter is to establish procedures and requirements for the permitting of Data Center Facilities based upon locations where the facilities can meet the standards and criteria set forth herein. The following standards and regulations are necessary for the health, safety, general welfare, and convenience of the County's inhabitants.

The intent of this section is to provide planning, development, and building criteria for data center purveyors. Each data center facility will be subject to an individual review based upon site-specific information and these procedures and requirements. This provides for a predictable, but sensitive, siting process that effectively addresses project impacts.

14.840.110: Definitions

1. ANSI: American National Standards Institute.

2. ASA: Acoustical Society of America.

3. Closed Loop Cooling System: A system that either draws water from an aquifer or another potable source, or uses coolant or fluid only for an initial system charge, and infrequent recharges. The system is designed to prevent evaporation and to reuse the water, coolant, or fluid within the system rather than continuously require additional water, coolant, or fluid. Closed Loop Cooling Systems do not discharge into the environment water, coolant, or fluid that has been processed within in the system and includes mechanical cooling systems, air-cooled systems with economizers, direct liquid cooling systems, immersion cooling systems, plate-and-frame heat exchangers, rear-door heat exchangers, and other sealed liquid cooling approaches.

4. Critical Aquifer Recharge Area (CARA): As defined in Chapter 11.20 SCC.

5. Data Center: A facility or building, or portion thereof, devoted to the housing, operation, or co-location of computer, telecommunications, networking, and/or related equipment used for the processing, storage, or transmission of digital data, including cryptocurrency mining, blockchain transaction processing, and server farms, together with associated cooling, power, and backup generation infrastructure. Internet Exchange Points are not Data Centers.

6. IEC: International Electrotechnical Commission.

7. Large-Load Data Center: A Data Center with a connected or contracted electrical load of twenty (20) megawatts or greater or requiring dedicated uninterruptible power supply of an equivalent scale.

8. Light-Load Data Center: A Data Center with a connected or contracted electrical load of less than twenty (20) megawatts or requiring dedicated uninterruptible power supply of an equivalent scale.

9. NFPA: National Fire Prevention Association.

10. Reclaimed and/or Reused Water Cooling System: A system that uses reclaimed water, treated industrial process water or wastewater (including wastewater generated by another industrial facility), or another

non-potable, non-aquifer source as the primary cooling water supply.

11. Serving Utility: The electric utility, whether investor-owned, an electric cooperative, or a public utility district, providing or proposed to provide electrical service to a Data Center.

14.840.120: Vesting and Application to Pending Matters

1. This Zoning Ordinance applies to all building permit applications for Data Centers in unincorporated Spokane County that have not vested under RCW 19.27.095 as of the effective date of this Zoning Ordinance.

2. This Zoning Ordinance shall not be construed to reopen, invalidate, or specially exempt any final, unappealed administrative determination or interpretation issued by the Planning Director before the effective date of this Zoning Ordinance.

3. The legal effect of a determination on a project that has submitted a complete building permit application before the effective date of this Zoning Ordinance shall be governed by existing vesting and equitable doctrines, not by this Zoning Ordinance.

14.840.130: Alternative Classifications

1. Data Centers shall not be classified as an Essential Public Facility nor be subjected to the Essential Public Facility Siting Process.

2. Nothing in this Chapter shall be construed to preclude the separate establishment of a process for siting Data Centers that are combined with other qualifying industrial uses on a single master-planned site as a Major Industrial Development.

14.840.140: Reserved

14.840.150: Utility Coordination and Cost Allocation

1. The Board of County Commissioners is authorized to pursue a non-binding coordination framework regarding Large-Load Data Centers with any Serving Utility operating in Spokane County. The Framework Agreement may address information-sharing, notice of large-load service requests, and the County's position in any Federal Energy Regulatory Commission or Washington Utilities and Transportation Commission proceeding affecting Large-Load Data Centers within Spokane County.

14.840.160: Applicability

1. All Data Centers shall follow the standards and conditions of this chapter.

2. Large-Load Data Centers shall be permitted under a conditional use permit in a Heavy Industrial Zone.

3. Light-Load Data Centers shall be permitted for limited uses in the Heavy Industrial Zone, the Light Industrial Zone, the Regional Commercial Zone, and the Community Commercial Zone.

14.840.170: Use Chart

Table 840-1

	Light Industrial	***Heavy Industrial***

Large-Load Data Center	**N**	**CU**
Light-Load Data Center	**L**	**L**

Table 840-2

	Neighborhood Commercial	***Community Commercial***	***Regional Commercial***	***LDA Commercial***
Large-Load Data Center	**N**	**N**	**N**	**N**
Light-Load Data Center	**N**	**L**	**L**	**N**

14.840.180: Specific Standards for all Data Centers

1. In addition to the requirements enumerated by Chapter 13.300 SCC, a complete building permit application for any Data Center application shall include:

    a. Documentation demonstrating the megawatt load at the proposed facility's maximum capacity and the annual kilowatt per hour load required by the proposed facility;

    b. Documentation demonstrating that the Serving Utility is able to deliver the required power;

    c. At the expense of the applicant, a pre-construction ambient noise study conducted by a third-party acoustical engineer using Sound Level Meters described in ANSI/ASA S1.4-2014 / IEC 61672:1-2013 and generally accepted methodology;

    d. At the expense of the applicant, a vibration study prepared by a qualified professional that demonstrates that no vibration perceptible to the human sense of feeling caused by the Data Center will be emitted beyond the property line;

    e. Documentation demonstrating that all permits and authorizations required by the Spokane Regional Clean Air Agency and the Washington State Department of Ecology have been obtained.

2. Any new or expanded electric distribution infrastructure, including distribution substations, shall be located onsite or immediately adjacent to the Data Center site.

3. Any Data Center, or any associated equipment, generators, or operating functions, shall not exceed 50 dBA at the nearest property line, and shall have a dBC level at the nearest property line no greater than 5 dBC more than the background noise level at the site prior to construction.

    a. All Data Centers shall be designed and built to incorporate sound mitigation methods sufficient to ensure that the Data Center does not exceed the ambient noise levels permitted by this section.

    b. Prior to final inspection and at the expense of the applicant, all applicants shall provide a post-construction verification ambient noise study conducted by a third-party acoustical engineer using Sound Level Meters described in ANSI/ASA S1.4-2014 / IEC 61672:1-2013 and generally accepted methodology confirming that the Data Center satisfies the noise requirements of this section.

    c. The Data Center operator shall, within thirty days of the anniversary on which the certificate of occupancy or certificate of completion was issued, complete at the operator's expense, a yearly

ambient noise study to confirm that the ambient noise levels do not exceed the levels permitted by this section.

d. The operation of any Data Center must satisfy the requirements of WAC 173-60-040.

e. Failure to comply with these noise standards shall constitute a violation of this code and/or the Certificate of Occupancy.

4. Backup generators:

a. Shall be Tier IV compliant;

b. Testing or operation of backup generators shall not occur on days the Spokane Regional Clean Air Agency reports an Air Quality Index greater than 100, except in the case of an actual power outage.

i. A microgrid design within the Data Center campus is encouraged but not required.

c. The Data Center operator shall maintain a public website announcing the times backup generators are planned to be in operation, including for testing, at least twenty-four (24) hours in advance.

d. The Data Center operator shall notify the Spokane County Communications and Public Affairs Department at least twenty-four (24) hours in advance of a test.

e. Unless backup generators are providing electrical supply during a power outage, backup generators may only be operated between the hours of 9:00 am and 5:00 pm, Monday through Friday, excluding holidays.

f. Failure to comply with these backup generator standards shall constitute a violation of this code and/or the Certificate of Occupancy.

5. Energy storage systems shall provide long-duration storage of not less than ten (10) hours and comply with NFPA Standard 855 (Standard for the Installation of Stationary Energy Storage Systems).

14.840.190: Water Source Standards for Large-Load Data Centers

1. The following is the order of preference for a Large-Load Data Center's water supply and cooling system's intake:

a. Tier 1 – Reclaimed and/or Reused Water Cooling Systems:

i. Such systems must continue to use the primary cooling water supply and shall not discharge any primary cooling water into any sanitary sewer or septic system.

b. Tier 2 – Potable Water Systems:

i. Systems using potable water shall use a Closed-Loop Cooling System.

c. Tier 3 – Conditional Exemption:

i. An exemption may be granted upon written request made at the time a complete building permit application is submitted and the request must include:

1. Detailed engineering documentation prepared by a licensed professional engineer demonstrating that a Closed-Loop Cooling System is not feasible for the specific project;

2. Proposed alternative technologies for the Large-Load Data Center's Cooling System such as geothermal, air-cooled, direct-to-chip liquid cooling, or waste-heat recovery systems;

3. The County may impose reasonable conditions by way of a Development Agreement.

2. No Large-Load Data Center may draw primary cooling or make-up water to recharge the cooling system from private potable wells.

3. The annual average Water Usage Effectiveness, measured by the below equation, shall not exceed 0.3 liters per kilowatt-hour of information technology load.

    a. $$\text{Water Usage Effectiveness} = \frac{\text{Annual Liters of Water Used}}{\text{Annual kWh Used to Power IT Equipment}}$$

    b. For example, a 20MW load equals 175,200 MWh or 175,200,000 KWh. To achieve a Water Usage Effectiveness of 0.3, that would require the use of no more than 52,560,000 liters of water or approximately 13,884,883 gallons of water annually.

4. Large-Load Data Centers shall be subject to the following net-new aquifer withdrawal limits:

    a. Tier 1: Presumed to satisfy the water projection objective of this Section and are exempt from this subsection.

    b. Tier 2: Net-new withdrawal from an Aquifer or another potable groundwater source shall not exceed the liters of water required annually to maintain a Water Usage Effectiveness of 0.3 liters per kilowatt-hour of information technology load, averaged over any five-year period.

        i. If an applicant represents that the proposed Large-Load Data Center will use no more water than the average United States household annually, the applicant will be expected to not exceed a net-new withdrawal of 120,000 gallons.

    c. Tier 3: No Tier 3 Cooling System shall be approved that anticipates withdrawing water from an Aquifer or another potable groundwater source, or would exceed a Water Usage Effectiveness of over 0.3 liters per kilowatt-hour of information technology load, averaged over any five-year period.

        i. If an applicant represents that the proposed Large-Load Data Center will use no more water than the average United States household annually, the applicant will be expected to not exceed a net-new withdrawal of 120,000 gallons.

5. Compliance with the Water Source Standards enumerated by this section shall be demonstrated through:

    a. Permanent metering of all water withdrawal, reuse, and discharge, with data reported to the County and the applicable water purveyor or the Department of Ecology;

b. An annual public compliance report; and

c. A license allowing the County and the Department of Ecology to inspect and audit the facility's water systems and records.

6. Failure to comply with these water source standards shall constitute a violation of this code and/or the Certificate of Occupancy.

14.840.200: Closed-Loop Cooling Systems Using Chemicals

1. Large-Load Data Centers using a Closed-Loop Cooling System that uses antifreeze or heat-transfer fluids (e.g. propylene glycol/ethylene glycol) as the primary cooling source instead of water must use non-hazardous fluids when feasible.

2. Routine testing for fluid leaks and an annual certification of containment integrity is required.

3. Failure to comply with these standards for Closed-Loop Cooling Systems using chemicals shall constitute a violation of this code and/or the Certificate of Occupancy.

14.840.210: Specific Conditional Use Standards for Large-Load Data Centers

1. A complete building permit application for a Large-Load Data Center shall include, in addition to the requirements enumerated in Chapter 13.300 SCC and SCC 14.840.180(1):

    a. If the proposed site overlies the Spokane Valley Rathdrum Prairie Aquifer, the Grande Ronde Aquifer, the Wanapum Aquifer, or within a Critical Aquifer Recharge Area, the following are required:

        i. A CARA/aquifer mapping and susceptibility narrative addressing the applicable Aquifer and the applicable Water Resource Inventory Area, including how the facility will comply with the Critical Areas Ordinance, Chapter 11.20 SCC;

        ii. A Critical Materials Management Plan that meets the requirements of Chapter 3.15 SCC including, but not limited to, inventory, storage volumes, containment, spill control, drain isolation, PCB-containing equipment, PFAS-containing fire suppression materials, and employee and contractor training for lithium-ion battery systems;

        iii. Stormwater and infiltration controls demonstrating compliance with applicable standards including SCC 11.20.075, including a prohibition on infiltration in critical-materials handling areas;

        iv. A backup power chemistry plan addressing the battery-first operation, generator fuel type and emissions controls, and spill prevention; and

        v. A groundwater monitoring and emergency response plan, including baseline sampling and an aquifer-specific spill response protocol.

    b. Documentation demonstrating that the Large-Load Data Center applicant, and not the Serving Utility or its existing residential or general ratepayer base, will be financially responsible for all infrastructure, including transmission, distribution, substation, or generation infrastructure, that is uniquely required to serve the project.

c. Documentation from either the public authority (when sourced by a public water supply) or the owner of the water rights (when sourced from nonpublic water sources) certifying adequate supply of water and that any improvements to water or wastewater utility structure needed to serve the Large-Load Data Center will be paid by the applicant.

d. A water feasibility study that includes annual use as well as daily and peak water demand to determine if adequate water supply exists and determine the impact of the use on existing wells, groundwater, surface waters, and aquifers in the vicinity of the proposed Large-Load Data center.

    i. A Large-Load Data Center will only be approved if the water feasibility study demonstrates:

        1. That the anticipated cooling water supply yield is adequate;

        2. That the proposed water withdrawals and discharges will not endanger or adversely affect the quantity or quality of groundwater supplies or surface waters in the vicinity; and,

        3. An adequate means of wastewater disposal.

e. As to Cooling Systems:

    i. Applicants intending to use a Tier 1 Cooling System must demonstrate that the reclaimed and/or reused water source is reasonably reliable for the operational life of the facility.

    ii. An applicant intending to use a Cooling System other than Tier 1 must demonstrate why a higher-preference tier is not feasible for the proposed Large-Load Data Center.

    iii. Proof of all required authorizations and permits required by the Washington Department of Ecology for the operation of the Cooling System.

    iv. Certification by a licensed professional engineer that the Cooling System complies with SCC 13.840.190.

    v. If hazardous materials are to be used to charge a Closed-Loop Cooling System, the applicant must provide response plans for spill prevention, secondary containment (sized for the full system volume) and for hazardous materials.

f. The applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional.

    i. The ERP shall be reviewed and accepted by the fire district for which the Data Center structure will be sited within.

    ii. The ERP shall include detailed procedures for fire suppression, containment, ventilation, and evacuation sufficient to protect public health, safety, and welfare. Detailed procedures shall include:

        1. An evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;

2. A plan that ensures all first responders that would respond to the Data Center in the event of an emergency receive adequate training specific to the installed system; and

3. Provisions for annual fire safety inspections demonstrating compliance with the fire safety standards to be performed by a qualified professional on behalf of the Data Center.

iii. The ERP shall include response procedures to be followed in the event of a fire, collapse, personal injury, or other emergency.

iv. The ERP shall include 24-hour emergency contact information for a representative of the Large-Load Data Center that can be contacted during an emergency.

v. The ERP shall include the following as applied to battery storage:

1. A plan for fire suppression systems designed specifically for battery storage when an applicant proposes battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy to a proposed large-load data center at a later time, whether the energy is stored for use on-site or off-site.

g. The applicant shall submit a Signal Interface Plan that provides provisions for the avoidance of any disruption to and mitigates any loss to radio, telephone, or similar signals caused by the Large-Load Data Center to ensure compliance with the Communications Act of 1934 and Title 47 CFR.

h. The applicant shall submit a traffic management plan that addresses construction haul routes, peak-hour construction traffic, and worker parking.

i. The applicant shall submit a decommissioning and reuse plan that addresses the Large-Load Data Center's disposition at the end of its operational life and is prepared by a professional engineer that contains:

i. The estimated decommissioning timeframe and cost of removal for all structures, foundations, conduit, equipment, interconnection facilities, and roads;

ii. The salvage value of any equipment in current dollars and the calculations supporting the decommissioning estimate. The estimated salvage value of the material using current, publicly available material indices and/or firm quotes from a decommissioning or recycling company experienced in the decommissioning of Large-Load Data Centers.

iii. The manner in which the Large-Load Data Center will be decommissioned, including provision and a timetable for the removal of all structures, foundations, conduit, equipment, and interconnected facilities and for the revegetation and restoration of the property to its original condition or preparation of the site in a condition compatible with the prior zoning of the parcel(s); and

iv. A performance bond, letter of credit, or other financial assurance payable to the County, sufficient to assure that decommissioning of the site can be achieved by a third party in the event that the applicant defaults in that obligation, which financial assurance shall be provided prior to commencement of construction.

j. The applicant shall submit a process wastewater plan that addresses how water discharged to air, ground, storm or sanitary sewer systems within Spokane County, or transferred for use in another industrial process such as feedstock for hydrogen or other fuel production, will be treated onsite prior to any discharge or transfer.

2. Any water discharged to air, ground, storm or sanitary sewer systems within Spokane County, or transferred for use in another industrial process such as feedstock for hydrogen or other fuel production, shall be minimal and treated onsite. Any such transfer shall be documented as part of the reporting requirement under SCC 14.840.190(5).

3. The requirements of this Section are in addition to, and are not a substitute for, any water right required under Chapter 90.03 RCW or Chapter 90.44 RCW, or any permit required under Chapter 43.21C RCW.

4. Any Large-Load Data Center using battery storage or otherwise storing energy must demonstrate compliance with NFPA Standard 855 (Standard for the Installation of Stationary Energy Storage Systems).

5. All Large-Load Data Centers shall be constructed so that any equipment used is housed in a metered, electrically grounded, and pre-engineered metal-encased structure with a fire rating designed to resist an internal electrical fire for at least thirty (30) minutes. The containment space shall contain baffles that automatically close in the event of fire, independent of a possible electrical system failure.

6. During Large-Load Data Center construction and welding operations, the applicant shall have a readily accessible water truck and chemical fire suppression material available on site to allow for immediate fire response.

7. All Large-Load Data Centers shall provide 24-hour emergency signage, visible at the access entrance to the Large-Load Data Center, and shall include a contact representative's name and a 24-hour telephone number.

8. All Large-Load Data Centers shall provide staff with cellular or on-site telephones to enable timely communication with the fire department and other emergency services.

9. No Large-Load Data Center shall be located closer than 1,000 feet from the nearest residential or commercially zoned property line.

10. No Large-Load Data Center shall be taller than 60 feet in height.

11. All Large-Load Data Centers shall comply with the following landscaping requirements:

    a. A landscape buffer is required between the Large-Load Data Center and accessory uses, and any adjoining residential or commercial zoned district, sensitive receptor, or public roadway.

    b. The landscape buffer shall:

        i. Be at least 25 feet in width and may be part of the minimum setback distance;

        ii. Include plantings that consist of native species;

        iii. Include one (1) large evergreen tree planted that has a minimum height of eight (8) feet for every 25 linear feet of buffer;

        iv. Include one (1) deciduous canopy (shade) tree planted that has a minimum caliper of 2.5 inches for every 75 linear feet of buffer;

v. Include one (1) ornamental/flowering tree planted that has a minimum height of eight (8) feet for multi-stemmed varieties or has a minimum caliper of 2.5 inches for single-stemmed varieties for every 50 linear feet of buffer; and

vi. Include five (5) shrubs per 25 linear feet of buffer that are fully branched and have a minimum height of three (3) feet at the time of planting. Shrubs shall be of a combination of evergreen and deciduous species, with a minimum of 50% being evergreen.

12. All Large-Load Data Centers shall comply with the following illumination requirements to ensure that lighting is shielded, downcast and of a luminosity designed to maintain the existing night sky darkness and to prevent light trespass onto adjacent properties:

    a. All fixtures shall be full cut-off type;

    b. Light poles shall be no taller than 25 feet in height;

    c. All light poles must be setback a minimum of ten feet from any exterior property line; and

    d. Maximum foot-candles at the property line shall be 0.5.

13. No façade shall have more than twenty percent (20%) of the area exposed with apparatus (e.g. vents, fans, HVAC systems, etc.).

14. Electric fields and magnetic fields shall not be created that adversely affect public health, safety, and welfare, including but not limited to interference with the normal operation of equipment or instruments or normal radio, telephone, or television reception from off the premises where the activity is conducted.

14.840.250: General Compliance

1. All Data Centers shall comply with the siting and permitting requirements contained in Title 13 SCC (Project Permit Procedures) and Chapter 11.10 SCC (SEPA), with all identified impacts mitigated by the developer.

2. If any section, subsection, sentence, clause, or phrase of this Zoning Ordinance is held to be invalid or unconstitutional, such holding shall not affect the validity of the remaining portions of this Zoning Ordinance.