

VIII. Industrial Use Standards

Contents

A. Residential Buffer.....	1
B. Firefighting Access	1
C. Notification Radius.....	2
D. Environmental Review.....	2
E. Emergency Management.....	4
F. Construction and Maintenance Standards.....	5
G. Noise Mitigation Requirements	6
H. Traffic Impact Study.....	9
I. Ownership	11
J. Dust Control.....	12
K. Socio-economic Impact.....	12
L. Setback Waiver	12
M. Site Preparation.....	12

A. Residential Buffer

1. A buffer strip approved by the Planning and Zoning Commission shall be required to provide a sight and sound barrier when an industrial use is adjacent to a residential district or any residence.
2. The open storage of waste products or salvage products shall not be permitted closer than 500 feet from any residence.

B. Firefighting Access

All combustible materials shall be stored in a manner to permit free access to firefighting equipment.

C. Notification Radius

Notification of Surrounding Property Owners. The applicant shall provide a list of all property owners within one (1) mile of the exterior boundary of the proposed project site. Written notice of the application and public hearing shall be mailed to such property owners by first-class mail no less than 30 days prior to the initial public hearing. Notification shall describe the nature of the proposed development.

D. Environmental Review

1. Purpose. The purpose of this section is to ensure that Mercer County's review of certain industrial uses include a comprehensive evaluation of potential environmental and infrastructure impacts, including cumulative impacts, based on information and studies submitted by the applicant, so that informed land-use decisions may be made to protect public health, safety, and welfare.
2. Environmental Review Required.
 - a. In addition to the materials required as part of a conditional use permit submittal, the applicant shall submit an Environmental Review.
 - b. The Environmental Review shall be based upon, and may incorporate by reference, studies, plans, and documentation submitted as part of the application. Additional narrative analysis may be required where necessary to reasonably explain potential impacts and proposed mitigation measures.
 - c. The level of detail required shall be proportional to the size, scale, and intensity of the proposal.
3. Qualifications of Environmental Review Preparer. The Environmental Review shall be prepared or coordinated by a person or firm with at least five (5) years of experience preparing environmental review documents for public agency review. The applicant shall submit a list of at least three (3) comparable environmental review documents completed within the past ten (10) years, including the name of the project, the lead reviewing agency, and contact information for the agency. If the Environmental Review includes a specialized technical study, that portion shall be prepared by a qualified professional with experience in that subject area.
4. Third Party Review. At the applicant's cost, the County shall have a person or firm that meets the qualifications of part 3 above review the Environmental Review documentation.
5. Scope of the Environmental Review. The Environmental Review shall include a comprehensive evaluation of reasonably foreseeable impacts of the proposal,

including associated infrastructure and operations, informed by submitted materials. At a minimum, the review shall address the following topics, as applicable.

- a. Noise, including continuous operation noise and backup power systems.
 - b. Water Resources, including water sources, anticipated consumption, and potential impacts to existing users.
 - c. Energy Demand and Electrical Infrastructure, including electrical load, substations, and transmission connections.
 - d. Air Quality and Emissions, including construction activity and emergency or backup generators.
 - e. Transportation and Road Impacts, including construction traffic, employee traffic, and heavy equipment hauling.
 - f. Stormwater, Drainage, and Surface Impacts, including runoff, erosion, and impervious surfaces.
 - g. Land Use Compatibility, including proximity to residences, agricultural uses, and other sensitive receptors.
 - h. Public Safety and Emergency Services, including fire protection, hazardous materials, and emergency response capacity.
6. Cumulative Impact Assessment. The Environmental Review shall include a cumulative impact assessment that evaluates the combined effects of the proposed use together with: (1) other existing or approved industrial or conditional uses located on property abutting the project site; and (2) supporting infrastructure located within the County that is necessary to serve the proposed use, including roads, utility corridors, substations, transmission facilities, pipelines, water systems, drainage facilities, and similar facilities. The assessment shall be based on information reasonably available to the applicant and shall be proportionate to the size, scale, and intensity of the proposal. The purpose of the cumulative impact assessment is to inform County decision-makers. It does not require a finding of zero impact and does not, by itself, prohibit approval of a Conditional Use Permit. The cumulative impact assessment shall, at a minimum, consider:
- a. Other existing or approved industrial or conditional uses located on property abutting the project site;
 - b. Supporting infrastructure located within the County that is necessary to serve the proposed use, including roads, utility corridors, substations, transmission facilities, pipelines, water systems, drainage facilities, and similar facilities; and
 - c. The combined effects on infrastructure capacity, transportation systems, noise levels, water demand, drainage, public services, and emergency response capacity.

7. Agency Coordination. The applicant shall identify local, state, and federal agencies with jurisdiction over identified impacts and summarize the status of required permits or consultations. Copies of issued permits or agency determinations shall be provided as they become available.
8. Review of Use of Environmental Review. The Environmental Review shall be used by Mercer County to:
 - a. Determine compliance with ordinance standards;
 - b. Identify reasonable conditions of approval or mitigation measures; and
 - c. Determine whether additional studies or information are necessary prior to approval.
9. The County may request clarification or supplemental information if it determines that the Environmental Review is incomplete or insufficient to support a decision.
10. No State or Federal Environmental Determination Created. This section is intended solely to support local land-use review and does not create an environmental determination under state or federal law unless otherwise required by statute.

E. Emergency Management

1. Prior to construction, the rural fire district(s), Sheriff's Department, Emergency Management, and local emergency medical service provider having jurisdiction over the area, shall have an opportunity to review the emergency operations plan provided by the applicant and make any necessary updates to the plan.
2. Any emergency operations plan that identifies a need for additional staff, staff training, equipment, facilities, or other resources as a result of the proposed use shall require the applicant to provide, or pay the full cost of providing, those additional staff, training, equipment, facilities, or other resources to the extent necessary to meet the additional emergency service demand generated by the proposed use.
3. Prior to the start of operations, the applicant shall file with the County Emergency Manager a facility map identifying the locations of each structure.
4. Facility shall be constructed with a complete and contiguous perimeter fire break of at least 50 feet wide. Fire break may consist of aggregate, hard surfacing, or short grass that is well always maintained and effective in slowing the spread of wildfire. The fire break may be contained within required setback distances.

5. The emergency operations plan for construction shall be submitted to the Mercer County Emergency Manager not less than sixty (60) days before construction is to begin. The emergency operations plan for operations shall be submitted to the Mercer County Emergency Manager not less than sixty (60) days prior to commencement of operations.

F. Construction and Maintenance Standards

1. Access Roads. Access roads shall be constructed to meet the County roadway design standards. The developer shall coordinate with the County Highway Department and County Engineer to ensure the proper design standards are implemented and for approval of the design documents. The County Engineer will provide design of the access roads if requested by the Developer, at the Developer's cost. Access roads shall be constructed, to the extent feasible, parallel or perpendicular to the existing roads to minimize disruption to surrounding land use. Roads shall be designed to accommodate the weight and frequency of equipment transport while ensuring proper drainage and dust control.
2. Security Fencing. The applicant shall install and maintain secure perimeter fencing around the facility to protect infrastructure and prevent unauthorized access. Fence height shall be a minimum of eight (8) feet. If existing fences are removed or damaged during construction, they shall be promptly repaired or replaced unless otherwise negotiated with the landowner.
3. Vegetation Management. The applicant shall minimize the removal of trees and vegetation to preserve the natural environment. No large tree stands, shelter belts, or critical green spaces shall be removed without the written approval of the affected landowner. Landscaping buffers may be required to mitigate visual impacts and may be located within required setbacks.
4. Load Permitting. The applicant is responsible for complying with all state and local overweight load permitting requirements in accordance with applicable transportation laws. A conditional use permit for the facility does not exempt haulers from obtaining necessary permits for transporting heavy equipment or materials.
5. Road Restoration.
 - a. Prior to construction, the applicant shall enter into a road use, maintenance, and restoration agreement with the County. The agreement shall address road use, maintenance during hauling, and restoration of affected roads following completion of hauling activities. The agreement will ensure that the requirements of this section are followed.

- b. Prior to construction, contact the County Highway Department to determine the project haul routes and designate the affected roads as haul roads.
- c. Prior to construction, the applicant will provide financial security, in the form of a bond, letter of credit, parent guarantee, or other form acceptable to the County, to guarantee performance of road maintenance and restoration obligations in conformance with the requirements in this Ordinance.
- d. Before hauling over a designated haul road, the applicant will coordinate a pre-haul road inspection with the County Highway Department. The joint inspection will determine the existing condition of the haul road, including the type, thickness, and width of the surfacing material. The developer will record the results in an inspection report. The inspection report will set forth any special conditions for use, maintenance, and restoration of the route. The Developer and the County Highway Department will review and sign the report.
- e. After completing hauling operations over a designated haul road, restore the road to a condition at least equal to the condition existing at the time of the pre-haul inspection. The County Highway Department will order the type and amount of maintenance and restoration work and the requirements for performing this work.
- f. Upon completion of construction, the applicant shall ensure that any roads, sidewalks, or other public infrastructure damaged by construction activities are promptly repaired or restored to at least their pre-construction condition at the applicant's expense.

G. Noise Mitigation Requirements

- 1. Noise Study.
 - a. The noise study establishes the average baseline ambient noise level in the project area and describes the anticipated noise level of the facility and any proposed mitigation efforts such as sound walls, baffles, ventilation silencers, etc., if needed to comply with the noise levels in Table 1. The study and its results must describe the existing ambient noise environment and modeled results for the proposal.
 - b. The study must be prepared by a County-verified acoustical engineer.
 - c. All noise studies must include information regarding noise mitigation measures incorporated in the design of the proposal, if necessary to comply with noise levels in Table 1.
 - d. The noise study must be reviewed through a third party contracted through the County at the expense of the applicant.

2. Acoustical Engineer Verification.

- a. The applicant's acoustical engineer shall be verified and approved by the Zoning Administrator. Verification documentation includes, but is not limited to, the following:
 - i. One-page descriptions of at least three (3) noise studies performed for other similar proposals, or
 - ii. At least three (3) references of public agencies and officials, or private sector industrial project contacts, where the engineer has performed noise studies.

3. Methods of Measurement. Noise perceived from identified Receptor Site(s), as measured from any source point(s), shall not exceed the sound pressure levels provided in Table 1 for normal operation. If necessary, noise mitigation shall be required to achieve compliance. Noise mitigation may include, but is not limited to, the use of low-noise fans, earthen berms, sound walls, or enclosures.

4. Maximum Sound Levels.

- a. Noise levels for normal operations shall not exceed the average hourly levels in Table 1 at points measured at the closest exterior wall of any occupied dwelling unit closest to the proposed project noise source. This requirement may be waived by the affected landowner in a written agreement between the landowner and the applicant, which is included with the conditional use permit application. If waived, the next closest Receptor Site(s) shall be measured.

Table 1: Maximum Noise Levels

Maximum Noise Levels	
Daytime	Nighttime
Fifty (50) dB(A)	Forty-five (45) dB(A)

- b. Emergency standby generators serving any lawful use may operate at any time during loss of utility power or other bona fide emergency conditions and may also operate for routine maintenance and testing reasonably necessary to ensure emergency readiness, and shall not, by itself, constitute a violation of this section, provided the generators are maintained with manufacturer-recommended sound attenuation and the operator retains maintenance/testing records for twenty-four (24) months and provides them

to the county upon request. Operation outside the stated hours shall not be a violation when reasonably necessary for emergency readiness due to manufacturer requirements, commissioning, repairs, post-event verification, or utility-directed testing and when reasonable measures are taken to minimize impacts.

- c. Testing and maintenance operations for emergency generators shall only occur between the hours of 7AM and 7PM.

5. Low-frequency Noise

- a. Where the proposed use includes equipment with the potential to generate low-frequency noise, the required noise study shall include an evaluation of noise levels within the low-frequency range. The evaluation shall:
 - i. Measure or model sound levels in third-octave frequency bands below 200 hertz (Hz);
 - ii. Assess operational conditions during normal operating load; and
 - iii. Identify whether tonal or pulsating low-frequency noise components are present.
- b. Assessment Standard.
 - i. Low-frequency noise shall be evaluated using generally accepted acoustical engineering methods, including octave-band or one-third-octave-band analysis, or other equivalent methodologies.
 - ii. The analysis shall demonstrate whether low-frequency noise generated by the facility is readily distinguishable above background conditions at nearby sensitive receptors, including residences.

6. Noise Mitigation and Monitoring.

- a. Applicable proposed projects must implement noise mitigation measures as necessary and mechanically feasible to meet sound levels in Table 1.
- b. If the study identifies low-frequency noise that is reasonably anticipated to exceed background levels in a manner that may result in perceptible or tonal effects at nearby sensitive receptors, the applicant shall propose reasonable and feasible mitigation measures.
- c. An approved acoustical engineer shall verify prior to the time the project is fully operational that it was constructed with all noise mitigation measures as included in the noise study. This shall be performed at the cost of the project owner.
- d. The conditional use permit may be conditioned to require an annual study at the cost of the project owner, to verify that noise levels do not exceed those shown in Table 1. The annual study shall be provided by an approved

acoustical engineer. Study noise measurements shall take place under full load conditions (i.e. during the summer). As an alternative, the County may require 24-hour noise monitoring, with monitoring information to be made available to the County upon request.

- e. Facilities exceeding noise thresholds must implement additional mitigation measures, at the cost of the owner, within 90 days.
 - f. The County will investigate noise complaints within 14 days.
 - g. Corrective action will be required if violations are confirmed.
7. Construction Noise. Construction activities shall comply with all applicable County and State noise regulations, and reasonable measures shall be taken to minimize temporary noise impacts to surrounding properties.

H. Traffic Impact Study

1. Purpose. The purpose of the traffic impact study is to identify the adequacy of the transportation system to serve a proposed Development and the expected effects of the proposed Development on the transportation system. Mercer County may require a traffic impact study to determine the effects of Development on public roads and determine what improvements are needed, if any, to maintain safe, efficient traffic operations.
 - a. Applicability. Traffic impact studies **may be required** by the County Engineer at any of the following stages of Development:
 - i. Application for a zone change
 - ii. Application for a subdivision
 - iii. Application for a conditional use permit
 - b. A traffic impact study **shall be required** for:
 - i. Any Development that can be reasonably expected to generate more than 500 vehicle trips during a single day and/or more than 100 vehicle trips during a single hour. Trips are external to the site.
 - ii. Any proposed zoning or land use change that, after development is completed, can be reasonably expected to generate more than 300 trips during a single day more than the previous zoning or land use condition.
 - c. A traffic impact study **may be required** for:
 - i. Any Development that can be reasonably expected to generate more than 200 vehicle trips during a single day and/or more than 40 vehicle trips during a single hour.

- ii. Any Development in which, based on the engineering judgment of the County Engineer, the proposed Development would significantly affect the adjacent roadway system. Examples include but are not limited to proposals adding traffic to or creating known or anticipated safety concerns or proposals that will generate a significant amount of truck traffic (more than 30 trips per day or over 5% of site traffic.)
- d. Trip Generation. To verify the proposed number of trips for development detailed in a Development Permit or Conditional Use Permit application, the County Engineer may request any Development to verify the expected number of trips per day generated by the Development, which is done using the current Trip Generation Manual from the Institute of Transportation Engineers.
- e. State Coordination. Proposed Development that receives access from a State Highway requires coordination with the State Department of Transportation, wherein a traffic impact study may be required by the State Department of Transportation in compliance with state guidelines.
- f. Study Requirements. The following items are required as part of the traffic impact study. The County Engineer has the authority to waive any of the requirements of this section based on professional engineering judgement.
 - i. A summary of the proposed Development, the major findings of the analysis, and proposed mitigation measures.
 - ii. A vicinity map showing the location of the proposed project in relation to the transportation system.
 - iii. Existing traffic volumes using the best available data, unless the County Engineer determines that new traffic counts are necessary.
 - iv. Sight distance evaluation at study intersections.
 - v. Study intersection design, including a recommendation on the need for right and/or left turn lanes. This recommendation must follow the State Department of Transportation's "Guidelines for the Installation of Turn Lanes along State Highways". If turn lanes are recommended, the study should use State Department of Transportation design practices to indicate the length of the proposed turn lanes including tapers, etc.
 - vi. Capacity analysis at intersections and segments within the study area, as appropriate. The analysis should document (1) existing traffic volumes using the best available data, unless the County Engineer determines that new counts are necessary due to recent Development changes in the area, (2) Existing performance of the transportation system, including Levels of Service (LOS) and volume/capacity ratios, (3) Complete trip generation figures for all aspects of the proposed

Development, including the number of trips by vehicle type (cars and trucks), and time-of-day entering/exiting percentages, (4) Forecast volumes and performance of the transportation system with the Development at buildout and (5) Directional trip distribution (for example, 30% from the west, 70% from the east). For Development that is expected to generate a significant amount of Commercial Truck traffic (more than 30 trips per day or 5% of site traffic), indicate if the truck directional distribution varies from the vehicle directional distribution.

- vii. Crash data analysis at existing study intersections.
- viii. Traffic signal warrant analysis – with a recommendation of signalization (including timing, phasing, protected/permissive turns, and other signal coordination), roundabout or other traffic control devices.

2. Process

- a. The County Engineer shall be consulted by a potential applicant prior to the submission of an application of a zone change, subdivision or conditional use permit to determine if a traffic impact study is required.
- b. The Developer shall be responsible for the cost of the traffic impact study, unless a condition exists where cost sharing may occur, as determined by the County Engineer.
- c. The traffic impact study must be signed and stamped by a Professional Engineer registered in the State of North Dakota.
- d. Improvements recommended as a result of the traffic impact study will be required upon application approval by the Mercer County Board of Commissioners to be either:
 - e. Constructed and in place before commencement of operations, or
 - f. Bonded to assure completion prior to application approval.

I. Ownership

- 1. Foreign Ownership. Developers must submit an affidavit affirming that the industrial use is owned and operated by individuals, corporations, etc. in compliance with applicable state and federal laws and regulations.
- 2. Change of Ownership. 30 days prior to any change in ownership of a industrial use permitted in Mercer County, or a change in the controlling interest of any entity owning an industrial use permitted in Mercer County, an application shall be made to the Mercer County Commission, requesting transfer of the conditional use permit.

Approval of such transfer shall be conditioned upon explicit agreement by the new applicant to comply with all provisions of this section and all conditions attached to the original conditional use permit. The application may be in letter form and shall be signed by the authorized representatives or agents of both the current applicant and the prospective applicant.

J. Dust Control

All uses in the Industrial District shall implement dust control measures on site access roads in coordination with the County Highway Department and County Engineer.

K. Socio-economic Impact

The applicant shall provide an evaluation of potential socio-economic impacts of the proposal, including temporary and permanent employment impacts, indirect and induced economic impacts to the County, County tax revenue impacts, County service costs, and associated housing needs.

L. Setback Waiver

Any setback required for an industrial use as part of this Ordinance may be waived by the affected landowner(s) in a written agreement between the landowner(s) and the project applicant/developer. The County shall be provided a copy of each agreement.

M. Site Preparation

No site preparation shall be permitted until the land is properly zoned and the conditional use permit has been accomplished. This prohibition does not include basic surveying of the proposed site.