

GUIDELINES FOR PREPARING NC STATE UNIVERSITY ENVIRONMENT ASSESSMENTS

The purpose of this document is to provide specific instructions for preparation of environmental assessments (EA's) for NC State University, using the State Clearinghouse Guidelines.

EA's for all NC State University projects are submitted by the University's Environmental Affairs Manager to the State Clearinghouse. The party contracted to prepare the document (the preparer) should be in contact with that person well in advance of the projected filing date to discuss the project and the submittal schedule.

The preparer should follow the guidelines as closely as possible in preparing an initial draft and submitting it to NC State Environmental Affairs for review. Based upon this review, the preparer may be requested to provide more information, make corrections, and/or provide other input to produce a final document that is ready for submittal. Sometimes another draft will be requested prior to submitting the final document. This process will continue until the University is satisfied with the document.

Generally, the preparer should plan to have the initial draft to NCSU Environmental Affairs at least two weeks prior to the projected submission date. Once a document is approved, the preparer will provide the manager with 18 bound copies ready for submittal.

March 1999
(replaces 5/24/93 guidelines)

N.C. Department of Administration
State Intergovernmental Review Clearinghouse

Environmental Assessment Guidelines

These standardized guidelines are for use when preparing an Environmental Assessment (EA) to comply with the **State Environmental Policy Act (SEPA)** and its rules in the North Carolina Administrative Code.* The purpose of the EA is to provide a state agency with enough information to determine if a planned project has a level of impact on the environment requiring the preparation of an Environmental Impact Statement (EIS) **or** if a Finding of No Significant Impact (FONSI) is the appropriate conclusion.

1. Prepare a cover letter including the following:

- Title/name of proposed activity
- Responsible state agency
- Name, address and phone number of state agency contact person
- Preparer of the document (if *not* a state agency, include address, phone number)
- List of other cooperating agencies, if applicable

*Prior to completing an EA, be sure that the proposed project meets the state project agency's** minimum criteria for requiring compliance with SEPA and that you are following the lead state project agency's procedures and required forms. This information can be obtained from the state project agency.*

2. Complete all sections (A-I).

A. Proposed Project Description

Describe the entire project. Explain how it fits into any larger project or master plan. If this is a phased project, identify future and previous planned phases and their timing. Details should include, but are not limited to, the following, as applicable:

- number of acres of land to be disturbed
- square footage and height in stories of new buildings
- square footage or acreage of footprint of entire project
- number of parking spaces in parking lot(s) or deck
- proposed use(s) of any building(s)
- location of project (county/municipality) and reference to location map(s) in Section H

* 1 NCAC, Chapter 25, Section .0500

** State project agency is the agency responsible for SEPA compliance due to its project-approval authority. This is the agency that is funding, permitting or otherwise giving state approval to the project.

* Include in Section H a reproducible 8 1/2@ x 11@ site location map showing the site of the proposed

- site improvements to be made, such as grading, filling, landscaping, etc.
- connections to existing utility and sewer lines and/or new utility installation
- amount of paved and otherwise impermeable surface
- construction of any stormwater control devices

B. Purpose and Need for Proposed Project

Discuss why this project is necessary and how it fits into the project sponsor's mission. Include any unique aspects of the project. *For example, is the project needed to bring together functions that are scattered, to alleviate crowded facilities, to expand, upgrade or replace unsafe or inadequate facilities, or to create a new needed facility/service?*

C. Alternatives Analysis

Discuss all reasonable alternatives to the proposed project, including the alternative of no action. If more than one site was considered, discuss the site selection process and the factors considered in selecting the proposed site. Factors considered could include real estate considerations, space, utilities, transportation, environmental consequences, etc. **Conclude with why the proposed site or project is the preferred alternative.**

D. Existing Environmental Characteristics of Project Area

The existing or affected environment should be discussed in terms of what **currently** exists on the site and in the surrounding area.

If no site resource information exists for a given topic, make a statement to that effect and **provide a reference to a study or document which supports your statement.** *For example, if there are no wetlands on the site, reference a wetlands delineation that was done in the past or, at a minimum, a field survey that was conducted.*

For some topics, such as land use, wetlands, water supplies, shellfish or fish and their habitats, and wildlife and their habitats, discussion should also include the surrounding area if there is any possibility that the proposed project could have any impact on it. *For example, if the site itself does not contain any wetlands, but there are wetlands downstream that could be affected by the increased surface water runoff from the site, they should be identified.*

(1) Topography

Briefly describe the topography of the project area including landforms, slopes, and elevations. A brief description of the geology of the site can be added if available. Is the site within the 100-year flood plain? National Flood Insurance Program (NFIP) maps should be used to determine whether the project will encroach on the base (100-year) flood plain.

(2) Soils

Describe the dominant soil(s) in the project area as well as any soil types that might prove to be a constraint to the proposed project. This would include any fill, wetland soil types, etc.

(3) Land Use

Describe the current use of the land at the site and the surrounding acreage. Additionally, discuss how the current land use fits into the land use of the entire area in terms of conservation, development, and ecological function. If applicable, identify the current zoning classification of the project site and surrounding area.

(4) Wetlands

Describe the existence of any wetlands on-site or near the site. Indicate any wetlands on the map in Section H. Include a list of the type, quality, and delineation. Describe the primary function of the wetland (*e.g., flood control, wildlife habitat, groundwater recharge*), and other factors that indicate the relative importance of the function to the total wetland resources of the area.

(5) Prime or Unique Agricultural Lands

Is any of the proposed site classified as prime or unique agricultural land? Reference some authority. Local soil and water conservation districts can be of assistance in classification of these areas.

(6) Public Lands and Scenic, Recreational, and State Natural Areas

Discuss the existence of any formally designated park land, scenic or recreational areas, or state natural areas on or adjacent to the site.

(7) Areas of Archaeological or Historical Value

Reference any studies that have been done on this site. If no studies are available discuss if and how the site has been previously disturbed. List any buildings on the site and their approximate age.

(8) Air Quality

Identify the area's air quality classification, acknowledging if it is in transition and why. Discuss the current sources of emissions for the site. Discuss any previous odor problems or complaints due to any existing facilities.

(9) Noise Levels

Discuss the current noise levels on the site with a measurable benchmark, if possible.

(10) Water Resources (Surface Water and Groundwater)

Note: Since these topics tend to overlap and are interrelated, discuss them together under a single heading.

Identify surface waters and groundwater (aquifers) in the project area. For surface waters, identify the name, location (include on the enclosed map in Section H), classification, and use support ratings. Identify the river basin where the project is located. If there are unnamed streams, estimate the average flow. Discuss groundwater in terms of use, quality, quantity, depth, and recharge.

(11) Forest Resources

List type (*for example, hardwoods/pines*) at or near the site.

(12) Shellfish or Fish and Their Habitats

Are there categories of shellfish beds/fish habitats at or near the site? Are these closed beds, highly productive areas, or spawning areas?

(13) Wildlife and Natural Vegetation

Identify any wildlife habitat that exists on or near the project area. List specific species of dominant plants and animals that are indicative of the kind of habitat that exists, as well as any threatened or endangered species.

E. Predicted Environmental Effects of Projects

In this section the discussion should center on the ***direct, indirect, and cumulative impacts*** the project will have on the same topics covered in the previous section with the addition of A(14) Introduction of Toxic Substances. @ Identify both the construction and operational impacts. If there will be no impact in any specific topic area (#1-13 above), that should be stated. If the impact is small and deemed to be insignificant, describe the impact and then make a statement to that effect at the end of the discussion for ***each*** topic. In all categories, quantify impacts where feasible (*i.e., in terms of acres, linear feet, etc.*).

If, in Section D, AExisting Environmental Characteristics of Project Area,@ it was shown that a resource did not exist on or near the site, then indicate ANot Applicable (N/A)@ in the appropriate section. *For example, if there are no wetlands on the site or near the site that could be impacted by the project, then there cannot be any environmental consequences to wetlands from the project and there need not be any mitigative measures. Therefore, the topic of wetlands does not need to be addressed in this or the next section and AN/A@ should be indicated under #4 of this section.*

(1) Topography

Will this project change the existing topography? Identify and evaluate any encroachments of the project on flood plains.

(2) Soils

Will this project cause any soil disturbance or contamination? If soil is to be moved, how many square yards/feet will be moved and to what location? If soil is expected to be contaminated, discuss the contaminant.

(3) Land Use

How will the land use change due to the project and how will the new use(s) fit into the intended land use of the entire area in terms of conservation, development, ecological function, and quality of life? Will local zoning or land use plans need to be changed?

(4) Wetlands

Will there be any direct or indirect impacts on wetlands from the project? If wetland is to be filled, how many acres are involved and what kind of authorization (permit) is required? Will the diversion/addition/withdrawal of surface water impact existing wetlands? Construction activity as well as long-term operational activity should be considered.

(5) Prime or Unique Agricultural Lands

How will the project affect the identified prime or unique agricultural land? How much acreage will be lost and how much retained in that use? What will be the impact of the loss?

(6) Public Lands, Scenic and Recreational Areas

How will the project impact any formally designated park land, scenic, recreational or state natural areas on or adjacent to the site? Again, quantify the amount of loss. Also, discuss the loss of any informal scenic or recreational site functions.

(7) Areas of Archaeological or Historical Value

How will the project affect any areas of archaeological or historical value? Will any building be demolished or renovated? If yes, include photographs of buildings on the site.

(8) Air Quality

How will the ambient air quality be affected by the project? Remember to discuss both the construction and the operation of the project. Consider cumulative impacts as this project is added to the existing development. Will there be any open burning? If parking is involved and there will be more than 750 spaces, a Complex Air Source permit will be required. Confirm if the project will increase odor levels or increase the possibility for odor complaints.

(9) Noise Levels

Will the project increase noise levels? If so, when (days of the week and hours of day)? At what distance will increased noise levels be heard? Will surrounding properties be affected by noise level?

(10) Water Resources

How will the project impact the following during construction and operation: surface water quality and quantity, and groundwater quality and quantity? Address any changes in the amount of impervious surface at the project site and stormwater runoff (*i.e., nonpoint source pollution*). When discussing these impacts, include impacts on erosion rates at the site and downstream, sedimentation changes, changes in downstream water quality (e.g., eutrophication impacts), etc.

(11) Forest Resources

If any forests are destroyed by this activity, describe forestry practices to be used.

(12) Shellfish or Fish and Their Habitats

What kinds of impacts on shellfish, fish, or their habitats will the project have either during construction or operation? Again, consider on-site and nearby aquatic habitats.

(13) Wildlife and Natural Vegetation

How much of the existing natural vegetation will be destroyed or altered by the project? If the wildlife will be displaced, are there surrounding areas that provide similar types of habitat or does the project encompass any possible relocation areas nearby? What is the long-term effect if more development is planned for the area?

(14) Introduction of Toxic Substances

Will any toxic substances be introduced during construction or operation of the project? If so, name them and identify how they will be used. Discuss any measures that will be taken to ensure that toxic substances will be treated in accordance with all appropriate regulations so that there will be no significant environmental impact.

F. Mitigative Measures

The only topics that need to be covered in this section are those which were deemed to be significantly affected by the proposed project in Section E, APredicted Environmental Effects of Projects.@ List all of those topics in the same order as above and discuss for each one what measures are going to be taken to mitigate the effects of the project. *For example, wetlands created to offset wetland loss, or if habitat of any kind is going to be created, it should go in this section.* If the project will cause an increase in emissions, what steps are being planned to minimize or reduce future emission increases? If stormwater control practices are going to be implemented, what kinds and what level of rainfall events will they accommodate? Provide quantitative data.

G. References

List in alphabetical order any documents referenced in the EA.

H. Exhibits

Include a reproducible 8 1/2 x 11 site location map or maps showing the site of the proposed project and any significant features such as wetlands, parks, historic sites, etc. Also include a most recent USGS topographical map (7.5 minute quadrangle) with project and boundaries shown.

I. State and Federal Permits Required

List any permits that are to be obtained for this project.

FOR LEAD STATE AGENCY USE ONLY

Conclusion Statement *(Must be completed and signed by responsible state agency and submitted with the EA document to the State Clearinghouse.)*

Select the appropriate statement below:

_____ After preparation/review of this EA, the responsible state agency has concluded there is a *Finding of No Significant Impact (FONSI)* and will not be preparing an *Environmental Impact Statement (EIS)*. (Attach any additional information regarding this conclusion that you deem important to this finding.)

_____ The agency has completed this EA and is hereby submitting it for review and comment. After a consideration of the comments received, the agency will proceed with a *FONSI* or prepare an *EIS*.

_____ **Agency** **Signed**

Submission Instructions

Note to non-state agency document preparer:

Documents completed for state agencies must first be sent to the appropriate agency for approval and completion of the *Conclusion Statement* prior to State Clearinghouse submission. Contact the appropriate agency for its submission procedures. Documents prepared for the N.C. Department of Environment and Natural Resources will be subject to departmental review prior to submission to the State Clearinghouse.

An EA should not exceed 40 pages in length, excluding exhibit materials. **Sixteen (16) copies** of this document with the cover letter and *Conclusion Statement* should be submitted to the State Clearinghouse, N.C. Department of Administration, Room 5106c, 116 West Jones Street, Raleigh, North Carolina 27603. For the review schedule and submission deadline dates, call the State Clearinghouse at (919) 733-7232.