



Procedures Manual

Environmental Impact Review of Major State Facilities



**Virginia Department of Environmental Quality
Office of Environmental Impact Review
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Procedures Manual Environmental Impact Review of Major State Facilities

This manual was prepared and distributed according to the requirements of *VA Code* §10.1-1191, which directs the Virginia Department of Environmental Quality (DEQ) to develop procedures governing the preparation and evaluation of required environmental impact reports for state projects. *VA Code* §10.1-1188 requires state agencies to prepare and submit an environmental impact report (EIR) for each major state project. This manual describes objectives, criteria, and procedures developed by DEQ to assure the orderly preparation and evaluation of environmental impact reports.

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Chapter 1. Overview

The purpose of environmental review is to identify and evaluate the environmental effects of proposed state facilities, to guide facility siting and design decisions in order to protect important environmental resources and to identify any environmental liability during the planning stages of a project. The analysis needed to prepare an environmental impact report helps agencies to assess the effects of development proposals and to consider alternative actions and mitigating measures to avoid or reduce adverse impacts. Review of the EIR provides DEQ and other state agencies with information that can be used to recommend project modifications, if needed, and to make recommendations to the Secretary of Administration. Preparation of EIRs assists proponent agencies in developing projects which are consistent with existing land-use policies including local plans and ordinances.

VA Code §10.1-1190 provides that the State Comptroller shall not authorize payments of funds for major state projects unless the request is accompanied by written approval of the governor after his or her consideration of the comments by DEQ on the environmental impact of the facility. Each new governor typically delegates the authority to approve projects to the Secretary of Administration by Executive Order. The Secretary of Administration must then weigh the benefits and environmental costs of the project before releasing funds for that project. DEQ's recommendations to the Secretary of Administration are advisory; however, the secretary may incorporate them as conditions of project approval.

In some instances, environmental review will help to avoid unforeseen construction costs to overcome environmental hazards. In other cases, environmental review will help agencies avoid adverse impacts on the natural resources of the Commonwealth. In all cases, environmental review helps agencies develop and operate facilities that are consistent with state environmental policies, such as the Commonwealth's pollution prevention policy.

In addition to the coordination of EIRs, DEQ's Office of Environmental Impact Review (OEIR) also coordinates the review of the following projects or actions:

- Airport runway construction and extension (*VA Code* §5.1-7)
- Consistency of federal actions with Virginia's Coastal Zone Management Program (pursuant to 15 CFR 930.1 *et seq.* [Coastal Zone Management Act]; implemented by Executive Order Number 13 [1986] and subsequently renewed every 4 years, the most current is EO 35 [2014])
- Electric generating plants and associated facilities (*VA Code* §56-46.1; State Corporation Commission-DEQ 2002 MOU)
- Farm and forest lands preservation during project planning for major state projects (*VA Code* §3.2-204 through §3.2-205)

- Federal environmental assessments and environmental impact statements developed under the National Environmental Policy Act (40 CFR 1500-1508)
- Hydropower projects (state agencies' responses to notices of proceedings by the State Water Control Board to consider certifications under 33 U.S.C. 1341) (*VA Code* §10.1-1186(7))
- Mineral activities on state-owned lands (*VA Code* §2.2-1157; implemented by the "Minerals Management Plan", Commonwealth of Virginia)
- Oil and gas drilling proposals in Tidewater Virginia (*VA Code* §62.1-195.1)
- Intergovernmental review of federal programs (Federal EO 12372)

Chapter 2. Responsibilities of the Proponent Agency

The environmental impact reporting and review procedure should be a part of the planning, siting and design procedure for major state projects. When it is scheduled as part of the process, the preparation of the EIR can be accomplished efficiently and in a time frame that does not impede implementation of projects. Agencies that are considering major project initiatives are encouraged to contact OEIR early in order to enlist DEQ's assistance in identifying important issues and determining the level of analysis necessary.

In order to ensure consistent quality in conducting its reviews, DEQ needs certain information, which is discussed in the following sections. When insufficient information is provided for assessment of the impacts of the proposed project on the environment and natural resources, DEQ will return the EIR document to the proponent agency. If additional information is not provided, DEQ may limit its comments to those issues that have been presented adequately, while identifying deficiencies in the environmental report. Either action may result in delays in initiating a project. DEQ, therefore, urges each proponent of a project to review the EIR and this manual carefully to ensure that adequate information is provided.

DEQ also encourages proponent agencies to contact local planning and transportation agencies early in the planning phase for major state projects to ensure that local plans and ordinances are adequately considered. Agencies with special needs are encouraged to contact DEQ early in their project planning to discuss problems in meeting their mandates or questions about their responsibilities.

EIR Submission:

DEQ requests that EIRs be submitted electronically (one searchable PDF or Word document <50 MB via):

- VITA LFT
- Email (25 MB max)
- Website of FTP site

Paper copies or CDs may be required and should be provide upon request.

Chapter 3. Responsibilities of Reviewing Agencies

DEQ must review and comment on an EIR within 60 days. In conducting its reviews, OEIR relies heavily on the project-specific comments and guidance of other divisions within DEQ as well as other agencies. In reviewing EIRs, state agencies should determine whether any of their proprietary, management, policy development or regulatory responsibilities is likely to affect or be affected by the project under review. The effect should be described in the agency's comments.

OEIR relies on other DEQ divisions and agencies to provide the basic information for comments and recommendations about a proposed facility. The reviewing agency or entity is expected to bring its expertise to bear on the analysis presented in the EIR. If permitting will be required, agencies should identify the criteria or anticipated permit conditions. Reviewing agencies should also recommend application of existing agency or state policies.

Reviewing agencies should provide a rationale for their comments, which may include statutory requirements, regulatory requirements, memoranda of agreement or understanding, relevant state policy or other reasoning which underlies their suggestions. Development of state facilities must incorporate protection measures stipulated in state policies, even those that are more stringent than applicable regulatory requirements. For example, all agencies of the Commonwealth must administer their programs in accordance with the following:

- The goals and priorities of Virginia's Coastal Zone Management Program established in 1986 and Executive Order No. 35 (2014)
- Permit requirements for impacts to wetlands outlined in the Commonwealth's wetlands law (*VA Code* §62.1-44.15:21)
- The Commonwealth's pollution prevention policy (*VA Code* §10.1-1425.11).

Chapter 4. DEQ Guidelines for the Contents of an EIR Document

In order to clearly discuss the content required by law to be included in the EIR, DEQ recommends that the EIR document follow the outline below. However, the proponent agency may, at its discretion, depart from this format provided the substance of each element enumerated in *VA Code* §10.1-1188 is included in the EIR.

An EIR should be based on preliminary design drawings, if possible, or on the conceptual drawings of the planning study. Preparation of the report and DEQ's review should occur before the final site design is completed. DEQ's review will focus on whether the report accurately describes unavoidable environmental impacts and on the proponent agency's commitment to avoid or reduce those impacts.

EIR Contents:

- Project description
- Affected environment
- Impacts of the project
- Alternatives
- Mitigation
- Irreversible environmental changes

- **Project description:** A discussion of what is being proposed, important design features, how the facility will be operated and the purpose of the facility, including:
 - Title
 - Sponsor agency contact person and contact information
 - Capital budget appropriation data (agency code, project code, budget item and the budget biennium), if applicable and available at the time of submission
 - The location of the project, clearly identified on a US Geological Survey topographic map or its equivalent, and a site plan
 - A full project description, including aspects of the project that may cause direct or indirect environmental impacts. For example, the document must discuss provisions for utilities such as existing and proposed facilities for providing potable water and wastewater treatment, including intake or outfall locations, expected additional demands and facility capacities. Description of the site must be thorough and include information on existing or proposed storage tanks (number, capacities, spill prevention measures and containment plans) as well as provide some history on the previous use of the site and any known petroleum releases in the project vicinity. DEQ recommends a database search for waste sites in proximity to the project site (see Appendix P).

- **Affected environment:** A discussion of baseline information for the impact analysis and to identify features that require specific designs or that limit design alternatives. This section should identify sensitive environmental features that may be affected by the project. An EIR Submission Checklist is included as Appendix D. Each item should be considered and discussed if applicable.
- **Impacts of the project:** A discussion of the environmental consequences of proceeding with the project is needed in order to properly weigh the costs of a project against its potential benefits and to evaluate needed mitigation measures. Potential impacts to significant resources should be considered and discussed for each of the project alternatives. Impacts should be discussed in measurable terms (acres, gallons per day, square feet, etc.) where possible. This section should describe and analyze the direct, indirect and cumulative environmental impacts of the preferred project alternative. An EIR Submission Checklist is included as Appendix D, and the EIR Concentrated Review Checklist is included as Appendix E. Each item should be considered and discussed if applicable.
- **Alternatives:** A discussion of alternatives to the project or why no alternatives were considered, including whether there are other ways to achieve the purpose that will be served by the project. The EIR should demonstrate consideration and analysis of the environmental impacts of the alternatives, as well as the program and fiscal impacts to the agency. Where adverse environmental impacts of the preferred alternative are likely to be severe, controversial or unacceptable, the alternatives analysis will be more important to the project review. Identification of alternatives should not be limited to site selection. There are four types of possible alternatives:
 - A discussion of alternative sites is essential if land is to be acquired, or if the preferred site is environmentally sensitive or controversial
 - Site plans can sometimes be revised to avoid impacts on resources on or near the parcel, which often helps to reduce environmental impacts to acceptable levels
 - Alternative methods of operation, including more efficient uses of the proposed facility
 - The no-action alternative means not pursuing the project and must be considered even if the proponent agency thinks it is undesirable.
- **Mitigation:** A discussion of measures that avoid or minimize the environmental impacts of the preferred alternative to identify, for reviewers, actions that can reduce or compensate for loss of environmental resources. Reviewers will consider whether the proposed mitigation is sufficient to avoid or make up for adverse impacts. Extra mitigation effort is warranted if the environmental impacts of the project are severe and unavoidable. Mitigation measures in the state project development process are not limited to those which may be required as permit conditions. In certain instances, the application of other state policies may warrant that state agencies go beyond permit requirements in carrying out their responsibilities. For

example, the EIR should incorporate the Commonwealth's pollution prevention policy (see Appendix Q for more information on pollution prevention).

In preparing their EIR, proponent agencies are encouraged to include mitigation as part of the project design. Discussion of other actions that the agency has considered, even though they were rejected, should be included as evidence of the agency's effort to avoid significant environmental impacts. DEQ encourages proponent agencies to clearly present their mitigation commitments, including:

- Mitigation measures to which the proponent agency is willing to commit
- Measures that the proponent agency has considered but does not intend to pursue, which helps the reviewing agencies avoid duplicating analysis that has already been performed such as:
 - Discussing how the disposal of any petroleum or hazardous materials will be handled
 - Discussing how any building materials will be disposed
 - Innovative pollution prevention strategies and conservation methods promoting low- impact development should be incorporated in the design of new facilities. See Appendix Q for more information on pollution prevention.

The desirability of a mitigation measure is determined by its effectiveness in reducing or avoiding an adverse environmental impact or otherwise enhancing environmental values.

From most desirable to least, mitigation includes:

- Avoiding an impact. This is most useful where the project will give rise to irretrievable loss of a resource in short supply (e.g., non-tidal wetlands) and where the alternatives analysis identifies feasible site-plan alternatives. It is the best form of mitigation.
- Reducing impacts in scale or type. If an adverse impact cannot be avoided, it should be minimized (for instance, paved areas may be reduced in size, or a conventional pavement replaced by porous pavement in order to minimize stormwater runoff).
- Compensating for lost resources or land area. Where there is no way to avoid or reduce the loss of an important resource, and compensation is achievable, then it should be included in the project proposal. Compensation includes replacement in a new location; preservation of other, similar resources (offsets); or preservation of other resources of similar value. If compensation is the chosen alternative, then safety factors should be considered (for example, creation of additional wetlands to offset the loss) in order to ensure effective function and value of the lost resource.

Mitigation supplements, but does not substitute for, innovative resource conservation measures on the part of state agencies. As a general rule, agencies are encouraged to include resource conservation as integral parts of their project plans. For instance,

recycling of materials as a part of project operation is expected of all state agencies and does not qualify as mitigation.

- **Irreversible environmental changes.** A discussion of irreversible environmental changes, which is an opportunity to demonstrate understanding of the long-term impacts, if any, of the project's construction and use. This section should indicate whether the project will cause a permanent impact on air quality or water quality, whether it will consume significant land and water resources, or whether it will generate other demands on the natural resources of the immediate or surrounding area. Losses of significant resources, such as historic or archaeological sites, should be identified as well.

Examples of irreversible environmental changes that should be identified:

- Reduction or alteration of the flow of water in a stream or river
- Disturbance or destruction of archaeological sites
- Disturbance, destruction or alteration of a wetland or stream, in any way
- Permanent clearing or construction within a scenic area

