

DAR-21

The Climate Leadership and Community Protection Act and Air Permit Applications

New York State Department of Environmental Conservation

DEC Program Policy

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Signature:	
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	Unit: Bureau of Stationary Sources

- I. **Summary:** This policy document, issued by the New York State Department of Environmental Conservation (DEC) Division of Air Resources, outlines the requirements for analyses developed pursuant to Section 7(2) of the Climate Leadership and Community Protection Act (CLCPA) in support of air pollution control permit applications.
- II. **Policy:** This policy is written to provide guidance for applicants and DEC staff when preparing and reviewing CLCPA analyses submitted to DEC in support of air pollution control permit applications.
- III. **Purpose and Background:** The CLCPA went into effect January 1, 2020 (Chapter 106 of the Laws of 2019). The CLCPA includes economy-wide requirements to reduce greenhouse gas (GHG) emissions in New York State by 40% below 1990 levels by 2030, and 85% below 1990 levels by 2050. Environmental Conservation Law (ECL) § 75-0107. It requires DEC to specify economy-wide emissions limits that correspond to those reduction requirements, which have been promulgated under 6 NYCRR Part 496 (Part 496). The CLCPA also establishes a Climate Action Council that is given three years (by January 1, 2023) to finalize a scoping plan providing recommendations for meeting those limits, and requires the DEC to promulgate regulations on GHG emission sources within four years (by January 1, 2024) that will ensure those limits are met. ECL § 75-0109. It further establishes that by 2040 the electricity generation sector will have zero emissions. Public Service Law (PSL) § 66-p.

When issuing permits, Section 7(2) of CLCPA requires all state agencies to consider “whether such decisions are inconsistent with, or will interfere with, the attainment of the statewide GHG emission limits established in Article 75 of the environmental conservation law.” Further, if deemed inconsistent, the state agency must provide a

detailed justification and identify alternatives or GHG mitigation measures to be imposed. For purposes of the CLCPA, statewide GHG emissions include upstream out-of-state GHG emissions associated with the generation of electricity imported into the State, or the extraction, transmission, and use of fossil fuels imported into the State, and any downstream emissions attributable to the project. ECL § 75-0101(13).

Although not covered by this policy, decisions impacting disadvantaged communities should also comply with Section 7(3) of the CLCPA.

IV. Responsibility: The Division of Air Resources (DAR) is responsible for implementing the review and permitting procedures described in this policy. The Office of General Counsel (OGC) is responsible for advising DAR regarding compliance with this policy. Facility owners and operators are responsible for providing a complete CLCPA analysis that meets the requirements of this policy with each air pollution control permit application as described in this policy.

V. Procedure:

A. Applicability

This policy applies to all applications for the following types of permit actions that are received by DEC after the effective date specified above:

1. New Title V and Air State Facility (ASF) permits;
2. Modifications to Title V and ASF permits;
3. Renewals of Title V and ASF permits; and
4. Air Facility Registrations where DEC determines an analysis is necessary or appropriate to ensure CLCPA consistency.

DEC staff may require an applicant to submit a CLCPA analysis regardless of the applicability stated in this section to ensure the requirements of Section 7(2) are met or if the facts surrounding the project indicate that an analysis is warranted.

B. Determining Project Scope

It is important that each CLCPA analysis prepared to meet the requirements of Section 7(2) includes the potential GHG emissions from each portion of the project. The applicable portions of the project include any new or modified emission sources that have the potential to emit GHG, including increases and decreases in emissions of GHG from existing equipment. In addition, the project scope includes any upstream, downstream, and indirect emissions known to be attributable to the project, including upstream out-of-state emissions from fossil fuel production, transmission, and imported electricity.

For a permit renewal that includes a significant modification, the project scope includes any new or modified emission sources that have the potential to emit GHG, including increases and decreases in emissions of GHG from existing equipment. It does not include existing equipment whose operations are not being changed unless deemed

necessary to assess CLCPA consistency. In addition, the project scope includes any upstream, downstream, and indirect emissions known to be attributable to the project, as described above.

A permit renewal that does not include a significant modification and would not lead to an increase in actual or potential GHG emissions would in most circumstances be considered consistent with the CLCPA pending finalization of the scoping plan and future regulations. However, DEC staff may require an applicant to submit a CLCPA analysis for a permit renewal to ensure the requirements of Section 7(2) are met, if the facts surrounding the project indicate that an analysis is warranted. For the purposes of this paragraph, actual emissions are defined as the highest 24-month average GHG emissions during the five years preceding the permit application unless another period is more representative.

C. CLCPA Analysis Requirements

To determine whether a given project is consistent with the requirements of CLCPA, the applicant must provide an objective analysis of the GHG and CO₂e emissions from the project, that includes any upstream or downstream emissions known to be attributable to the project, including upstream emissions attributed to production, transmission, and use of fossil fuels or imported electricity. For projects that increase GHG emissions, the applicant should also provide a description of any proposed alternatives or GHG mitigation measures from the facility owner or operator. It is important to note that the CLCPA review is independent from other reviews (e.g. New Source Review, 6 NYCRR Part 212) that may also be required for the permit action. However, the analysis may consider applicable requirements related to GHG emissions (e.g. 6 NYCRR Parts 242 and 251) and the effect compliance with those requirements will have on the facility's PTE GHG. At a minimum, each analysis submitted pursuant to this requirement must include the following information:

1. Calculations describing the project's direct GHG emissions on PTE and actual emissions bases (i.e. tons/year). These calculations should be performed using appropriate emission factors such as those found in USEPA's *AP-42: Compilation of Air Emission Factors* document, manufacturer's data, or emission test results. The calculations should reflect all aspects of the project, including any GHG emissions that may result from the operation of control equipment and exempt activities.
2. Calculations describing the project's GHG PTE and projected actual emissions in units of CO₂e. These calculations should be performed using the 20-year global warming potentials (GWP) found in 6 NYCRR 496.5 (Part 496).
3. Calculations describing any upstream GHG emissions attributable to the project resulting from the extraction, transmission, and use of fossil fuels or electricity imported into the State. These calculations should also be provided on a PTE basis (i.e. tons/year) and in units of CO₂e.

This includes upstream emissions resulting from the firing of fossil fuels in stationary or portable combustion installations and control equipment. These calculations should be performed using the emission factors in the most recent version of the *Preliminary Interim Draft Emission Factors for Use by State*

Agencies and Project Proponents document developed by DEC, or a facility-specific factor developed by the applicant. If a facility-specific factor is used, the applicant must include a justification explaining the source of the factor and why the applicant believes it is reasonable.

Upstream emissions also include GHG emissions associated with the generation of electricity imported into the State. In general, DAR does not typically review interconnection projects. However, if a project is known to use power imported into the State, the CLCPA analysis should include the upstream emissions associated with that use.

It is important to note that upstream emissions calculations are only required for fossil fuels and imported electricity. Accordingly, facilities using fuels such as wood, ethanol, biodiesel, green hydrogen, and renewable natural gas (RNG) do not need to provide upstream emissions calculations for the non-fossil fuel portion of those fuels (e.g. B20 biodiesel is 20% biodiesel and 80% distillate fuel. Upstream emissions must be calculated for the distillate portion, but not the biodiesel portion).

4. Calculations describing any reasonably foreseeable downstream and indirect emissions attributable to the project. These calculations should be provided on a PTE basis (i.e. tons/year) and in units of CO₂e.

Downstream emissions include emissions of GHG resulting from the transmission and use of the facility's products. For example, a landfill that is producing RNG that will be injected into an existing pipeline has downstream emissions associated with the transmission of the gas to the end user, and a compressor station that is increasing its natural gas transmission capacity has downstream emissions associated with the combustion of that gas. An emission factor for in-state downstream emissions resulting from the transmission of natural gas/RNG is provided in the *Preliminary Interim Draft Emission Factors for Use by State Agencies and Project Proponents* document.

Downstream emissions do not typically include emissions from the shipment or use of consumer goods.

Indirect emissions are emissions that are a consequence of the activities of the reporting facility but occur at sources owned or controlled by another entity. Indirect emissions do not include upstream and downstream emissions already accounted for above.

5. Projected future GHG and CO₂e emissions for the years 2030, 2040 (for facilities in the electric generation sector), and 2050, including any proposed future emissions reduction strategies.
6. A discussion of the technical or economic feasibility of any alternatives or GHG mitigation measures for the project. Additional detail on this requirement is provided in the "Identification of Alternatives and Mitigation" section of this guidance document.

7. For facilities in the electric generation sector, the analysis should discuss how the facility intends to comply with the requirement that the electric generation sector be zero emissions by 2040. This discussion should cover the feasibility and impacts from any alternative fuels or technologies that will be used by the facility to comply, and any alternatives or mitigation measures that will be implemented.

D. Considering Inconsistency with CLCPA

Following the submittal of a CLCPA analysis meeting the requirements of this policy, DAR staff must evaluate the information presented to determine whether the project is inconsistent with or will interfere with the State's ability to meet the statewide emission limits promulgated in Part 496. While each determination will be based on the facts surrounding the project itself, some potential causes of interference and inconsistency are:

- The project does not conform with the Scoping Plan or regulations designed to achieve compliance with the Statewide emission limits established in ECL Article 75 and reflected in Part 496;
- The project creates or enables a significant new source of GHG emissions;
- The project will be directly responsible for a significant increase in demand for a known source of GHG emissions;
- The project directly reduces the market demand for, or access to, GHG emissions reduction technologies or strategies;
- The project prevents or makes it more difficult or expensive for the State to reduce GHG emissions;
- The project facilitates the expanded or continued use of fossil fuels through infrastructure development; and/or
- The project interferes with the attainment of the zero-emissions electric generation sector by 2040 requirement.

If DEC finds that the project is inconsistent with or will interfere with the State's ability to meet the statewide emission limits, a statement of justification must be prepared by DEC before proceeding with the decision to approve the project. Each justification must include the following information:

1. An explanation of any portions of the project that are consistent with CLCPA and its implementing regulations and the portions of the project that are inconsistent with CLCPA and its implementing regulations;
2. An explanation of the alternatives and mitigation measures considered and whether they were found to be feasible; and
3. A description of the environmental, economic, and/or social harm associated with the absence of the project.

While each determination will be based on the facts surrounding the project itself, potential examples of acceptable justifications may include:

- A demonstration that the lack of the project within the State would result in emissions leakage (e.g. the applicant would transfer operations to a neighboring state);
- No technically feasible alternatives exist to achieve the desired ends;
- The applicant will undertake mitigation efforts to offset GHG emissions;
- The absence of the project will result in economic, social, or environmental harm to the public; and
- The project is needed to improve or maintain the safety and reliability of existing systems.

E. Identification of Alternatives and Mitigation

If the applicant concludes that the facility's CO₂e PTE, including any upstream and downstream emissions known to be attributable to the project, will increase, or if DEC determines that the project would be inconsistent with or would interfere with the attainment of the Statewide GHG emission limits, then an explanation of, and justification for, the increase and any potential alternatives or mitigation measures must be included. In general, the discussion should be a good-faith accounting of potential options and any technical or economic barriers to their implementation.

Examples of potential alternatives include, but are not limited to:

- Use of electric equipment instead of fossil fuel equipment (e.g. electric heater instead of a natural gas burner);
- Use of lower emission technologies, including the use of lower emission process materials that may reduce downstream GHG emissions;
- Use of alternative process technologies that would reduce or eliminate GHG emissions; and
- No reasonable alternative exists.

For each potential alternative, the applicant should discuss any technical or economic barriers to implementation. For example, an applicant may determine that the use of an electric heater instead of a proposed natural gas fired boiler would necessitate the construction of an electrical substation at the facility at a significant cost, or that electricity is not as reliable as natural gas for critical infrastructure. In each case, the applicant should provide enough detail for DEC staff to understand the reasoning behind the decision. A reasonable estimate of any potential financial impact is acceptable in lieu of a detailed economic analysis.

Should the applicant conclude that there are no feasible alternatives to the project, mitigation must be considered. Any mitigation option must result in measurable GHG emissions reduction or sequestration that is in addition to actions already required by law or regulation. Further, mitigation efforts must be quantifiable, permanent, verifiable, and enforceable. Wherever possible, mitigation should result in a reduction in GHG PTE that is at least equivalent to the increases from the project. Accordingly, it may be necessary for the applicant to consider implementation of more than one mitigation measure.

Examples of potential mitigation measures include, but are not limited to:

- Financial mitigation, such as providing funds for GHG reduction projects in the local community;
- Technological mitigation, such as the installation of emission controls that capture or reduce GHG emissions;
- Operational mitigation, such as limitations on the amount of fossil fuel combusted at the project or the allowable hours of operation for the project; and
- Physical mitigation, such as the planting and upkeep of trees or other means of carbon sequestration.

It may be necessary to discuss the feasibility or acceptability of proposed mitigation measures with DEC staff outside of DAR. DAR staff and applicants are encouraged to reach out to the Bureau of Stationary Sources at (518) 402-8403 for assistance locating appropriate contacts in other DEC divisions whenever necessary.

F. Permitting

Title V Permits

Should the applicant propose, and DAR accept, an alternative or mitigation measure that requires the imposition of one or more permit conditions to ensure its proper implementation, facility specific permit condition(s) cited to 6 NYCRR 201-6.5(a) will be created and included in the Title V permit action under review. The resulting permit condition(s) must follow established procedures and guidance for the development of permit conditions.

Air State Facility Permits

Should the applicant propose, and DAR accept, an alternative or mitigation measure that requires the imposition of one or more permit conditions to ensure its proper implementation, facility specific permit condition(s) cited to 6 NYCRR 201-5.3(c) will be created and included in the Air State Facility permit action under review. The resulting permit condition(s) must follow established procedures and guidance for the development of permit conditions.

VI. Related References:

CLCPA (Chapter 106 of the Laws of 2019)

6 NYCRR Parts 201, 496, and 621

Preliminary Interim Draft Emission Factors for Use by State Agencies and Project Proponents

CP-49

USEPA AP-42: Compilation of Air Emission Factors