GUIDANCE FOR FACILITIES DEVELOPING AN ENVIRONMENTAL JUSTICE IMPACT STATEMENT

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INTRODUCTION

This guide serves as a template for preparing an environmental justice impact statement (EJIS), pursuant to New Jersey's Environmental Justice Rules, <u>N.J.A.C 7:1C</u> (Rules). The purpose of this guidance document is to outline the required elements of the different sections of an EJIS. All sections may not apply to your facility.

Upon receipt of a permit application, the New Jersey Department of Environmental Protection (Department) will determine whether the application is subject to the Rules. If the Rules apply, the Department will notify the facility. At this point, formal review of the underlying permit application(s) will pause pending compliance with the Rules.

Please note that the Department is not requiring a solid waste facility to conduct the notice and hearing requirements for the Rules concurrent with the Solid Waste Management Plan notice and hearing requirements. If your facility has any questions about timing of notice and hearing requirements, please email the Department at <u>ej.regulation@dep.nj.gov</u>.

Prior to preparing an EJIS, a facility may obtain screening information for their overburdened community (OBC) from <u>New Jersey's Environmental Justice Mapping</u>, <u>Assessment</u>, <u>and Protection tool</u> or request the Department provide initial screening information by emailing <u>ej.regulation@dep.nj.gov</u>. Initial screening information for the OBC will include identification of the existing environmental and public health stressors, the appropriate geographic point of comparison, any adverse environmental or public health stressors, the combined stressor total, and cumulative stressors. Once screening information is obtained, the facility may proceed with the development of the EJIS.

If your facility chooses to obtain the screening information without consulting the Department, please make sure that your facility uses the outline of the facility boundaries and the municipal block/lot numbers in identifying the proper census block group(s).

A facility must submit the EJIS to the Department for review by uploading through the NJDEP Online Business Portal, <u>https://dep.nj.gov/online/</u>. The Department will review and notify the facility of any deficiencies, or, if all required information is submitted, authorize the facility to proceed with the public process. The Department will not informally review an EJIS. However, if a facility has a question or wishes to meet with the Department to discuss development of the EJIS, the facility may contact the Department at <u>ej.regulation@dep.nj.gov</u>.

Information required in the EJIS is outlined at N.J.A.C. 7:1C-3. The Rules require the preparation of an EJIS to identify and analyze:

- 1. Defined environmental and public health stressors as set forth at the Appendix to N.J.A.C. 7:1C
- 2. Any adverse environmental and public health stressors in the OBC
- 3. The presence or absence of adverse cumulative stressors in the OBC
- 4. Potential environmental and public health stressors associated with the facility
- 5. Whether the facility can avoid causing a disproportionate impact
- 6. The measures the facility will propose to implement to avoid or address any disproportionate impact
- 7. Where applicable, how the new facility serves a compelling public interest in the OBC

In preparing an EJIS, facilities should strive to give as much information as necessary to accurately describe the proposed project and its associated impacts to environmental and public health stressors. Facilities should also endeavor to define and explain technical terms and facility processes in a way that the public can easily understand. The Department encourages the facility to provide information in a way that facilitates meaningful engagement with members of the host OBC.

A facility's final EJIS will be published on the Department's website and in the DEP bulletin, as well as provided electronically to registered interested parties and representatives of OBCs.

EJIS TEMPLATE

BASIC REQUIREMENTS AND PRACTICE TIPS

The following sections describe the basic information required to be included in each EJIS pursuant to N.J.A.C. 7:1C-3.2. Interspersed with the basic requirements, the Department has included practice tips or suggestions to assist facilities in preparing the EJIS.

If you have additional questions, please email <u>ej.regulation@dep.nj.gov</u>.

Practice tip: if any of the information described in the sections below does not apply to your facility, it is helpful to note this in the EJIS, so that the Department can be sure it was omitted intentionally and not an oversight.

COVER SHEET

Practice tip: including a cover sheet with all of the information below will assist in identifying the facility, applicable permit applications, and facility contact information.

- Facility name
- Facility address including street address, municipality, municipal block/lot number(s), and county
- EJ Project ID number
- Program Interest number(s)
- Name of permit(s) for which the facility is applying and permit activity number(s)
- Date
- Name of preparer of the EJIS and contact person for information regarding the EJIS

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Practice tip: a table of contents and list of tables and figures are useful reference tools.

TABLE(S) OF REFERENCES, ACRONYMS, AND ABBREVIATIONS

Practice tips: if your EJIS refers to and relies on external material and sources, make sure to include the citation and link to website where the material or source can be accessed. Including a table of references is also a useful tool.

Another way to improve readability and achieve general public understanding of your EJIS is to include an acronyms and abbreviations section to spell out technical terms and industry jargon in the document.

SECTION I. EXECUTIVE SUMMARY (N.J.A.C. 7:1C-3.2(a)1)

- Summary of information contained in the EJIS.
- If applicable, supplemental information required at N.J.A.C. 7:1C-3.3 (please see <u>Supplemental</u> information requirements and practice tips, below)

Practice tip: to the extent possible, the information should be summarized in an easy-to-understand manner, with technical terms explained or defined. Although the Department recognizes that the summary will vary depending on the facility and type of application, the Department recommends that the Executive Summary:

- introduce the facility
- describe the existing operations
- describe the proposed operations (if applicable; if not, make clear that there are no proposed changes in operations)
- summarize your existing permit(s) and pending application(s) (if applicable) and provide the required facility and permit identifying information
- describe the facility's location in the OBC
- summarize stressor information, and
- summarize proposed actions to reduce any impact on the overburdened community.

SECTION II. FACILITY SETTING (N.J.A.C. 7:1C-3.2(a)2)

Practice tip: this section must include information about both the *municipal* setting and the *neighborhood* setting. The Rules do not define "neighborhood" so the facility may choose to identify the neighborhood as the census block group, the area within a one-mile radius of the facility, or a different area that immediately surrounds the facility. The facility should make sure that the EJIS clearly identifies the neighborhood setting that is being described. Municipal websites can be a great resource for this type of information.

- Detailed description of the municipal setting of the facility
- Detailed description of the neighborhood setting of the facility
- For *both* the municipal and neighborhood setting of the facility, the following are required in the detailed description:
 - Location of community and residential dwellings
 - Location of hospitals
 - Location of nursing homes
 - $\circ \quad \ \ \text{Location of playgrounds}$
 - Location of parks
 - Location of schools
 - Comprehensive demographic, economic zoning, and physical descriptions
- Clear and readable site plan of the facility identifying the site location.

Practice tip: to ensure that the facility location is properly identified, the Department suggests including a map showing the boundaries of the facility, the overburdened community (census block group), the neighborhood as identified by the facility, and the municipality.

Note that the public notice is required to include a map showing the location of the facility. The map is required to include the street address, municipality or municipalities, county or counties, tax map block(s) and lot(s) (not the census block group), and size of the facility property. The Department suggests including this map as part of the EJIS itself.

SECTION III. CURRENT AND PROPOSED OPERATIONS (N.J.A.C. 7:1C-3.2(a)3)

- Explanation of the purpose of the permit application
- Description of how the project serves the needs of the individuals in the overburdened community
- Description of the facility's current operations, including identification of all processes to be used (see below list).
 - Pollution or environmental control measures and monitoring instrumentation
 - Hours of operation
 - Onsite equipment
 - Traffic routes
 - Number of employees
 - All other information relevant to the potential for the facility to contribute to environmental and public health stressors in the overburdened community
- If the facility is proposing a new facility or an expansion of an existing facility, description of the facility's proposed new or expanded operations, including identification of proposed processes:
 - \circ $\;$ Anticipated completion dates for major phases of construction
 - Any pollution or environmental control measures and monitoring instrumentation

Practice tip: to the extent possible, the facility should explain the information in this section in a way that the public can easily understand, as technical terms and processes may be unfamiliar to the public.

- Hours of operation
- Onsite equipment
- Traffic routes
- Number of employees
- All other information relevant to the potential for the construction to contribute to environmental and public health stressors in the overburdened community

Practice tip: if the facility is seeking a renewal of its Title V major source air operating permit with no proposed changes, it is helpful to make sure this is clearly stated.

SECTION IV. PERMITS (N.J.A.C. 7:1C-3.2(a)4)

• Identification of all Federal, State and local permits that are or will be required for construction and operation of the facility

Practice tip: the facility must identify all permits needed for its operation, not just those permits needed for the proposed construction or change in operation/expansion (if applicable).

SECTION V. LOCAL ENVIRONMENTAL JUSTICE ORDINANCES (N.J.A.C. 7:1C-3.2(a)5)

• If applicable, evidence of satisfaction of any required local environmental justice or cumulative impact analysis ordinances

SECTION VI. SCREENING INFORMATION (N.J.A.C. 7:1C-3.2(a)6)

- Environmental and Public Health Stressors/Geographic Point of Comparison
- Adverse Environmental and Public Health Stressors
- Combined Stressor Total
- Cumulative stressors

Practice tip: as noted above, the Department suggests that the EJIS include a map showing the boundaries of the facility, the overburdened community/communities, and municipality/municipalities, to ensure that the facility's location is properly identified. By mapping the boundaries as described above, each facility is encouraged to confirm that your facility's location as mapped in your EJIS lies in the mapped census block group on the EJMAP tool (bit.ly/EJMAP).

SECTION VII. IMPACT ASSESSMENT (N.J.A.C. 7:1C-3.2(a)7)

- Assessment of the positive and/or negative impacts of the facility or proposed facility on each of the community's environmental and public health stressors designated as "Affected" at N.J.A.C. 7:1C, Appendix, based on conditions of maximum usage or output
- Correlation of facility's impacts with various stages of site preparation, facility construction, and operation, including
 - Amounts, concentrations, and pathways of any contaminants or pollution associated with the facility

Practice tip: a facility must assess all of the stressors designated as "Affected" in N.J.A.C. 7:1C, Appendix., **not** only those stressors designated as adverse in your OBC's stressor summary table. The 4 of 26 stressors designated "Baseline" and not "Affected" are Drinking Water, Potential Lead Exposure, Unemployment and Education Cumulative stressors. "Affected" stressors are:

- Ground-level ozone (3-year average days above standard)
- □ PM2.5 (same as above)
- Air toxics cancer risk, including diesel particulate matter (estimated cancer risk/million)
- □ Air toxics cancer risk, excluding diesel particulate matter (same as above)
- □ Air toxics non-cancer risk (combined hazard quotient)
- □ Traffic: cars, light- and medium-duty trucks (annual average daily traffic mile/square mile)
- □ Traffic: heavy-duty trucks (same as above)
- □ Railways (rail mile/square mile)
- □ Known contaminated sites (weighted sites/square mile)
- □ Soil contamination deed restrictions (percent area)
- Ground water classification exception areas/currently known extent restrictions (percent area)
- □ Solid waste facilities (sites/square mile)
- □ Scrap metal facilities (same as above)
- □ Surface water (percent of uses impaired)
- □ Combined sewer overflows (count)
- Lack of recreational open space (population/acre of open space within 0.25 mil)
- Lack of tree canopy (percent lack of tree canopy)
- Impervious surface (percent impervious surface)

SECTION VIII. PUBLIC PARTICIPATION PLAN (N.J.A.C. 7:1C-3.2(a)8)

- Copy of proposed notice of public hearing and comment period. The notice must include:
 - \circ $\;$ $\;$ The name of the applicant and the date, time, and location of the hearing $\;$
 - The EJ Project ID Number, the Program Interest Number(s), and the Permit Activity Number(s) that are associated with the public meeting
 - A general description of the proposed new or expanded facility or existing major source facility, as applicable, being considered

- A map indicating the location of the facility, including the street address, as applicable, municipality, county, tax map block and lot, and size of the property that would be the subject of the application being considered
- A brief summary of the EJIS and supplemental information, as applicable, and information on how an interested person may review a copy of the complete EJIS and supplemental information
- A statement inviting participation in the public hearing and notifying the public that, for a time period of no less than 30 days after the hearing and 60 days total, written comments may be submitted to the applicant. The statement shall provide an address for submittal of written comments to the applicant
- Any other information deemed appropriate by the Department, for that specific notice

Practice tips: the Department understands that the hearing location and date might be subject to when the facility is authorized to proceed. Therefore, the draft notice submitted with the EJIS may include placeholders for hearing location and dates. However, the facility must provide this information to the Department for review and approval before the facility proceeds with the public process. Once a facility receives authorization to proceed, the facility must submit the final notice to the Department for posting on the Department's website.

If the facility is unable to hold a hearing in the OBC because there is no suitable hearing space, the facility must explain this in the EJIS. In this case, the hearing may be held in the municipality in which the facility is located, as close to the OBC as possible.

If the facility is in more than one OBC, the facility shall propose a central location that is close to all such OBCs. If the hearing is proposed to be held outside of the OBC, the location is subject to Department approval.

- Proposed methods of public notice, which shall include the minimum requirements set forth at N.J.A.C. 7:1C-4.1(a)
 - \circ ~ Copy of EJIS to clerk of municipality or municipalities in which OBC is located
 - Publication in at least two newspapers circulating within the OBC, including, at a minimum, one local non-English language newspaper in a language representative of residents of the overburdened community, if applicable
 - Notice to be provided to the Department, the governing body, and the clerk of the municipality in which the OBC is located
 - Notice to be provided through certified mail (return receipt requested) to all persons who own and/or reside on land located within 200 feet of the facility and to any easement holders for that land who are listed in the tax records for the municipality or municipalities in which the land is located
 - \circ $\;$ Other methods identified by the facility to give individuals direct notice
 - Invitation to Department, municipality or municipalities, and local environmental and environmental justice bodies to attend hearing

Practice tip: For a list of available media, please contact the Office of Environmental Justice at <u>environmentaljustice@dep.nj.gov</u>. If two printed newspapers are not available in the OBC, digital newspaper is acceptable.

- Copy of proposed sign(s) to be posted at the facility in a prominent location during public comment period. Sign must contain sufficient detail in a language representative of the residents of the OBC to inform of the application and how the public may obtain information about the application
- Any other form of notice that facility proposes to use in addition to the required notices.

Practice tips: the Department suggests including access information (call-in number or link) to the virtual component (e.g., Zoom, Teams) in the notice.

A facility may, but is not required to, share a copy of their hearing presentation before the hearing for Department review.

If your facility would like additional resources on public participation and community engagement, please contact the Office of Environmental Justice at <u>environmentaljustice@dep.nj.gov</u>.

SECTION IX. AVOIDANCE OF DISPROPORTIONATE IMPACTS (N.J.A.C. 7:1C-3.2(a)9)

- Demonstration, including any necessary operational conditions and control measures, that the facility will avoid a disproportionate impact by not *creating* adverse cumulative stressors in the OBC as a result of the facility's contribution, if possible
- If this demonstration is not possible *or* the facility is located in an OBC already subject to adverse cumulative stressors, the EJIS must include the supplemental info required at N.J.A.C. 7:1C-3.3.

Practice tip: in this section, the facility is to evaluate whether it will *create* adverse cumulative stressors in the OBC as a result of the facility's contribution.

SUPPLEMENTAL INFORMATION REQUIREMENTS AND PRACTICE TIPS

The EJ rules at N.J.A.C. 7:1C-3.3 include supplemental information requirements.

The only facilities that do NOT have to include supplemental information are those facilities that are:

- (1) located in an OBC that is NOT subject to adverse cumulative stressors; AND
- (2) have demonstrated that they will avoid creating a disproportionate impact.

SITE MAPPING (N.J.A.C. 7:1C-3.3(a)1)

- Topographic conditions, contour data, drainage patterns, wetlands or their associated buffers, coastal zones, or other areas regulated by the Department
- Areas of known plant or animal species on the Federal and State endangered, threatened, or rare plant or animal species list
- All existing water classifications, designated uses, and limitations of the surface water bodies that are immediately adjacent to the site, exist on the site, or drain directly onto or off the site, upstream

tributaries of bodies of water which flow onto the site, and downstream tributaries of bodies of water which flow from the site, in accordance with N.J.A.C. 7:9B

Any existing onsite public scenic attributes or outdoor recreation and conservation opportunities in the
overburdened community, such as any Federal, State, county, or municipal parks, forests, wildlife
management areas and natural areas, any areas acquired for recreation and conservation purposes with
Green Acres funding, program, or a non-profit conservation organization, any lands preserved as open
space by a non-profit conservation organization or other public access features

Practice tip: the Department's Office of GIS website provides these types of map layers: <u>https://gisdata-njdep.opendata.arcgis.com/</u>.

ON-SITE CONTAMINATION (N.J.A.C. 7:1C-3.3(a)2)

- Existence of known, or suspected, contaminants
- Historical uses of the site
- Any remediation activities that have occurred on the site
- Any additional information pertaining to the existence or absence of contamination on site

Practice tip: if your facility is located on property subject to remediation and the facility is located in an OBC subject to adverse cumulative stressors that include "contaminated sites" stressor(s), the facility should explain any past, ongoing, or future remedial actions to clean up the site. Such actions would be considered as measures taken to minimize or reduce the facility's contribution to such stressor.

AMBIENT AIR QUALITY (N.J.A.C. 7:1C-3.3(a)3)

- Description of the ambient air quality data for existing concentrations of the National Ambient Air Quality Standard (NAAQS) pollutants as identified at 42 U.S.C. §§ 7401 et seq.
- Discussion of how the facility will comply with the requirements at N.J.A.C. 7:27

Practice tip: in discussing the ambient air quality standards and compliance with N.J.A.C. 7:27, the facility should briefly describe the NAAQS attainment or nonattainment status to the applicable region, describe the particular requirements of N.J.A.C. 7:27 applicable to its permit as a result of the NAAQS status, and state how the facility will comply through the underlying permitting process, to ensure the facility's emissions will not contribute to nonattainment or continued nonattainment. A helpful website to identify air monitoring can be found on the Department's website: https://dep.nj.gov/airmon/.

SUBSURFACE HYDROLOGY (N.J.A.C. 7:1C-3.3(a)4)

- Presentation of ground water quantity and quality data for the aquifers located beneath the site, including, but not limited to:
 - Depth to ground water during seasonal high and low flow

- Flow direction
- Existing uses
- Future supply capabilities
- Description of the soils that identifies major soil types and their characteristics, including, but not limited
 - to
 - o Drainage
 - Erosion potential
 - Sedimentation potential

LOCALIZED CLIMATE AND FLOODING IMPACTS (N.J.A.C. 7:1C-3.3(a)5)

- Description of the localized climate and flooding impacts through the presentation of site-specific data. Meteorological data may be obtained from the nearest National Oceanographic and Atmospheric Administration sanctioned station.
 - Average annual precipitation
 - o Average monthly precipitation
 - Flooding
 - Temperature
 - At a minimum, the description shall use and reference data and tools from the Department's Climate Change website (https://www.nj.gov/dep/climatechange), which must be referenced in the prepared document, and address
 - Whether the facility is located within a flood hazard area, as delineated by the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13
 - The expected impacts of flooding on the facility from the 100-year storm event and/or potential inundation due to sea level rise
 - Proposed resilience measures; and
 - A list of measures to mitigate risks from flooding and inundation

TRAFFIC STUDY (N.J.A.C. 7:1C-3.3(a)6)

- Description of the transportation routes that will service the facility
- Description of site access capability
- Description of existing traffic flow patterns expressed in the following terms:
 - Daily peak hour volumes
 - Off peak hour volumes
 - Levels of service
 - Average daily round trips
 - The facility's current and proposed contributions thereto for all vehicles associated with the facility's operations

Practice tip: a formal traffic study by a licensed engineer with expertise in traffic analysis is not required. However, if a traffic study is included, it is recommended that the details of the study, including its date, objective, and commissioner of the study, be stated for transparency and relevance. One helpful State website to find traffic reports, including a 48-hour traffic studies of major State roadways can be found on the New Jersey Department of Transportation's website: <u>https://www.njtms.org/map/</u>

SEWAGE FACILITIES (N.J.A.C. 7:1C-3.3(a)7)

- Identification of type of treatment system available
- Identification of existing treatment capacity
- Identification of collection system capacity
- Identification of average and peak flow data
- Current committed capacity for the treatment and collection system

STORMWATER MANAGEMENT SYSTEM (N.J.A.C. 7:1C-3.3(a)8)

- Identification of the type of collection and treatment system available
- Identification of current collection and treatment capacity and utilization
 - Presence or absence of combined sewer overflows

WATER SUPPLY (N.J.A.C. 7:1C-3.3(a)9)

- Identification of the water supply system
- Identification of water sources
- Identification of the level and type of existing pre-treatment
- Identification of the capacity of the distribution system
- Identification of the current commitment of capacity
- Identification of the availability of additional supply
- Identification of peak and average demands

ENERGY SUPPLY SYSTEM (ON-SITE OR IMMEDIATELY AVAILABLE) (N.J.A.C. 7:1C-3.3(a)10)

- Identification of existing power lines or pipelines
- Identification of current commitment of capacity
- Identification of the capability of supplying energy to the proposed facility and/or activity
- Conveying of any energy products generated by the proposed facility and/or activity from the site
- Evaluation of the feasibility of the utilization of onsite or offsite renewable energy resources to meet, fully or partially, the energy demand of the facility

Practice tip: the Department encourages facilities to evaluate whether renewable energy resources onsite or offsite are feasible for the facility as potential control measures to reduce a facility's contributions to adverse stressors in the OBC.

REASONABLE DESIGN ALTERNATIVES (N.J.A.C. 7:1C-3.3(a)11)

Practice tip: the reasonable design alternatives requirements apply ONLY to a new facility or expansion of an existing facility.

- A sufficiently detailed comparison of reasonable design alternatives that would permit independent and comparative evaluation (new or expanded facilities only)
- Description of siting changes or process alternatives that could reduce some or all of the proposed facility's contributions to environmental and public health stressors in the OBC, including
 - Identification of any significant differences in contributions to environmental and public health stressors that would reasonably result from the alternatives considered
 - Discussion of the alternative of no action or no project, including the major foreseeable consequences of such a choice
 - Comparison, in matrix or other appropriate format, of both the chosen alternative and the set of alternatives considered
 - Justification of selection of the preferred alternatives

ODOR, DUST, AND NOISE MITIGATION (N.J.A.C. 7:1C-3.3(a)12)

- Odor, dust, and/or noise mitigation or management plan, if:
 - \circ The facility has the potential to cause odor, dust, and/or noise off-site; or
 - The facility has had a confirmed odor, dust, and/or noise complaint submitted through DEP's Hotline or the local health agency for the five years preceding the date of the permit application

COMPLIANCE HISTORY (N.J.A.C. 7:1C-3.3(a)13)

- Detailed compliance history for the facility
 - Any existing Department permits
 - Copies of any enforcement actions issued to the facility for the five years preceding the date of the permit application

Practice tip: please include beginning and end date of the compliance history provided.

CONTROL MEASURES (N.J.A.C. 7:1C-3.3(a)14)

• Analysis and proposal of control measures to address the facility's contribution to environmental and public health stressors in accordance with:

- N.J.A.C. 7:1C-5 for new facilities,
- N.J.A.C. 7:1C-6 for facility expansions, or
- N.J.A.C. 7:1C-8 for existing major sources seeking renewal

The requirements for new facilities, facility expansions, and existing major sources seeking renewal may differ. Thus, there are three separate sections below to address the requirements for each category.

Practice tips: remember that "control measures" are not limited to air pollution control measures or equipment. Depending on your facility's contribution, control measures may be used to mitigate impacts on other media, such as water and land resources.

For the control measures analysis and proposal, a facility is to consider only those *adverse* stressors that the facility is contributing to in the OBC, which were identified in the initial screening information. A facility does not have to do an analysis and control measure proposal for all of the stressors designated as affected in the Appendix to N.J.A.C. 7:1C.

NEW FACILITIES (N.J.A.C. 7:1C-3.2(a)10, -3.3(a)14, AND -5)

A new facility must provide:

- A description of how the facility will serve a compelling public interest in the OBC. For purposes of this analysis, the economic benefits of the proposed new facility *shall not be considered* in determining whether it serves a compelling public interest in an overburdened community. The Department will consider all of the following:
 - Demonstration that the proposed new facility will primarily serve an essential environmental, health, or safety need of the individuals in an OBC
 - Demonstration that the proposed new facility is necessary to serve the essential environmental, health, or safety needs of the individuals in an OBC
 - Demonstration that there are no reasonable alternatives that can be sited outside the overburdened community to serve the essential environmental, health, or safety needs of the individuals in an OBC
 - If the facility directly reduces adverse environmental and public health stressors in the OBC, it may be considered as serving an essential environmental, health, or safety need of the individuals in the OBC
- A list of proposed control measures to avoid, minimize, and/ or reduce the facility's contribution to all adverse environmental or public health stressor(s)
- *Major source/major facilities (only) as defined at N.J.A.C. 7:27-22.1*: Independent of the above-listed requirement to propose control measures related to the facility's contribution to all adverse environmental or public health stressors, a major source/major facility must also include a Localized Impact Control Technology (LICT) analysis of air pollution control measures if an application proposes construction, installation, reconstruction, or modification of equipment and control apparatus that is a significant source operation, as defined at N.J.A.C. 7:27-8.1. A LICT analysis does not apply to sources

permitted in a general permit (GP) issued pursuant to N.J.A.C. 7:27-8.8 or in a general operating permit (GOP) issued pursuant to N.J.A.C. 7:27-22.14.

Practice tip: to determine which emissions of air contaminant(s) are subject to the LICT analysis for your significant source(s), ask:

Will my *proposed new major facility* have the potential to emit (PTE):

- a. any HAP at a rate equal to or greater than the SOTA (state-of-the-art) threshold at N.J.A.C. 7:27-17.9 at the facility level, OR
- b. any other air contaminant or category of air contaminant not covered above at a rate individually equal to or greater than five tons per year at the facility level?

A LICT analysis is required for any significant *source* proposed to be constructed, installed, reconstructed, or modified for *any air contaminant* that the facility identified meets or exceeds the applicable threshold above at a *facility* level.

LICT ANALYSIS FOR NEW MAJOR SOURCES/MAJOR FACILITIES (N.J.A.C. 7:1C-7)

- Identify and evaluate a list of air pollution control technologies or measures that may be applied to the source to reduce **each contaminant** identified is subject to LICT analysis.
 - The list shall not be limited to measures demonstrated to be reliable in practice and that have been applied to other existing sources in this same category and shall include measures applied to sources in similar source categories, as well as innovative control technologies, modification of the process or process equipment, other pollution prevention measures, and combinations of the above measures
 - Arrange the measures on the list in descending order of air pollution control effectiveness, with the first-listed or "top" measure constituting LICT for the source unless your facility provides one of the below. If the top measure is eliminated from consideration during this "top down" analysis, your facility must evaluate each successive measure on the list in the same manner until a measure is reached that is not eliminated. Upon the Department's approval of the LICT demonstration, this measure shall constitute the LICT for the source.
 - Demonstration that the top measure should be eliminated from consideration because it is technically infeasible based on physical, chemical, or engineering principles, and/or technical difficulties that would prevent the successful application of the measure
 - Demonstration that the top measure should be eliminated from consideration based on its environmental impacts. The justification shall show that the adverse environmental effects of the top measure, such as effects on water or land, or HAP emissions, when compared

with its air contaminant emission reduction benefits, would make use of the top measure unreasonable

 Demonstration that the top measure should be eliminated from consideration based on its energy impacts. The justification shall show that the top measure uses fuels that are not reliably available; or that the energy consumed by the top measure is greater than the proposed measure(s), and that the extra energy used, when compared with the air contaminant emission reduction benefits resulting from the top measure, would make use of the top measure unreasonable

Practice tip: economic infeasibility does not constitute technical infeasibility for purposes of the LICT analysis.

PROPOSED FEASIBLE CONTROL MEASURES (FOR ALL FACILITY TYPES) (N.J.A.C. 7:1C-5.4(b))

- For any new facility, the applicant must propose feasible control measures to avoid, minimize, and/or reduce the facility's contribution to any adverse environmental or public health stressor(s). Measures should be proposed in the following order:
 - 1. All feasible measures to avoid facility contributions to adverse environmental and public health stressors.
 - 2. For any contribution that cannot feasibly be avoided, all feasible onsite measures to minimize facility contributions to adverse environmental and public health stressors
 - 3. All feasible offsite measures within the OBC to reduce adverse environmental and public health stressors to which the facility will contribute
 - 4. All feasible offsite measures within the OBC to reduce adverse environmental and public health stressors to which the facility will not contribute, with preference for the reduction of stressors from highest to lowest percentile in relation to the geographic point of comparison
 - 5. All feasible offsite measures within the OBC to provide a net environmental benefit (reduce baseline environmental and public health stressors) in the OBC
- ***For a new major source/major facility***, the applicant must propose feasible control measures to avoid, minimize, and/or reduce the facility's contribution to any adverse environmental or public health stressor(s) ***for any aspects of the facility's operations not addressed in the LICT analysis***

Practice tip: "feasible" is defined as "measures addressing contributions to environmental or public health stressors that are reasonably capable of being accomplished by taking into account economic and technological factors." See N.J.A.C. 7:1C-1.5.

All new facilities must include feasible control measures. If a facility determines there are no feasible control measures, it is helpful to note this in the EJIS. Note that a proposed new major source/major facility does not need to re-evaluate equipment or sources that were subject to the LICT analysis.

FACILITY EXPANSIONS (N.J.A.C. 7:1C-3.3(a)14 AND -6)

An existing facility seeking to expand must provide:

- A list of proposed control measures to avoid, minimize, and/or reduce the facility's contribution to all adverse environmental or public health stressor(s)
- *Major source/major facilities as defined at N.J.A.C. 7:27-22.1 (only)*: Independent of the above-listed requirement to propose control measures related to the facility's contribution to all adverse environmental or public health stressor(s), an existing major source/major facility that seeks to expand must also include a Localized Impact Control Technology (LICT) analysis of air pollution control measures if an application proposes construction, installation, reconstruction, or modification of equipment and control apparatus that is a *significant source*, as defined at N.J.A.C. 7:27-8.1. A LICT analysis does not apply to sources permitted in a general permit (GP) issued pursuant to N.J.A.C. 7:27-8.8 or in a general operating permit (GOP) issued pursuant to N.J.A.C. 7:27-22.14

Practice tip: for an existing major source seeking to expand, the LICT analysis is not automatically required. Rather, the applicability of the LICT analysis for an expansion depends on whether the permit application for the expansion proposes construction, installation, reconstruction, or modification of equipment and control apparatus that is a **significant source** operation. If there are no significant source operations proposed to be constructed, installed, reconstructed, or modified as part of the expansion, the LICT analysis is not required.

LICT ANALYSIS FOR EXISTING MAJOR SOURCES/MAJOR FACILITIES SEEKING TO EXPAND (N.J.A.C. 7:1C-7)

• If the applicant determines that the application for expansion proposes construction, installation, reconstruction, or modification of equipment and control apparatus that is a **significant source** operation, a LICT analysis must be conducted.

Practice tip: to determine which emissions of air contaminant(s) are subject to the LICT analysis for your proposed significant source operation, ask:

Does my *facility* (existing facility + proposed expansion) have the potential to emit:

- a. any HAP at a rate equal to or greater than the SOTA (state-of-the-art) threshold at N.J.A.C. 7:27-17.9 at the facility level (existing + proposed expansion), OR
- b. any other air contaminant or category of air contaminant not covered above at a rate individually equal to or greater than five tons per year at the facility level (existing + proposed expansion)?

A LICT analysis is required for any significant *source* proposed to be constructed, installed, reconstructed, or modified for *any air contaminant* that the facility identified meets or exceeds the applicable threshold above at a *facility* (existing facility + proposed expansion) level.

- After determining which proposed significant source operation(s) trigger LICT, identify and evaluate a list of air pollution control technologies or measures that may be applied to the significant source operation to reduce **each contaminant** identified is subject to LICT analysis.
 - The list shall not be limited to measures demonstrated to be reliable in practice and that have been applied to other existing sources in this same category and shall include measures applied to sources in similar source categories, as well as innovative control technologies, modification of the process or process equipment, other pollution prevention measures, and combinations of the above measures
 - Arrange the measures on the list in descending order of air pollution control effectiveness, with the first-listed or "top" measure constituting LICT for the source unless your facility provides one of the below. If the top measure is eliminated from consideration during this "top down" analysis, your facility must evaluate each successive measure on the list in the same manner until a measure is reached that is not eliminated. Upon the Department's approval of the LICT demonstration, this measure shall constitute the LICT for the source.
 - Demonstration that the top measure should be eliminated from consideration because it is technically infeasible based on physical, chemical, or engineering principles, and/or technical difficulties that would prevent the successful application of the measure
 - Demonstration that the top measure should be eliminated from consideration based on its environmental impacts. The justification shall show that the adverse environmental effects of the top measure, such as effects on water or land, or HAP emissions, when compared with its air contaminant emission reduction benefits, would make use of the top measure unreasonable
 - Demonstration that the top measure should be eliminated from consideration based on its energy impacts. The justification shall show that the top measure uses fuels that are not reliably available; or that the energy consumed by the top measure is greater than the proposed measure(s), and that the extra energy used, when compared with the air contaminant emission reduction benefits resulting from the top measure, would make use of the top measure unreasonable

Practice tip: economic infeasibility does not constitute technical infeasibility for purposes of the LICT analysis.

PROPOSED FEASIBLE CONTROL MEASURES (FOR ALL FACILITY TYPES) (N.J.A.C. 7:1C-6.3(b))

- For any expanded facility, the applicant must propose feasible control measures to avoid, minimize, and/or reduce the facility's contribution (*meaning the contributions attributable to the expansion, not the whole facility*) to any adverse environmental or public health stressor(s). Measures should be proposed in the following order:
 - 1. All feasible measures to avoid facility contributions to adverse environmental and public health stressors.
 - 2. For any contribution that cannot feasibly be avoided, all feasible onsite measures to minimize facility contributions to adverse environmental and public health stressors

- 3. All feasible offsite measures within the OBC to reduce adverse environmental and public health stressors to which the facility will contribute
- 4. All feasible offsite measures within the OBC to reduce adverse environmental and public health stressors to which the facility will not contribute, with preference for the reduction of stressors from highest to lowest percentile in relation to the geographic point of comparison
- 5. All feasible offsite measures within the OBC to provide a net environmental benefit (reduce baseline environmental and public health stressors) in the OBC
- *For an existing major source/major facility seeking to expand*, the applicant must propose feasible control measures to avoid, minimize, and/or reduce the facility's contribution to all adverse environmental or public health stressor(s) *for any aspects of the facility's operations not addressed in the LICT analysis*

Practice tips: "feasible" is defined as "measures addressing contributions to environmental or public health stressors that are reasonably capable of being accomplished by taking into account economic and technological factors." See N.J.A.C. 7:1C-1.5.

All existing facilities seeking to expand must include feasible control measures. If a facility determines there are no feasible control measures, it is helpful to note this in the EJIS.

Note that a proposed expansion of a major source/major facility does not need to re-evaluate equipment or sources that were subject to the LICT analysis.

MAJOR SOURCES/MAJOR FACILITIES SEEKING RENEWAL (N.J.A.C. 7:1C-3.3(a)14 AND -8)

A major facility seeking a renewal must provide (when applicable):

- A facility-wide risk assessment and control measures (unless exempt). This requirement is independent of which stressors are identified as adverse
- A technical feasibility analysis (for equipment as applicable (see below)). This requirement is independent of which stressors are identified as adverse
- All feasible onsite control measures, addressing aspects of the existing major source facility's operations not already assessed pursuant to the facility-wide risk assessment and/or technical feasibility analysis, to avoid and/or minimize facility contributions to environmental and public health stressors.

FACILITY-WIDE RISK ASSESSMENT AND CONTROL MEASURES (N.J.A.C. 7:1C-8.3(a) AND -8.4)

Not required if both of the below apply:

- 1. The applicant or designated responsible corporate official certifies that:
 - The applicant submitted a facility-wide risk assessment as part of its application for its current effective operating permit
 - \circ ~ The Department approved the facility-wide risk assessment ~
 - No new information or change in use or operation at the facility occurred since the Department approved the facility-wide risk assessment

2. The Department determines that there have been no changes to the requirements for a facility-wide risk assessment pursuant to N.J.A.C. 7:1C-8.4, requiring an update to the facility-wide risk assessment

Practice tip: an applicant may follow the procedures at N.J.A.C. 7:27-1.39, Certification of information, to comply with the certification requirement.

Requirements for a facility-wide risk assessment:

- The assessment must evaluate existing source operations and include each source operation's emission rates of hazardous air pollutants (HAP) and toxic substances that exceed the reporting thresholds at N.J.A.C. 7:27-17.9
- The assessment must be conducted in accordance with a protocol approved in advance by the Department. Technical guidance on the preparation of a protocol can be found in the Air Quality Permitting Program's Technical Manual 1002 (Guidance on Preparing an Air Quality Modeling Protocol) and Technical Manual 1003 (Guidance on Preparing a Risk Assessment for Air Contaminant Emissions) available on the Department's website at http://www.nj.gov/dep/aqpp/techman.html.
- To be approvable, the protocol must:
 - take into account all relevant site-specific and general factors. These factors include, but are not limited to:
 - a land use analysis
 - proper consideration of topography
 - o a good engineering practice stack height analysis
 - use of the most recent version of the USEPA-approved models
 - \circ identification of the most appropriate meteorological data, and
 - consideration of all relevant averaging times.
 - o document how the applicant proposes to conduct the facility-wide risk assessment
 - document how the results will be presented to the Department

Practice tip: if your facility is able to use the Department's risk screening worksheet, the worksheet will be considered to satisfy the facility-wide risk assessment requirement. If your facility is required to develop a protocol for Department approval, please contact the Department as soon as possible.

• If the outcome of the facility-wide risk assessment is above a negligible level pursuant to Technical Manual 1003, then the applicant must submit a plan to lower the risk to a negligible level as part of its EJIS in accordance with N.J.A.C. 7:1C-2. The plan may include measures, such as applying better air pollution controls to lower emissions, modifying stack parameters to increase dispersion, and/or implementing applicable risk minimization strategies to reduce risk in the overburdened community.

TECHNICAL FEASIBILITY ANALYSIS AND CONTROL MEASURES (N.J.A.C. 7:1C-8.3(a)2 AND -8.5)

- Technical feasibility analysis to reduce emissions to the maximum extent technically feasible is required for any equipment in your facility's current effective operating permit that meets all of the below:
 - The equipment was installed at least 20 years prior to the expiration date of its current effective operating permit.

- The equipment was not subject to review under this subchapter in the 15 years prior to the expiration date of its current effective operating permit.
- The total emissions of any of the pollutants listed below from each piece of equipment that meet the criteria at (a)1 and 2 above, comprise at least 20 percent of the facility's overall potential to emit that pollutant. All emissions shall be calculated based on potential to emit (tons per year):
 - Fine particulate matter (PM2.5);
 - Nitrogen oxides; and
 - Volatile organic compounds.

To prepare a technical feasibility analysis:

- List each equipment and source operation subject to the technical feasibility analysis, according to the potential to emit of each equipment and source operation, in descending order, for each applicable pollutant
- List air pollution control technologies or pollution prevention options that may be applied to each equipment or control apparatus to reduce the identified pollutants, which shall:
 - Include control applied to similar types of sources, innovative control technologies, modification of the process or process equipment, other pollution prevention measures, and combination of these measures
 - 2. List each measure in descending order of air pollution control effectiveness
- Propose measures to reduce emissions of each pollutant that must be evaluated by applying the first listed or "top" measure in its list for each equipment and control apparatus, unless the applicant demonstrates any of the below:
 - 1. The top measure is technically infeasible, based on physical, chemical, or engineering principles, and/or technical difficulties that would prevent the successful application of the measure
 - 2. The top measure would be unreasonable when comparing its air contaminant emission reduction benefits with its adverse environmental effects, such as effects on water or land, or HAP emissions
 - 3. The total and incremental costs of the top measure are greater than the total and incremental costs of the proposed measure(s), which costs shall be calculated using the techniques in the latest edition of the USEPA's Air Pollution Control Cost Manual and that the extra costs, compared with the air contaminant emission reduction benefits resulting from the top measure, would make use of the top measure unreasonable
 - 4. The top measure uses fuels that are not reliably available, or that the energy consumed by the top measure is greater than the proposed measure(s), and the extra energy used, when compared with the air contaminant emission reduction benefits resulting from the top measure, would make use of the top measure unreasonable
- If the top measure is eliminated from consideration, an evaluation of each successive measure on the list, using the procedure described above, until the applicant reaches its proposed measure

Practice tip: the Department is developing a worksheet to assist facilities with the analysis.

PROPOSED FEASIBLE CONTROL MEASURES (N.J.A.C. 7:1C-8.6)

For a major source facility seeking renewal, the facility must propose feasible control measures to avoid and/or minimize the facility's contribution to all adverse environmental or public health stressor(s) *for any aspects of the facility's operations not addressed in the facility-wide risk assessment and technical feasibility analysis. Measures should be proposed in the following order:

- 1. All feasible measures to avoid facility contributions to adverse environmental and public health stressors
- For any contribution that cannot feasibly be avoided, all feasible onsite measures to minimize facility contributions to adverse environmental and public health stressors

Practice tip: "feasible" is defined as "measures addressing contributions to environmental or public health stressors that are reasonably capable of being accomplished by taking into account economic and technological factors." See N.J.A.C. 7:1C-1.5. A major facility seeking renewal must include feasible control measures for aspects of the facility's operations not addressed by the facility-wide risk assessment or the technical feasibility analysis. If a facility determines there are no feasible control measures, it is helpful to note this in the EJIS.