



**New York City
Department of Environmental Protection
Bureau of Water Supply**

**Applicant's Guide
to
Crossing, Piping or Diversion Permits**

January 2022

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to
Crossing, Piping or Diversion Permits**

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1.0 INTRODUCTION

“The New York City Rules and Regulations for the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and Its Sources” (**Watershed Regulations**)¹ are intended to ensure that bridges, crossings, pipings and watercourse diversions are constructed in a manner that prevents adverse water quality impacts to the New York City (**City**) water supply and water quality (§§ 18-39(a)(2)(vi),(ix) and (a)(9)). To that end, the Watershed Regulations require that under certain circumstances, Crossing, Piping or Diversion Permits (**CPDPs**) be reviewed and approved by the New York City Department of Environmental Protection (**DEP**) before certain construction activities may commence.

This guide was developed to assist in determining when DEP review and approval is necessary, and to expedite the approval process. Section 2.0 identifies activities that require DEP’s review and approval and the requirements for CPDPs. Appendix B provides an application checklist, and Appendix C includes the application form. A copy of the Watershed Regulations may be obtained from the DEP offices listed on page 2 of this guide, or on DEP’s website: <https://www1.nyc.gov/site/dep/environment/regulations.page>. Where discrepancies exist between this guide and the Watershed Regulations, the Watershed Regulations will prevail.

2.0 APPLICATION REQUIREMENTS

The goal of a CPDP is to protect the quality of the City’s water supply by preventing adverse impacts.

The following sections identify the information that should be included in applications for review and approval. A checklist and an application form are contained in Appendices A and B, respectively. The design of the crossing and erosion and sediment control plans should be consistent with the standards set forth in the following references:

- “New York State Standards and Specifications for Erosion and Sediment Control (Blue Book),” (November, 2016). A copy of the ESC standards is available at the DEC website: <http://www.dec.ny.gov/chemical/29066.html> .
- “New York State Stormwater Management Design Manual,” (January, 2015). A copy of the Design Manual is available at the New York State Department of Environmental Conservation’s (NYSDEC) website: <https://www.dec.ny.gov/chemical/29072.html>.

2.1 CROSSING, PIPING OR DIVERSION REGULATIONS AND PERMITS

A proposed Crossing, Piping or Diversion of a watercourse or State wetland may require DEP review and approval depending on the following:

- **Bridge or crossing:** Construction of a bridge or crossing of a watercourse or State wetland which does not require a permit from a regulatory agency other than DEP shall require the review and approval of DEP. Such bridge or crossing shall be constructed to prevent adverse impacts on the quality of the water supply (18-39(a)(2)(vi); 18-39(a)(9)). An applicant

¹ Chapter 18 of Title 15, of the Rules of the City of New York (“Watershed Regulations”)

should consult with the Army Corps of Engineers (ACOE)², NYSDEC³ and local authorities to determine if a federal, state and/or local permit is required.

- **Impervious surface:** Creation of an impervious surface needed as an integral component of a diversion or piping of a watercourse, with the review and approval of DEP, and only if DEP determines that such impervious surface will not have an adverse impact on water quality (18-39(a)(2)(ix)).

2.2 GUIDANCE ON CROSSING, PIPING OR DIVERSION PERMIT APPLICATIONS

Any disturbance of a stream, wetland, or wetland buffer area has the potential for significant adverse impacts on water quality primarily as a result of soil disturbance and the uncontrolled discharge of sediment. Through good design, adherence to proper construction practices and sequencing, and use of special mitigation techniques where required, disturbances during construction can be minimized, and the site can be stabilized to prevent long term changes in stream channel stability. Proper planning is critical in order to facilitate the permit process. The following sections present common guidelines for planning and designing a watercourse or State wetland crossing or watercourse piping. Applicants should follow these recommendations in order to show that the bridge or crossing or piping will be constructed to prevent adverse impacts on the City's water supply or that the creation of an impervious surface, such as a culvert, needed as an integral component of diversion or piping of a watercourse will not have an adverse impact on water quality.

A. PLANNING

- All opportunities should be considered to avoid direct disturbance of or impact to the watercourse such as locating bridge abutments outside the channel in an upland area.
- Construction should be scheduled for intervals of low flow, avoiding periods known for seasonal flooding.
- The amount of disturbed area within the riparian corridor should always be kept to a minimum.
- Watercourse crossings should be located on stream banks that are low and stable whenever possible. A preferred site for a crossing is in a rapids/riffle section of a watercourse.
- Crossing approaches should avoid steep slopes and remain fairly level for 50 feet on either side of the crossing, especially when proposed in the vicinity of erodible soils. When the

² The ACOE website www.nan.usace.army.mil can be helpful to locate the pertinent ACOE field office responsible for the area where the project is located to determine whether ACOE permitting is necessary.

³ NYSDEC website www.dec.ny.gov can be helpful to locate the pertinent DEC regional permitting office to determine if a DEC permit is necessary.

slopes of the approaches to a crossing exceed 10%, drainage structures to divert running water off roads and away from streams to a stable outlet should be included.

- Bridges, arch culverts or open-bottomed box culverts which retain the natural stream bottom and slope are encouraged.
- Twin or multiple parallel culverts are not a preferred practice due to susceptibility to blockage by sediment, ice or debris.

B. DESIGN

- When constructing crossings, the design should reflect the channel characteristics and the physical features of the watercourse with particular attention paid to width and depth of the channel and its relationship with the floodplain.
- If a culvert is used, the size of the watershed area should be estimated and the culvert properly sized to accommodate, at a minimum, runoff from the 10-year, 24-hour storm event.
- Studying the stream's dynamics is essential. In particular, observations should be made regarding the typical sediment loads being carried within the streambed, the predicted flow velocities, and bank stability. Where appropriate, these factors should be addressed within the design of the crossing.
- Culverts should be placed slightly below the natural stream grade whenever practicable to facilitate the movement of bed load through the pipe, and to minimize the risk of undercutting at the inlet or outlet. Avoid placing fill above the stream bed or below the culvert to obtain the necessary grade.

2.3 CONTENTS OF CROSSING, PIPING OR DIVERSION PERMIT APPLICATIONS

Applications to DEP for review and approval of a CPDP must consist of one copy of the following and the applicable information set forth in this document.

- A completed DEP application form that includes the name, address and contact information for the applicant;
- A description of the activity;
- The location and topography of the area of the activity;
- Identification of any existing culverts or bridges at the location;
- Any engineering, construction or other plans which detail the methods to be used in undertaking the activity such that it shall meet the requirement for the specific activity set forth in the Watershed Regulations;

- An Environmental Assessment Form and any Draft Environmental Impact Statement or Determination of Nonsignificance prepared pursuant to Article 8 of the Environmental Conservation Law;
- A list of related permits or approvals from any other agency;
- A list of any enforcement actions, including lawsuits or administrative proceedings, commenced against the applicant, or any principal affiliate of the applicant, for any alleged violations of law related to the activity for which approval is sought or the facility or site at which the activity is located, in the five years preceding the application, and disposition or status of the actions; and

A. NARRATIVE REPORT

The following must be provided in the narrative:

- The schedule and sequence for construction activities, including implementation of the erosion and sediment controls, grading, flow diversion, pumping, dewatering, construction, and site stabilization;
- The maintenance schedule for all crossings, piping, or diversions, and a description of the maintenance activities to be performed; and
- All calculations or justification used in siting, sizing, and designing any crossing, piping, or diversion.

B. PLANS, DETAILS AND SPECIFICATIONS

Plans should be provided at a scale not to exceed 1" = 50', details and specifications that depict:

- The location of any watercourses, wetlands, reservoirs, reservoir stems, or controlled lakes on or adjacent to the property. The plan must include approximate width and depth of the existing channel; and
- The design of the proposed crossing, diversion, or piping including plan and cross-sectional views.

C. EROSION AND SEDIMENT CONTROLS

The construction of a crossing of a watercourse or State wetland, or the diversion or piping of a watercourse, may require a Stormwater Pollution Prevention Plan if the land disturbance is greater than two (2) acres⁴ (See “Applicants Guide to Stormwater Pollution Prevention Plans”). In most cases this two (2) acre threshold will not be exceeded for these types of projects. However, appropriate erosion and

⁴ Watershed Regulations § 18-39(b)(4)(iv)

sediment control measures should be included as part of the CPDP for projects that disturb less than two (2) acres in order to demonstrate that water quality will not be adversely impacted.⁵ The following information must be provided:

1. EROSION & SEDIMENT CONTROL NARRATIVE

- A description of proposed erosion controls. The description must include all temporary and permanent, structural and non-structural measures that will be used to prevent a turbid discharge or sedimentation within a receiving wetland, watercourse or waterbody during and after the construction phase of the project;
- The location of proposed erosion control measures, shown relative to the disturbed area and the water resource and including designs, and details;
- The maintenance schedule for erosion and sediment controls with a description of the maintenance activities to be performed;
- The construction schedule, including any phasing plan, construction sequence, and implementation schedules for temporary and permanent erosion and sediment controls.

2. EROSION & SEDIMENT CONTROL DETAILS AND SPECIFICATIONS

- The limits of disturbance, including material stockpile areas, borrow areas, and areas where vegetation will be cleared;
- The location of vegetation to be protected on the site; and
- Provisions to prevent erosion of fill material and to protect disturbed areas near culvert inlets and outfalls.

3.0 APPLICATION PROCESS

Applications for review and approval by DEP under the Watershed Regulations are subject to the following process. A flow chart illustrating the time frames and the application process described below is attached as Appendix D.

STEP 1 – OPTIONAL PRE-APPLICATION CONFERENCES

A prospective applicant may meet with DEP representatives at locations in or near the watershed before submitting an application for review and approval to discuss proposed regulated activities, regulatory requirements, and the application process. DEP has found that a pre-application conference benefits both the applicant and DEP, and therefore encourages each applicant to involve DEP early in the project

⁵ Watershed Regulations § 18-39(a)(9).

planning stage.⁶ At the pre-application conference, an applicant may also request that DEP visit the applicant's site. Because distances from a watercourse, as well as other water bodies, are relevant to the approval process, a site visit will establish whether, or where, a watercourse may be located on or near the site that may affect the project. To request a pre-application conference, contact the appropriate DEP office listed below.

East of Hudson

Regulatory and Engineering Programs
DEP
465 Columbus Avenue
Valhalla, NY 10595
Phone (914) 749-5266

Kingston Region (Projects in Greene,

Schoharie & Ulster Counties)
Regulatory and Engineering Programs
DEP
71 Smith Avenue
Kingston, NY 12401
Phone (845) 340-7214

Arkville Region (Projects in Delaware & Sullivan Counties)

Regulatory and Engineering Programs
DEP
County Route 38
Arkville, NY 12406
(845) 771-1119

Request to Flag a Reservoir, Reservoir Stem, Controlled Lake or Watercourse:

Under the Watershed Regulations, the property owners or applicants may request that DEP flag the presence of any watercourse(s), reservoir, reservoir stem, or controlled lake on the property.⁷ Identification of these features is relevant to the approval process. DEP will fulfill the request as soon as field schedules permit. An owner or applicant may also supply a surveyor's map, which includes representations of watercourses, reservoirs, reservoir stems or controlled lakes flagged by DEP. DEP will review the surveyor's map and confirm or amend it within 20 business days for applicants, and as soon as practicable for other property owners. Following DEP confirmation, the survey map will be valid and binding upon DEP for five (5) years following the date of confirmation. Contact DEP at the appropriate telephone number provided for the appropriate offices listed above to request watercourse determinations.

The Watershed Regulations address only those wetlands mapped by the NYSDEC. Applicants should consult with the United States Army Corps of Engineers (ACOE) and local authorities to determine if there are federally and/or locally designated wetlands, and if so, what restrictions may apply. The Department does not delineate wetlands. To establish the boundaries of a wetland, property owners must contact DEC, ACOE, or local authorities.

⁶ Watershed Regulations § 18-25.

⁷ Watershed Regulations § 18-23(b)(5) and (6).

STEP 2 – APPLICATION SUBMISSION

An application for review and approval of an activity governed by the Watershed Regulations, as well as applications for variances, may be submitted to either of DEP offices noted above by mail, electronic mail, or in person between the hours of 8:30am and 4:30pm, Monday through Friday. An application form is attached as Appendix C and a checklist of all elements necessary for DEP approval is attached as Appendix B. An applicant is encouraged to discuss the level of information required with DEP prior to submission of the application. There are no application fees. Where projects require multiple DEP permits or approvals, an applicant is encouraged to submit applications concurrently. As discussed below, when the applicant is not aware of the need for a variance when the application for a proposed project is submitted, the variance application may be submitted at a later date. As noted below in Step 4, where DEP is the Lead Agency for the Environmental Review of a project, or where a project is the subject of an Environmental Impact Statement, DEP cannot complete its review under SEQRA without reviewing all relevant applications.

STEP 3 – DETERMINATION OF COMPLETENESS

When DEP receives an application, DEP will review the application and determine if it contains all information necessary to be considered complete. This determination will be made within 20 calendar days. DEP will either notify the applicant that the application is complete, and that DEP has commenced its review, or that the application is incomplete.

If an application is incomplete, DEP will request the specific information that is needed before the application can be considered complete. Within 10 calendar days of receipt of the requested information, DEP will notify the applicant whether or not the application is complete. Once DEP has asked for more information, DEP will request further information only if the additional information submitted by the applicant raises new questions.⁸

If DEP fails to notify the applicant regarding completeness of the application within the specified time periods, the applicant may notify DEP of its failure to do so by writing to the appropriate DEP office (identified in Step 1, above) by United States Postal Service certified mail, return receipt requested. The notice must contain:

1. the applicant's name;
2. the location of the project;
3. the project name (if applicable); and
4. the DEP office where the application was filed.

If DEP does not notify the applicant as to completeness of its application within 10 business days of receiving the applicant's certified letter, the application will be deemed to be complete as of the 11th day. In cases where additional information has been requested and received, the amended application is the one that will be deemed complete, as of the 11th day.

⁸ DEP may also request further information in the following situations: (1) false or misleading information has been submitted; (2) a change in relevant law has occurred; (3) changes have been proposed for the project; (4) there is a new applicant; or (5) the applicant's owners, principals, shareholders, directors, or offices have changed. Watershed Regulations § 18-23(d)(2)(iii).

After determining that an application is complete, DEP will begin its review to determine whether the CPDP meets the standards in the Watershed Regulations.

STEP 4 – DETERMINATION: APPROVAL OR DISAPPROVAL

Once DEP notifies the applicant that the application is complete, or once the application is deemed complete as described above, DEP will notify the applicant in writing of its determination to approve, which may include conditions, or disapprove the application. The determination will be made within 45 days. The 45 day time period does not begin until any additional information, if requested by DEP during Step 3 above, has been supplied, and the application is deemed complete. The time period may be extended by mutual written agreement between the applicant and DEP. If during the 45 -day review period, DEP requests revisions to the application, the review period is suspended from the date such request is made until the date on which DEP receives such revisions, provided that DEP has no fewer than 10 calendar days from the date of receipt to issue a determination.

If DEP fails to notify the applicant within the specified time periods, the applicant may notify DEP of its failure to do so by writing to the appropriate DEP office (identified above) by certified mail, return receipt requested. The notice must contain:

1. the applicant's name;
2. the location of the proposed project;
3. the project name (if applicable);
4. the DEP office in which the application was filed; and
5. a statement that a decision is sought in accordance with the Watershed Regulations § 18-23(d)(6).

If DEP fails to provide a determination to the applicant in writing within 10 business days of receiving the applicant's notice, the application will be deemed approved subject to the standard conditions for that approval. A notice that does not contain all of the information listed above will not result in an application being deemed approved.

State Environmental Quality Review Act (SEQRA):

If the project is subject to review under SEQRA and the Lead Agency for the project has determined that the project may have a significant impact on the environment pursuant to the SEQRA regulations, the time periods specified above for determinations will be suspended until a Final Environmental Impact Statement has been issued by the Lead Agency and submitted to DEP. DEP will consider a project that requires SEQRA review as whole and will attempt to make determinations regarding all applications relating to such a project concurrently. DEP must issue its own Findings Statement before issuing an approval for any project that was subject to an Environmental Impact Statement.

APPENDIX A GLOSSARY

Impervious Surfaces: Impervious surfaces are areas which are either impervious to water or which substantially prevent the infiltration of water into the soil at that location. Impervious materials include, but are not limited to, paving, concrete, asphalt, rooftops, or other hard surfacing material. Impervious surfaces do not include dirt, crushed stones or gravel surfaces.

Intermittent Stream: A watercourse that during certain times of the year goes dry or whose lowest annual mean discharge during seven consecutive days with a recurrence interval of ten years (MA7CD/10) is less than 0.1 cubic foot per second and which periodically receives groundwater inflow. A drainage ditch, swale or surface feature that contains water only during and immediately after a rainstorm or a snowmelt shall not be considered an intermittent watercourse.

Limiting Distance: The shortest horizontal distance from the nearest point of a structure or object to the edge, margin, or steep bank forming the ordinary high water mark of a watercourse, wetland, reservoir, reservoir stem, or controlled lake or the contour line coinciding with the reservoir spillway elevation.

Perennial Stream: A watercourse that flows throughout the year from source to mouth.

Reservoir Stem: Any watercourse segment which is tributary to a reservoir and lies within 500 feet or less of the reservoir.

Watercourses are visible paths through which surface water travels on a regular basis, including an intermittent stream, which is tributary to the water supply. A drainage ditch, swale or surface feature that contains water only during and immediately after a rainstorm or a snow melt shall not be considered to be a watercourse.

Wetlands are any areas mapped as a wetland by the New York State Department of Environmental Conservation pursuant to the Environmental Conservation Law, which is at least 12.4 acres in size or has been designated as a wetland of unusual local importance.

APPENDIX B APPLICATION CHECKLIST

Four copies of the following information must be submitted to DEP. For further information regarding submissions, see the text of the Applicant's Guide.

REQUIREMENTS FOR CROSSING, PIPING OR DIVERSION PERMITS

- ___ A completed DEP application form
- ___ A description of the proposed project and the regulated activity
- ___ The location and existing topography of the area of the activity
- ___ Identification and location of any existing structures at the location
- ___ A description of the proposed erosion control measures
- ___ The schedule for construction, including implementation of erosion and sediment controls, grading, and site stabilization
- ___ The maintenance schedule for all erosion and sediment controls from construction through final stabilization and a description of the maintenance activities to be performed
- ___ An Environmental Assessment Form and any Draft Environmental Impact Statement or Determination of Nonsignificance
- ___ A list of any enforcement actions commenced during the five (5) years preceding the application against the applicant for any alleged violations of law related to the activity for which approval is sought
- ___ A regional locator map, at a scale not to exceed of 1:24,000, that identifies the property, adjacent public roadways, all reservoirs, reservoir stems, controlled lakes, watercourses, and wetlands on and adjacent to the project site, and drainage areas contributing to the project site
- ___ If the application relates to an impervious surface in a Designated Village Center, information necessary to justify that: (1) there is no reasonable alternative to the creation of the proposed impervious surface within the applicable limiting distance and (2) the best available measures are being proposed to prevent adverse impacts on the quality of the drinking water supply.

Narrative Report:

- ___ The maintenance schedule for all crossings, pipings, or diversions, and a description of the maintenance activities to be performed
- ___ All calculations used in siting, sizing, and designing any crossing, piping, or diversion

Plans, at a scale not to exceed 1" = 50', details and specifications:

- ___ The location of any watercourses, wetlands, reservoirs, reservoir stems, or controlled lakes on or adjacent to the property
- ___ The proposed crossing, diversion, or piping
- ___ The approximate area of site disturbance
- ___ The proposed erosion controls including:
 - ___ locations
 - ___ designs
 - ___ details



NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION FOR REVIEW AND APPROVAL OF A CROSSING, PIPING OR DIVERSION PERMIT

Applicant/Designated Representative
Name: _____
Address: _____
Phone: _____

Design Professional:
Name: _____
Address: _____
Phone: _____

Project Location: Address: _____
Town: _____
Subdivision name: _____
Reservoir Basin: _____

Tax Map Parcel: _____
County: _____
Lot number: _____

Type of Approval Sought: Watercourse or Wetland Crossing Permit
 Piping or Diversion Permit

Submissions must include four copies of all plans and supporting documents. All applications must include narratives, plans, details, and specifications providing the following information:

- Project Description
- Description of Existing Conditions
- Description of Proposed Conditions
- Operations and Maintenance Plans

General Requirements for submission are set forth in Section 2.0 of the accompanying Guide. Required supplemental information is described in Section 2.3. Also see Appendix B for a checklist of items to be included in the submission.

I believe this application to be complete and in compliance with the Watershed Regulations.

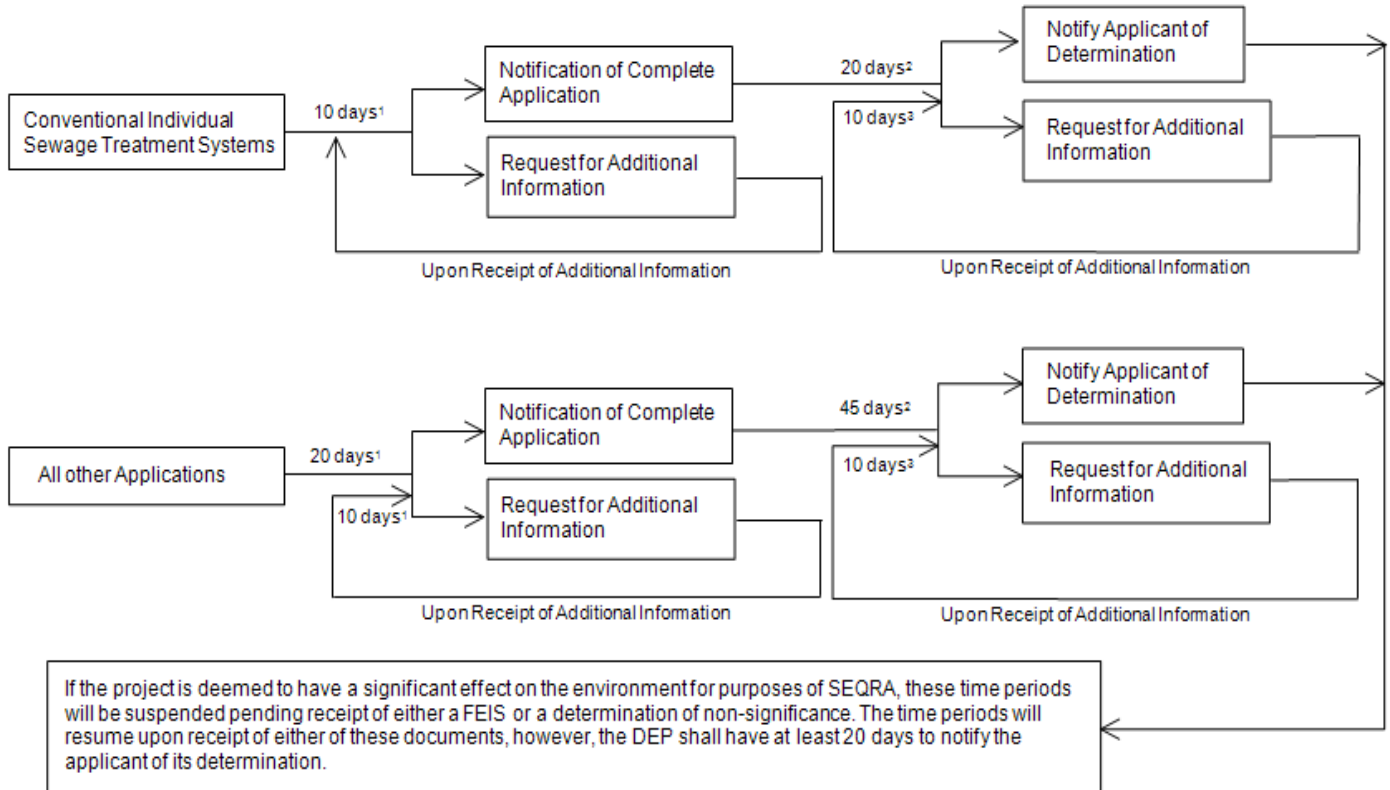
(Signature)

(Filing Date)

(Print Name)

Return Completed form to: DEP – Regulatory & Engineering Programs Section

APPENDIX D PROJECT REVIEW TIMELINES



1. If the DEP fails to notify the Applicant in writing within these time periods, the Applicant may inform the DEP of its failure to do so and request a determination of completeness in writing. The DEP then has 10 business days to notify the Applicant of the status of the application. If the DEP fails to act within those 10 days, the application will be deemed complete as of the eleventh day, For further information, refer to the guide.
2. If the DEP fails to notify the Applicant in writing within these time periods, the Applicant may inform the DEP of its failure to do so and request a determination of completeness in writing. The DEP then has 10 business days to notify the Applicant of the status of the application. If the DEP fails to act within those 10 days, the application will be deemed approved, subject to standard conditions. For further information, refer to the guide.
3. If, during the review period, the DEP requests revisions to the application, the review period shall be suspended from the date such request is made until the date on which the DEP receives such revisions, provided that the DEP shall have no fewer than 10 days from the date of receipt to issue a determination. Refer to the Guide and §18-23(d)(4) and (5) for more information.