Potential mitigation measures to minimize impacts of Corridors A3S2, B3, or B4 to the Wauponsee Glacial Trail include bridging over the existing trail; rerouting the trail; or, providing a replacement trail during construction and temporarily rerouting a section of the trail. Reasonable efforts would be made to limit disruption to the trail and reinstate it in the same or better condition. Ways to minimize harm to the trail through design or other mitigation will be investigated further and consultations with the FPDWC will be undertaken during the Tier Two NEPA studies.

Minimization of Corridor A3S2 impacts to the DPSFWA on Treat Island would be detailed during the Tier Two NEPA studies if Corridor A3S2 is selected in Tier One. The effort to minimize impacts will be based on meetings with resource agencies and field surveys. In the vicinity of the DPSFWA, Corridors B3 and B4 were designed to run along the southern boundary of the property as much as possible. This was accomplished while minimizing impacts to the Kankakee River by crossing at a narrower portion of the river and generally aligning the Corridors B3 and B4 parallel to an existing ComEd 345kV electric transmission line.

Measures to mitigate river and stream crossings will be detailed in the Tier Two NEPA studies as to type, extent, and location of mitigation. All required permits and approvals as noted in Section 3.9.4 and 3.16 will be obtained prior to in-stream construction. Depending on available sites, mitigation for unvegetated waters of the US could include re-meandering channelized streams, removing/replacing existing drain tiles/culverts with stabilized stream channels, stabilizing eroded streambanks, constructing in-stream habitat, creating riparian buffer, etc. With the implementation of BMPs, surface water impacts, including adverse impacts to fish, aquatic macroinvertebrate communities, water quality, and recreation, as a result of the working alignments are anticipated to be minimal. Special construction methods will be utilized to construct bridge piers to minimize the effect of construction on INAI river crossings.

3.16 Permits and Certifications

This section summarizes permits and certifications applicable to the Illiana Corridor. Regulatory permits would be required for the implementation of a selected alternative in Tier Two. Regulatory agencies, such as the USACE, are not being requested to consider issuing permits at this time; however, a general coordination approach is taking place. Consultations and detailed studies, which would be required as part of formal permit applications, will be completed during the Tier Two NEPA studies. Such studies would include formal wetland delineations, biological surveys, or field investigations for threatened and endangered species. Issuance of regulatory permits would require detailed engineering plans for the selected alternative in Tier Two.

This Tier One DEIS does not include detailed engineering plans for the working alignments within the corridors. Submittal of permit applications to pertinent regulatory agencies would not take place until after development of final engineering plans, which would occur after identifying a selected alternative in Tier Two. Avoidance and minimization strategies required to obtain permits would be developed at that time.

3.16.1 Illinois

Permits for the Illinois portion of the proposed project could include at least the following:

- Section 404 of the CWA from the USACE
- Section 10 of the Rivers and Harbors Appropriation Act of 1899 permit from the USACE
- Section 9 of the Rivers and Harbors Appropriation Act of 1899 permit from the US Coast Guard
- Section 401 of the CWA WQC from the IEPA
- NPDES permit from the IEPA
- Illinois DNR-OWR permits for impacts to regulatory floodways and stream crossings
- IWPA approval from Illinois DNR

All working alignments would have impacts on surface waters and wetlands. The discharge of dredge or fill materials into jurisdictional waters of the US, including wetlands, is subject to the requirements of Section 404 of the CWA. The USACE has regulatory authority over Section 404 of the CWA. All working alignments are located within the USACE-Chicago District for both the Illinois and Indiana portions of the proposed project. The USACE-Chicago District has developed a Regional Permit Program that is applicable when there are minor activities involved that may be adequately regulated with a standard set of conditions. An Individual Permit would be required if the Regional Permit conditions cannot be met. For this project, one or more Individual Permits would most likely be required for impacts to jurisdictional wetlands and other waters of the US. Section 404 permit applications would be filed after the Tier Two NEPA studies; it is anticipated that there would be a separate Section 404 permit application for each project of independent utility.

Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.) requires authorization from the USACE for the construction of any structure in or over any navigable water of the US, the excavation/dredging or deposition of material in these waters, or any obstruction or alteration in a "navigable water." A Section 10 permit would be required if structures are proposed within the Kankakee River.

Section 9 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.) requires authorization from the US Coast Guard for the construction of any bridge, dam, dike, or causeway over or in navigable waterways of the US. A Section 9 permit would be required for a structure over the Kankakee River.

The Section 404 permit is contingent upon receipt of Section 401 WQC from the IEPA. IEPA provides WQC pursuant to Section 401 of the CWA. Any of the working alignments would be subject to the requirements of Section 401 WQC. IEPA has granted Section 401 WQC for most projects that qualify for the USACE Regional Permit Program.

During the Tier Two NEPA studies, any of the working alignments would be subject to the requirements of an NPDES permit for stormwater discharges from construction sites. NPDES coverage is required when a construction project disturbs 1 acre or more of total land area, or is part of a larger common plan of development that ultimately disturbs 1 or more acres of total land area. Permit coverage would be obtained either under the IEPA general permit for stormwater discharges from construction site activities, or under an individual NPDES permit. Permit requirements would include preparation of a SWPPP. The SWPPP would identify potential sources of pollution and would describe or identify practices to be used to reduce the discharge of pollutants associated with construction site activity. The permit would require the installation, maintenance, repair, and inspection of BMPs and reporting.

The Illinois DNR-OWR issues floodway construction permits for work within regulatory floodways and for the crossing of streams with more than 640 acres of drainage area for urban areas. Any of the working alignments would require issuance of this permit. The involvement of streams and floodplains for each working alignment is described in Section 3.9 and Section 3.11, respectively.

Since the proposed project is state sponsored, it must comply with the IWPA. Under the IWPA, all impacts to wetlands regardless of size must be mitigated within the affected drainage basin or within 1 mile of the proposed project limits to be considered on-site mitigation. Although the USACE would allow "fees in lieu" for mitigation, the IWPA does not. On-site, in-basin mitigation is preferred, but wetland banking can be utilized. The IWPA is regulated by the Illinois DNR. Since the proposed project would be on a new alignment with potentially significant wetland impacts, it would be processed as a standard action that requires a wetland compensation plan and coordination with the Illinois DNR.

3.16.2 Indiana

Permits for the Indiana portion of the proposed project would include at least the following:

- Section 404 of the CWA from the USACE
- Section 401 of the CWA WQC from the IDEM
- IDEM Indiana Isolated Wetland Regulation and 401 WQC
- NPDES permit from IDEM
- Construction in a Floodway Permit from the Indiana DNR
- Rule 5 (327 IAC 15-5) Erosion Control

All working alignments would have impacts on surface waters and wetlands. Permits for the discharge of dredge or fill materials into jurisdictional waters of the US, including wetlands, is generally the same as Illinois; however, the USACE does not utilize the same Regional Permits in Indiana as are presently used by the Chicago District for projects in northeast Illinois. IDEM is responsible for the Section 401 WQC review process in Indiana. IDEM review focuses on how the project may impact water

quality of waters of the US as applied under the CWA within the jurisdiction of Indiana's water quality standards under IAC 327. Indiana's water quality standards have been reviewed and approved by the USEPA which maintains oversight of IDEM's approvals of 401 WQCs.

Under the Indiana Wetlands Regulatory Program, Isolated Wetlands Law (IC 13-18-22) and the rule implementing the law (327 IAC 17), IDEM regulates wetlands that do not fall under USACE jurisdiction (isolated wetlands). Isolated wetlands that are open water ponds constructed in upland areas for agricultural or recreational use are not regulated by IDEM. It is anticipated that implementation of any of the working alignments would require issuance of an Isolated Wetland General Permit or an Isolated Wetland Individual Permit.

All working alignments would be subject to the requirements of a NPDES permit for stormwater discharges from construction sites. NPDES coverage is required when a construction project disturbs 1 acre or more of total land area, or is part of a larger common plan of development that ultimately disturbs 1 or more acres of total land area. Permit coverage would be obtained from IDEM. Permit requirements would include preparation of a SWPPP. The SWPPP would identify potential sources of pollution and would describe or identify practices to be used to reduce the discharge of pollutants associated with construction site activity. The permit would require the installation, maintenance, repair, and inspection of BMPs and reporting.

The Indiana DNR has the jurisdictional responsibility for approving any construction within a floodway of any river or stream under IC 14, the Flood Control Act. The proposed project will have several stream and river crossings requiring approval of construction within floodways of any river or stream.

In Indiana, a detailed review of Soil Erosion and Sedimentation Control plans would be conducted by IDEM under Rule 5. Rule 5 applies to construction activities that result in the disturbance of 1 acre or more of total land area. Implementation of any of the working alignments would require issuance of this General Permit. An Individual Stormwater Permit may be required if an adverse environmental impact from a project site is evident. Generally, an Individual Stormwater Permit is typically required only if the IDEM determines the discharge will significantly lower water quality.

Mineral and Geologic Resources 3.17

This section describes mineral and geological resources within the Study Area and corridors, and discusses the potential for the working alignments to be affected by or cause impacts related to these resources and conditions. The mineral resource analysis involved assessment of sand and gravel, limestone, coal, and natural gas and oil resources, including any associated past or existing mining operations. Geologic risks to the project that may be associated with these resources and other geologic conditions including mine subsidence, weak and compressible soils, expansive soils, karst