

**Illinois Environmental Protection Agency  
Bureau of Water, Permit Section  
(IEPA)**

1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-3362

The IEPA has issued a Public Notice of a request for a Clean Water Act Section 401 water quality certification that would allow the issuance of a federal permit for the discharge of pollutants to waters of the State.

**Public Notice Beginning Date:**

Friday, March 12, 2021

**Public Notice Ending Date:**

Friday, April 2, 2021

**Agency Log No.:C-0273-20**

**Federal Permit Information:** Federal permit/license no. LRC-2011-00655 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

**Name and Address of Discharger:** Illinois Central Railroad, Martin Guimond - 17641 South Ashland Avenue, Homewood, IL 60430

**Discharge Location:** In Section 20 of Township 36-North and Range 14-East of the East 3rd Principal Meridian in Cook County. Additional project location information includes the following: Markham Yard, Harvey, IL 60426

**Name of Receiving Water:** Calumet Union Drainage Ditch-North (IL\_HBB), tributary to Little Calumet River (IL\_HB-01)

**Project Description:** Illinois Central Railroad (IC) operates a 360-acre intermodal facility in Markham Yard, with intermodal container, automotive, and grain transfer, as well as railcar repair facilities. The IC wishes to increase the capacity of its intermodal facility.

**Construction Schedule:** Unknown at this time

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their name and address along with comments on the certification request. The IEPA Log number must appear on each comment page. Commenters may include a request for public hearing. Only comments that pertain to Clean Water Act Section 401 authority as defined under 40 CFR part 121.3 will be considered. Part 121.3 defines the "scope of a Clean Water Act section 401 certification is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements". Requests for additional comment period must provide a demonstration of need. The last day that comments will be received will be on the Public Notice period ending date unless the IEPA grants an extended notice period.

The attached Fact Sheet provides a detailed description of the project and the findings of the IEPA's antidegradation assessment.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please see the contact information below.

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Post Document. No. C-0273-20-03122021-PublicNoticeAndFactSheet.pdf

Antidegradation Assessment Review for a 401 Water Quality Certification for Markham Yard Intermodal redevelopment.

IEPA Log No. C-0273-20

Cook County

Contact: Angie Sutton 217-782-9864

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Martin Guimond (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with reconfiguration of Illinois Central’s (IC) existing rail operations within its Markham Yard in Harvey, Sections 20, 29, and 30, Township 36 North, Range 14 East, Cook County Illinois. The project site is located from 159<sup>th</sup> to 171<sup>st</sup> and Center Avenue to Park Avenue. The proposed redevelopment would consist of the addition of two new loading/unloading tracks, providing container parking adjacent to the new tracks, straightening two sets of existing tracks, providing additional parking adjacent to the straightened tracks, and constructing a bridge over the Calumet Union Drainage Canal. The purpose of the proposed activity is to increase the capacity of the intermodal facility in order to handle anticipated demand increases.

The Applicant would place approximately 84,550 cubic yards (CY) of clean, non-expansive, non-swelling soil into 4.1 acres of a 5.85-acre wetland. Additionally, 2,495 linear feet (LF) of Markham Ditch will be impacted by relocation into an underground culvert. Illinois Central is proposing to mitigate for wetlands and waters of the U.S. (WOUS) impacts at a proposed restoration project with Wetlands Research, Inc. The area is referred to as Allen’s Corner Mitigation Project and is located in a 79-acre parcel west of Hampshire in Kane County. The USACE has accepted the mitigation concept and will determine the amount of compensatory mitigation required by the applicant.

Information used in this review was obtained from the application documents dated May 3, 2019, November 2019, September 14, 2020, September 18, 2020, February 8, 2021 and February 17, 2021.

**Identification and Characterization of the Affected Water Body.**

A wetland and stream survey was conducted in 2011 and updated in May 2019 for the project area. The delineation identified 5.96 acres (ac.) of wetland and 4703.97 linear feet (LF) of stream. Impacts are expected to 4.1 acres of Wetland 6 and 2945 LF of Markham Ditch. The tables below reflect wetland and stream resources within the project area and their impacts.

<b>Wetland Name</b>	<b>Cowardin* Type</b>	<b>Mean C/FQI</b>	<b>Size (ac.)</b>	<b>Impacts (ac.)</b>
A	PEM	1.8/4.02	0.19	0
B	PEM	0.0/0.0	0.18	0

4	PEM	1.2/2.68	0.73	0
4A	PSS		0.30	0
5	PEM	1.78/5.33	3.48	0
5A	PUB		1.08	0
6	PUB	2.5/5.0	5.85	4.1

\*Cowardin Wetland Type: PEM = palustrine emergent, PSS = palustrine shrub/scrub, PUB = palustrine unconsolidated bottom.

Methodology presented in *Plants of Chicago Region* (Swink and Wilhelm, 1994) proposes that an area with a native mean C greater than 3.5 or a native FQI greater than 35 suggests a sufficient floristic quality to be of at least marginal natural area quality. Results indicate that the wetlands in the study area are of poor quality.

Wetland 6 is expected to have 4.1 acres of its 5.85-acre area impacted. The wetland is located 1500 feet south of the Calumet Union Drainage Channel and is between 2 active tracks within the railyard. Hydrology to the wetland is provided by one culvert outlet at the edge of the wetland area. No connectivity to adjacent waterways was identified and the wetland was found to be slightly below grade from the surrounding uplands. Dominant vegetation consisted of Alder Buckthorn (*Frangula alnus*), Silver Maple (*Acer saccharinum*), American Elm (*Ulmus Americana*), Common Duckweed (*Lemna minor*) and Common Reed (*Phragmites australis*).

Stream Name	Flow Regime	Length (LF)	Impacts (LF)
3 – Calumet Union Drainage Canal	Perennial	999.38	0.0
4 – Markham Ditch	Intermittent	2945.98	2495.0
7 – Metra North Ditch	Intermittent	758.61	0.0
9 - Unnamed	Intermittent	7715.0	0.0

AECOM delineated additional water features that were located in the survey area, but not within the project area. The total streams delineated resulted in a total of 15,334 LF of stream. These consist of 5 ephemeral waters, 9 intermittent waters and 1 perennial water. The total wetland area in the project area was 5.96 acres. There were 9 ponds totaling approximately 5.0 acres in the survey area. These

were observed to be manmade and used for stormwater control purposes within the railyard and were lined in gravel.

Markham Ditch (no segment code), a tributary to Calumet Union Drainage Ditch-North, has 0 cfs of flow during critical 7Q10 low-flow conditions. Markham Ditch is classified as General Use Water. Markham Ditch is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating in that document. Markham Ditch, tributary to Waterbody Segment, IL\_HBB, is not listed on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List since it has not been assessed. This segment of Markham Ditch is not subject to enhanced dissolved oxygen standards.

The USGS Illinois Streamstats basin characteristics program gives a watershed size of 0.18 square miles for Markham Ditch. According to the Illinois State Water Survey, Markham Ditch in the area of the proposed discharge is likely to be 7Q1.1 zero flow streams. In this region of Illinois, 7Q1.1 zero flow streams are streams with a watershed area of 1 square mile or less. These streams will exhibit no flow for at least a continuous seven-day period nine out of ten years. Aquatic life communities in these headwater streams are tolerant of the effects of drying. Depending on the rainfall received before biological surveys, either a very limited aquatic life community, or no community at all would be found. Given this flow regime, no additional biological characterization is required.

#### **Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.**

The pollutant load increases that would occur from this project include some possible increases in total suspended solids. These increases, a normal and unavoidable result of the placement of the 80,000 CY fill material into 4.1 acres of Wetland 6 and 4,223 CY of fill into 2,495 linear feet of Markham Ditch, are expected to occur during construction activities. Impacts to Wetland 6 will be permanent as a result of filling in order to elevate the site for straightening of Tracks 1 and 2. Wetland 6 is currently 5.85 acres in size and will be reduced to 1.75 acres as a result of the impacts. Impacts to Markham Ditch will be permanent as a result of full encapsulation that will be located under new pavement and Tracks 3 and 4. Markham Ditch will be relocated to an underground culvert west of its existing location.

#### **Fate and Effect of Parameters Proposed for Increased Loading.**

This project will result in unavoidable permanent impacts to 4.1 acres of Wetland 6 and 2,495 linear feet of Markham Ditch. Impacts to wetlands and waters of the US (WOUS) were minimized to the greatest extent possible. Wetland 4 was avoided by reducing the width of the pavement along Track 4 for Trackside Parking while still providing for the minimum acreage needed for Trackside Parking. Wetland 6 impacts were reduced by 0.6 acres as a result of reduction of the width of pavement along Track 1 for Trackside Parking. Hydrology to the remaining 1.75 acres of Wetland 6 will be maintained and indirect impacts to the remaining area will be minimized. Indirect impacts including hydrology changes, stormwater storage, and water quality will be minimized using non-structural and structural controls.

Best Management Practices (BMPs) will protect aquatic resources by maintenance or reduction of pollutants in the stormwater discharged from the facility.

Compensatory mitigation is proposed to offset the WOUS impacts from the proposed project on a 79-acre parcel with Wetland Research, Inc.'s Allen's Corner Mitigation Project in Kane County. The parcel is located in the headwaters of Hampshire Creek just west of Hampshire Illinois. Historically the property was a gravel mine and is currently used for recreation and farming. Hampshire Creek dissects the property for approximately 2,808 feet and it, as well as the adjacent landscape has been straightened and channelized due to agricultural processes.

Proposed wetland mitigation will consist of creating 4.31 acres of wetland, and rehabilitation of 0.93 acres. An additional 3.82 acres of upland will be restored within the buffer areas. These activities will result in 9.06 acres of compensatory mitigation.

Restoration to the 2,808 LF of Hampshire Creek is proposed with the construction of 14 riffle structures, 769 LF of channel realignment, 432 feet of bank stabilization with peakstone, and 343 feet of stream bank stabilization and reshaping. Additionally, a 100-foot floodplain buffer is proposed to be established on both banks of Hampshire Creek in order to prevent adverse stream impacts as a result of agricultural activities. 6.3 acres of flood plain on both sides of the stream will be contained within the floodplain buffer. The buffer areas will be planted with wetland plant community types, riparian backwater, shallow marsh, and wet and mesic prairie.

#### **Purpose and Social & Economic Benefits of the Proposed Activity.**

The purpose of this project is to increase the capacity of IC's Markham Yard Intermodal Facility for loading and unloading containers on rail cars. This would be achieved with the addition of two new loading/unloading tracks and providing container parking adjacent to those new tracks. Intermodal container traffic has grown by an average of 11% per year and is projected to continue to grow between 5% and 8% annually for the next five years. The project will improve the capacity, efficiency and capability of the existing terminal in order to respond to the increased and anticipated growth. The Chicagoland area is a highly competitive marketplace and with these improvements, IC can offset increases in operating costs to retain and attract new customers.

#### **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

The Applicant has provided alternatives that have been developed based on the following six general requirements to accomplish the purpose and need of the project:

- Capacity expansion to enable IC to handle current demand and future growth, including sufficient track lengths and trackside parking infrastructure
- Location within the growth market catchment area (a 15-mile radius of IC's Markham Yard)

- Direct rail link to IC's South, East and West main line routes (Tennessee, Michigan and Wisconsin)
- Truck route access near the Interstate highway system
- Efficient rail and terminal operations, including access to ancillary operations such as rail car repair, locomotive servicing and repair, compressed air supply, and rail car switching
- An investment level proportional to the business opportunity

No Build Alternative: With this option, redevelopment of the intermodal terminal at Markham Yard would not occur and IC would continue to operate without creation of additional capacity. In turn, IC would not be able to meet the growing demand for services from their customers. This alternative was not chosen as it does not satisfy the purpose and need of the project.

New Build Alternatives: This option identified and examined four new greenfield sites in Matteson, University Park, Monee South and Griffith. These sites fulfilled 4 of the 6 requirements identified in the purpose and needs of the project. A new build alternative proved to be cost prohibitive due to new infrastructure, land rights-of-way purchases and required permit acquisition. Additionally, site clearing at these locations would lead to undesirable environmental impacts. New terminal construction was not considered any further and it does not satisfy project purpose and needs, and the investment is not proportional to the business opportunity.

Re-development Alternatives: This option identified and examined 3 brownfield sites in Joliet and Kirk Yards, and Markham Yard redevelopment.

Joliet and Kirk Yards: Both Joliet and Kirk yards have operational sites with established rail links and truck access routes that satisfy the purpose and needs of the project. However, neither yard has enough undeveloped property in order for IC to construct a facility that will support increased volume demand. Both yards are also outside the 15-mile radius of the market area and wetland and stream impacts would be significant as a result of development at these sites. The Joliet and Kirk Yards were both eliminated from further consideration as they do not satisfy the project's purpose and need.

Markham Yard Redevelopment: The Markham Yard Redevelopment Alternative looked at 4 different layouts that would include capacity expansion to accommodate increase intermodal demand. Four different track configurations address insufficient track and container storage capacity (2 for the East side and 2 for the West side).

1. East Side One Track Bend Redevelopment: This alternative looked at the option of constructing two tracks on the eastern side of Markham Yard. This would provide sufficient pad track capacity on Tracks 3 and 4 to handle demand and offers sufficient new trackside parking. Relocation of the existing IC automotive facility to new off-site location would be required but would be cost prohibitive due to

property acquisition, permitting and infrastructure duplication. The One Track Bend option would result in a boomerang track configuration which would compromise operating conditions and safety due to negative affect to driver sightlines. This also increases cost due to the decreased ratio of storage capacity per acre. Impacts to Wetland 5 would be 4.56 acres and there would be 200 linear feet of stream impacts. This option was not chosen as it was found to be cost prohibitive and does not satisfy the project's purpose and need (investment level proportional to business opportunity).

2. East Side Two Track Bends Redevelopment: This alternative looked at constructing two tracks on the eastern side of Markham Yard. This would provide sufficient pad track capacity. The configuration has two track curvatures which again, is not optimal for safety reasons. Overall, there would be a loss of trackside parking capacity per acre. Track 3 and 4 operations would be isolated and require cranes to move further distances as workload fluctuates in different sections of the terminal, resulting in unproductive use of cranes and staff. This option would result in fewer wetland impacts with 0.8 acres impacted in Wetland 5 and 0.2 acres of impacts in Wetland B. 200 linear feet of WOUS stream impacts would also occur. Costs for this option are higher than the East Side One Track option due to additional relocation of part of the Repair in Place (RIP) facilities. This option was not chosen due to it being cost prohibitive and the purpose and need of the project would not be satisfied (investment level proportional to business opportunity).
3. West Side Redevelopment with 4 track bends: This alternative looked at constructing two new tracks in same alignment next to tracks 1 and 2, but they would be shorter in length. This option provides sufficient track capacity, but the layout includes four curves. The RIP facility would not be impacted with this alternative, but trackside capacity would be reduced to 36 acres when 45 acres are needed in order to satisfy the project's purpose and needs. The four curves in this layout would result in unsafe operating practices and reduce trackside parking efficiency. 6 acres of remote storage would need to be developed but that would result in a cost increase of 5 million dollars. Impacts would occur to 4.56 acres of Wetland 5 and 0.3 acres of Wetland 4 as well as 2495 LF of stream impacts to WOUS. This alternative was not chosen as it provides insufficient trackside parking capacity which does not satisfy the purpose and needs of the project.
4. Proposed Project-Redevelopment: This alternative consists of expanding capacity on the westernmost side of Markham Yard with no track bends and eliminates the curves found on existing Tracks 1 and 2. With this option, IC proposes to fill in most of Westland 6 and straighten Tracks 1 and 2 in order to gain adjacent trackside parking capacity. Two new tracks (Tracks 3 and 4) would be added to align with straightened existing tracks (Tracks 1 and 2) in order to increase track

capacity. There would be no need for remote storage development as the proposed new trackside parking capacity meets the 45 acre requirement. Two new tracks would run contiguous along straightened existing tracks so no crane operating restrictions between the pad track would exist and therefore efficiency in crane and staff productivity would exist. This option shows the lowest cost projection at 22 million dollars. Wetland 4 impacts would be avoided with proposed pavement narrowing in the Wetland 4 area and Tracks 1 and 2 alignment straightening lessens the impacts to Wetland 6 from 5.85 ac. to 4.1 ac. Hydrology to both wetlands would be maintained and there would be no indirect impacts. 2495 linear feet of stream impacts would occur. This alternative avoids wetland and stream impacts to greatest extent possible and still satisfies the purpose and needs of the project.

Purpose & Need		Redevelopment Alternatives			
	Required	East – 1Bend	East – 2 Bends	West – 4 Bends	Proposed
Minimum track length (ft)	7700	8300	8200	7900	7800
Minimum new trackside parking (ac)	45	46	46	36	45
New remote storage compensation (ac)	0	4	0	6	0
Cost of expansion infrastructure (\$M)		27	27	26	22
Cost of Relocated Facilities (\$M)		17	19	2	0
<b>Total Cost (\$M)</b>		<b>44</b>	<b>46</b>	<b>27</b>	<b>22</b>
Wetland Impact (ac)		4.6	1.0	4.9	4.1
Waters of the US (LF)		200	200	2495	2495

The preferred alternative is for IC to redevelop the west side of Markham Yard by creating additional capacity at its existing terminal. This alternative was chosen based on operating requirements, environmental impacts, and investment equal to the opportunity.

**Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.**

An EcoCAT endangered species consultation was submitted on February 8, 2021 to the Illinois Department of Natural Resources (Project # 2110202). The review did not identify any protected



resources that may be in the vicinity of the project area. IDNR terminated the consultation request on February 8, 2021.

**Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the area by addressing IC's present-day inefficiencies with reconfiguration of Markham Yard's layout and in turn, offset increased operating costs in order to retain and attract new customers in the competitive Chicagoland marketplace. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.