

IEPA Log No.: **C-0646-14**  
CoE appl. #: **LRC-2014-00356**

Public Notice Beginning Date: **November 16, 2015**  
Public Notice Ending Date: **December 16, 2015**

Section 401 of the Federal Water Pollution Control Act  
Amendments of 1972

**Section 401 Water Quality Certification to Discharge into Waters of the State**

**Public Notice/Fact Sheet Issued By:**

Illinois Environmental Protection Agency  
Bureau of Water  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-3362

**Name and Address of Discharger:** Ducere, LLC – 27475 Ferry Road, Suite 150, Warrenville, IL 60555

**Discharge Location:** Near Lockport in Sections 11, 14, 15, 22, and 23 of Township 36N, Range 10E of the 3rd P.M. in Will County.

**Name of Receiving Water:** Jurisdictional wetlands and CSSC

**Project Description:** Proposed new 30 inch crude oil pipeline and barge terminal near the city of Lockport.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

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 call Darren Gove at 217/782-3362.

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Fact Sheet for Antidegradation Assessment  
For Ducere, LLC  
IEPA Log No. C-0646-14  
COE Log No. LRC-2014-00356  
Contact: Diane Shasteen (217) 558-2012  
Public Notice Start Date: November 16, 2015

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Ducere LLC (“Applicant”) has applied for Section 401 water quality certification for permanent impacts to 0.326 acres of jurisdictional wetlands and temporary impacts to two drainage swales and 0.187 wetland acres. The project would require approximately 14,240 CY to be dredged from and 0.05 acres of fill within the Chicago Sanitary and Ship Canal (CSSC). Approximately 803 CY of material would be temporarily excavated and back filled within the I&M Canal. The proposed project will construct a new 1.75 mile long, 30” diameter crude oil pipeline starting at a proposed barge loading facility located on the west bank of the CSSC immediately north of the 9<sup>th</sup> Street Bridge in Lockport, Will County, IL. The proposed barge loading facility will include two (2) 145’ diameter, internal floating roof, oil tanks with a concrete and earthen diked containment area, a control building, offices, and a water retention area. The proposed pipeline consisting of 10 segments (1.75 miles, described below) will transport crude oil from the existing Shell Lockport, IL Terminal (Shell) located on east side of the CSSC to the new dockside storage tanks. The pipeline will traverse properties owned by the Metropolitan Water Reclamation District of Chicago (MWRD), City of Lockport, Will County Forest Preserve District, Lockport Township Park District, Illinois Central-Canadian National (IC-CN) and BNSF Railways, Shell, and a private landowner. The areas to be crossed by the pipeline in Will County include Township 36N, Range 10E and Sections 11, 14, 15, 22, and 23.

The proposed pipeline route will cross various town roads, two railroads, several wetlands, streams, and canals. Construction of the 30” nominal diameter pipe will involve a combination of conventional (36” cover, 0.375” wall thickness X 52 pipe), “open-cut,” and directional (0.5” wall thickness) drilling in compliance with US Department of Transportation CFR 195 Standards. Pipeline segments will consist of the following:

- Segment 1: Barge loading site leased from the MWRD. 350’ above grade pipeline connecting the shore tank manifolds to the directional drill entry point of Segment 2
- Segment 2: Directional 100% rock drill (1150’) 10-15’ below the CSSC and 25’ below Deep Run Creek.
- Segment 3: Conventional pipeline construction (800’) including a 50’ encased pipeline bore beneath the BNSF railroad and open trenching across town roads.
- Segment 4: Conventional pipeline construction (1000’) including a 75’ aerial crossing over the I&M Canal.
- Segment 5: Conventional pipeline construction (1150’) 40’ east of the IC-CN railroad tracks and open cut installation of pipe through the I&M Canal
- Segments 6-8: Conventional pipeline construction (670’), a 130’ encased pipeline bore beneath the IC-CN Railroad, and directional drill (2650’) through Segments 6-8 and below Fiddymont Creek (Segment 7) before resuming conventional pipeline construction 40’ east of the IC-CN railway tracks in Segment 8.
- Segment 9: Conventional pipeline construction 40’ east of the IC-CN railroad tracks (700’) followed by a 100’ encased pipeline bore beneath the IC-CN railroad tracks.
- Segment 10: Conventional pipeline construction (380’) to enable pipeline connections to the Shell facilities.

The purpose of this project is to provide a facility along the CSSC that will load crude oil onto barges for shipment down the CSSC to the Illinois and Mississippi Rivers to refineries in the central and southern U.S. Three existing and three new cells would provide barge mooring; four 8” diameter marine loading arms would load approximately 10,000 barrels of crude per hour each; barge tow capacity is approximately 150,000 barrels and each barge tow could be loaded in approximately 8 hours.

Information used in this review was obtained from the applicant in a document entitled, Barge Loading Project on the Chicago Sanitary and Ship Canal in Will County, IL. Joint Application Form dated October 23, 2014 and revised February 18, 2015 and the revised Compensatory Mitigation Plan received on November 5, 2015.

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

The Chicago Sanitary and Ship Canal (IL\_GI-02), a direct tributary to the Des Plaines River (IL\_G-11), is a Non-Recreational and Commercial Use Waterway with an estimated 1315 cfs 7Q10 flow at this location. According to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, the CSSC has been assessed by Illinois EPA and is listed as not supporting Indigenous Aquatic Life and Fish Consumption uses. Causes for impairment are listed as Iron, Manganese, Oil and Grease, Dissolved Oxygen, and Phosphorus (Total) for Indigenous Aquatic Life use and Polychlorinated biphenyls for Fish Consumption use. Secondary Contact use has not been assessed. The CSSC 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. The CSSC is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

The Illinois and Michigan Canal (IL\_GH), a direct tributary to the Des Plaines River (IL\_G-11), is a Commercial Use Waterway with an estimated zero cfs 7Q10 flow at this location. According to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, the I&M Canal has not been assessed by Illinois EPA. The I&M Canal 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. The I&M Canal is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

Deep Run Creek (IL\_GIX-01), a direct tributary to the CSSC (IL\_GI-02), is a General Use Water with an estimated zero cfs 7Q10 flow at this location. According to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, Deep Run Creek has been assessed by Illinois EPA and is listed as fully supporting Aquatic Life use. Fish Consumption, Primary Contact Recreation, Secondary Contact, and Aesthetic Quality uses have not been assessed. Deep Run Creek 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. Deep Run Creek is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

Fiddymment Creek (IL\_GHC), a direct tributary to Illinois and Michigan Canal (IL\_GH), is a General Use Water with an estimated zero cfs 7Q10 flow at this location. According to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, Fiddymment Creek has been assessed by Illinois EPA and is listed as fully supporting Aesthetic Quality use. Aquatic Life use is listed as not supported with Phosphorus (Total) and Sedimentation/siltation listed as the causes of impairment. Fish Consumption, Primary Contact Recreation, and Secondary Contact uses have not been assessed. Fiddymment Creek 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. Fiddymment Creek is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

Parsons, on behalf of Ducere LLC, conducted wetland and habitat surveys along the proposed pipeline route in August and October 2014. A total of 8 wetlands (1, 1E, 2, 4-8) were identified within the project area. The wetland communities to be permanently disturbed (Wetlands 1 and 2) were considered to be poor quality forested/shrub wetlands with dominant species of reed canarygrass (*Phalaris arundinacea*), common reed (*Phragmites australis*), and common cattail (*Typha latifolia*). Wetlands 1 and 2 will be filled and regraded for permanent wetland impacts totaling 0.326 acres. Freshwater emergent wetlands temporarily impacted by the construction of the pipeline include 1E, (0.02 acres, temporary workspace) and 7 (0.13 acres, excavation). The project will also temporarily disturb two drainage swales (0.04 acres) for total temporary disturbances of 0.187 acres. The Applicant proposes mitigation for the permanently impacted 0.326 acres at a 1.0:1 ratio through the purchase of 0.326 acres of certified wetland bank credits from the Lily Cache Mitigation Bank in Will County.

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

The pollutant load increases that would occur during this project include possible increases in suspended solids. All work will be conducted in accordance with the Illinois Urban Manual, Latest Edition and a detailed Erosion Control Plan (ECP) has been prepared for the proposed project. Erosion and sediment controls and best management practices (BMPs) will be utilized to protect water quality and minimize impacts of stormwater on aquatic resources. Erosion control devices will include permanent vegetative soil cover, outlet protection (rip rap), and non-vegetative soil covers including aggregate cover, erosion blanket, Geo-textile fabric, and paving. Sediment controls will include temporary sediment basins and traps, sediment barriers (silt fence, straw bales, biologs, etc.), dewatering via sump pit and filter bags, inlet protection, and mud and dust control. All disturbed areas will be reseeded after construction activities in the area have concluded. No adverse effects are expected to the streams or wetlands due to the pollutant load increase.

Directional drilling will occur under the CSSC, Deep Run Creek, Fiddymment Creek, and several wetlands. An open cut installation of pipe will occur through the I&M Canal and will require a

temporary rock cofferdam to allow construction during dry conditions. Aquatic life uses in the portion of the streams that will be disturbed during construction may be negatively impacted, but in time, they will recover and support approximately the same community structure now found in the existing channel.

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

The increase in suspended solids will be local and temporary. The Applicant's ECP provides several measures that will be utilized to minimize any increase in these disturbances and prevent further impacts to the streams and the wetlands. A few of these measures include temporary and permanent erosion and sediment controls, temporary and permanent revegetation, structural streambank stabilization including rip rap and gabion baskets, and a stabilized construction entrance.

The Applicant will purchase 0.326 acres of certified wetland credits from the Lily Cache Mitigation Bank in Will County, the result of 1.0:1 mitigation ratio.

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

The proposed pipeline and barge terminal project would load crude oil onto barges for shipment down the CSSC, Illinois River, and Mississippi River to refineries in the central and southern United States. Addition of the barge terminal and pipeline will allow for safe, efficient transportation of crude oil which will allow regional refineries more opportunities to process U.S. and Canadian crude oil and reduce reliance on imported oil. As oil production grows in North America additional transportation options other than rail are needed to distribute the crude oil to Illinois refineries in Chicago and southern Illinois. Barging crude oil has lower impacts on the environment and the communities being transported through and costs less than railing crude oil. The proposed project will create approximately 50 local jobs for terminal operations and maintenance, tankermen, inspectors, and local tow boat operators along with additional construction and long haul tow boat jobs. Funds provided by Ducere to the City of Lockport for easements to supply the terminal via pipeline will be used to secure the level rail crossings so the 24/7 railroad whistles can be silenced.

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

The Applicant completed alternative analyses for the barge terminal locations, pipeline routing, and barge loading terminal layouts. The origin location of the crude oil to be loaded into barges was fixed at the Shell Terminal, however, several barge terminal locations were considered including:

- Repurposing of the Coal Power Plant Barge loading infrastructure (north of the proposed site) to crude oil
- Expanding the existing barge loading facilities at the CITGO Refinery in Lemont
- Building a new barge loading facility in close proximity on property on either side of the CITGO refinery

- Building a new barge loading facility on the site of the former Texaco refinery barge loading facility
- Building a new barge loading facility further south on the CSSC
- Repurposing the abandoned grain loading facility on MWRD property (Selected option)

The primary consideration for the location of the barge terminal was minimizing the potential for barge or tow collisions on the canal in high traffic areas. Barge tow widths are limited to 70' wide north of the spillway between the CSSC and the Des Plaines River directly north of the proposed barge loading site. Potential locations north of the proposed site are not preferred as barge tows would have to be taken apart, loaded as individual barges, and reassembled south of the spillway to meet the 70' width limit increasing safety and spill concerns. The preferred location has the advantage of loading barges outside the 160' wide barge traffic lane making it the safest option available.

Alternatives for pipeline routing included 1.) Crossing through the former Texaco Refinery to the west of the Shell Terminal 2.) A northern route across the CSSC and then south through property west of the canal, and 3.) A southern route from the Terminal on the east side of the I&M Canal and then crossing the CSSC to the barge loading facility. Waterway crossings ranged from 5 (Option 1 and 3) to 6 (Option 2), wetland disturbance and forested crossings ranged from none for Option 1, > 5 acres and >500' for Option 2, and <0.5 acres and <100' for Option 3. The former Texaco Refinery site offered the least amount of impact to wetlands and forest; however, ongoing site and environmental monitoring prevented the use of this site for the proposed pipeline. The southern route located along previously disturbed land, with low quality wetlands was chosen as the preferred alternative. To further minimize impact along this route directional drilling will occur under existing wetlands, waterways, forested areas, and the CSSC.

The barge terminal layout was designed per industry standards and in compliance with the US Department of Transportation requirements and the Illinois State Fire Code. The main challenge of the site design was to locate the 2 X 150,000 barrel storage tanks in a place where the required containment dike and berm system could be constructed to contain the entire contents of each tank without releasing any oil to the environment. The dike and berm system consists of concrete containment walls on the west, north, and east sides and an earthen berm on the south side. The only feasible location requires the elimination of 0.326 acres of wetlands. These impacts could be reduced if the system could consist of four concrete containment walls; however, vehicle access is required for normal operations and for emergency response by ambulance or fire trucks.

Additional safety designs have been implemented to reduce the chance of environmental degradation due to oil leakage or spills. The four tank design consists of two tanks at the barge loading terminal and two tanks at the common carrier pipeline terminus adjacent to the existing Shell Terminal. This design lowers the required pressure for the pipeline to operate, eliminates any potential surges from being directly connected to a long haul pipeline, and provides for improved volume control and checking. It also allows the operations staff to verify the working order of continuous, automated leak detection during transfer operations and follow strict shutdown procedures in the event of any alarms or concerns. A second earthen berm will bisect

the Barge Loading Terminal on the western portion of the site offering additional protection for the Des Plaines River from any small spill.

#### Conclusion:

The construction of the proposed project will follow conditions set forth by the Agency and USACE. The completion of the barge loading terminal and pipeline project is the most cost effective, viable means for loading crude oil onto barges for shipment down the CSSC, Illinois River, and Mississippi River to refineries in the central and southern United States. The location of the barge loading terminal provides the safest alternative by loading barges completely outside the 160' wide barge traffic lane of the CSSC. The preferred routing and direction drilling of the pipeline and additional safety measures provide for minimal environmental impacts and reduce the chance of environmental degradation due to oil spills. The Applicant has a comprehensive ECP that includes temporary and permanent erosion and sediment control plans, revegetation plans, and additional measures that will be implemented pre- and post-construction to reduce the pollution load. The impacts to 0.326 wetland acres will be mitigated through wetland credit (0.326 acres) purchased from the Lily Cache Mitigation Bank in Will County.

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

An Eco-CAT endangered species consultation submitted on October 16, 2014 to the Illinois Department of Natural Resources resulted in the identification of INAI sites, nature preserves, and threatened or endangered species that may be in the vicinity of the proposed pipeline. IDNR has requested the following:

- No clearing of trees 3' in diameter at breast height and larger between April 1<sup>st</sup> and October 1<sup>st</sup> to avoid and minimize potential impacts to state and federally listed bat species, northern long-eared bat (*Myotis septentrionalis*) and Indiana bat (*Myotis sodalis*).
- Conduct a study for state and federally listed Hine's Emerald Dragonfly (*Somatochlora hineana*) prior to construction activities and report finding to IDNR and USFWS
- Educate all on-site personnel involved with project construction and facility operation on state listed turtle species, Blanding's turtle (*Emydoidea blandingii*) and spotted turtle (*Clemmys guttata*). During construction, trenches and excavations should be inspected daily for trapped wildlife and any encounters with these species in the project area should be reported immediately to IDNR personnel
- Several state and federally listed plants exist in the project vicinity including leafy prairie clover (*Dalea foliosa*), golden corydalis (*Corydalis aurea*), lakeside daisy (*Tetranneuris herbacea*) and slender sandwort (*Minuartia patula*). The project area should be assessed by a qualified biologist and measures should be implemented to mitigate potential impacts including conserving the genetic material of the plants through translocation, seed collection, or stockpiling and replacing the surface soils containing the seed bank.
- A license agreement between IDNR OWR and the Applicant should be executed in regards to the trenching of the pipeline through the I&M canal.

- Comply with USFWS request for a third party expert review of the results of a theoretical petroleum release from the facility and impacts to surface and ground water. Develop an oil spill contingency plan acceptable to IDNR, USFWS, and the Illinois Nature Preserves Commission.

IDNR has evaluated the EcoCAT information and concluded that adverse effects to protected areas and listed species are unlikely if the above provisions are adhered to. The Applicant has either completed or agreed to complete the studies requested and agrees to the provisions listed above. IDNR terminated consultation for IDNR Project #1505611 on October 13, 2015.

### **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 will 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 will benefit the Midwest and the country by provided additional crude oil to regional refineries and in turn, reducing the country's dependence on imported crude oil. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.