

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION**

**FINAL ENVIRONMENTAL ASSESSMENT  
and  
FINDING OF NO SIGNIFICANT IMPACT**

**Special Permit Information:**

**Docket Number:** PHMSA-2017- 0158  
**Requested By:** Empire Pipeline, Inc.  
**Operator ID#:** 31592  
**Date Requested:** December 14, 2017  
**Original Issuance Date:** October 23, 2018  
**Effective Dates:** October 23, 2018, to October 23, 2028  
**Code Section(s):** 49 CFR 192.112(c)(1), 192.112(c)(2), 192.112(f)(3), 192.328(a), and 192.328(e) – alternative MAOP

**I. Background**

The Pipeline and Hazardous Material Safety Administration (PHMSA) is granting a special permit to Empire Pipeline, Inc. (Empire)<sup>1</sup> to operate 76.6 miles of the 24-inch diameter Empire Connector Pipeline (ECP)<sup>2</sup> in accordance with 49 Code of Federal Regulations (CFR) Parts 192.112, 192.328 and 192.620 at an Alternative Maximum Allowable Operating Pressure (alternative MAOP). The special permit is for deficiencies in meeting 49 CFR 192.112(c)(1), 192.112(c)(2), 192.112(f)(3), 192.328(a), and 192.328(e).

The Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI) describes Empire’s special permit request including the location of the new alternative MAOP, pipeline pressure increases, any affect to safety and the environment, and the special permit conditions.

In accordance with the Department of Transportation’s (DOT) Order DOT 5610.1C, the National Environmental Policy Act (NEPA), 42 U.S.C., 4321–4375, and the Council on Environmental Quality regulations, 40 CFR 1500-1508, the processing of a special permit application involves the preparation of an EA. The National Environmental Protection Act

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<sup>1</sup> Empire Pipeline, Inc. (Empire) is operator of the Empire Connector Pipeline (ECP). National Fuel Gas Company is owner of Empire.

<sup>2</sup> Empire originally requested a special permit to operate 70.1 miles of the 24-inch diameter Empire Connector Pipeline at alternative MAOP. Based upon adding Class 3 location as part of the special permit request the ECP special permit length has been increased to 76.6 miles of 24-inch diameter pipeline.

(NEPA) requires that agencies analyze a proposed action to determine whether the action will have a significant impact on the human environment.

As required by 49 CFR 190.341, PHMSA analyzes special permit requests for potential risks to public safety and the environment that could result from our decision to grant or deny the request. As part of this analysis, PHMSA looks at whether a special permit would impact the likelihood and consequences of a pipeline failure as compared with a pipeline that operates in full compliance with the pipeline safety regulations. PHMSA may grant the special permit request, grant the request with additional conditions, or deny the request.

## **II. Purpose and Need**

The Federal Energy Regulatory Commission (“FERC”) issued a Final Supplemental Environmental Impact Statement (“EIS”) on October 13, 2006, related to the construction of the Empire Connector Pipeline (ECP) and other facilities. FERC issued an Order dated December 21, 2006, granting a Certificate of Public Convenience and Necessity for the construction and operation of the ECP in Docket No. CP06-5-000, which adopted the findings and conditions of the EIS.

Empire’s receipt of a special permit to operate the ECP at the alternative MAOP would allow it to increase the flow capabilities of this pipeline and provide incremental firm transportation capacity, without pipeline looping. This increased flow capability would allow Empire (upon receipt of corresponding FERC approval) to provide additional firm transportation service to new or existing shippers on its pipeline system, which currently include local gas distribution companies, natural gas producers, and energy marketers. With an increase from 1,290 pounds per square inch gauge (psig) to 1,440 psig in the *special permit segment*, Empire would be able to increase the ECP’s design capacity by about 53,000 dekatherms (“Dth”) per day. The alternative MAOP of 1,440 psig on the ECP would also allow the pipeline system from the western end at the Canadian border to the southern end at the Pennsylvania to also operate at a minimum MAOP of 1,440 psig. The western and southern pipeline segments currently have a pipeline MAOP of 1,440 and 1,480 psig, respectively. These pipeline segments are shown on Attachment 1 – ECP alternative MAOP Overview Map, dated 10/03/2017.

### **List the pipeline safety regulation(s) for which the operator seeks relief:**

This special permit is for:

49 CFR 192.112(c)(1) – Plate / Coil Quality Control:

(1) There must be an internal quality management program at all mills involved in producing steel, plate, coil, skelp, and/or rolling pipe to be operated at alternative MAOP. These programs must be structured to eliminate or detect defects and inclusions affecting pipe quality.

49 CFR 192.112(c)(2) – Plate / Coil Quality Control:

(2) A mill inspection program or internal quality management program must include (i) and either (ii) or (iii):

(i) An ultrasonic test of the ends and at least 35 percent of the surface of the plate/coil or pipe to identify imperfections that impair serviceability such as laminations, cracks, and inclusions. At least 95 percent of the lengths of pipe manufactured must be tested. For all pipelines designed after December 22, 2008, the test must be done in accordance with ASTM A578/A578M Level B, or API 5L Paragraph 7.8.10 (incorporated by reference, see § 192.7) or equivalent method, and either

(ii) A macro etch test or other equivalent method to identify inclusions that may form centerline segregation during the continuous casting process. Use of sulfur prints is not an equivalent method. The test must be carried out on the first or second slab of each sequence graded with an acceptance criteria of one or two on the Mannesmann scale or equivalent; or

(iii) A quality assurance monitoring program implemented by the operator that includes audits of: (a) all steelmaking and casting facilities, (b) quality control plans and manufacturing procedure specifications, (c) equipment maintenance and records of conformance, (d) applicable casting superheat and speeds, and (e) centerline segregation monitoring records to ensure mitigation of centerline segregation during the continuous casting process.

49 CFR 192.112(f)(3) – Coating:

(3) A quality assurance inspection and testing program for the coating must cover the surface quality of the bare pipe, surface cleanliness and chlorides, blast cleaning, application temperature control, adhesion, cathodic disbondment, moisture permeation, bending, coating thickness, holiday detection, and repair.

49 CFR 192.328(a) – Quality Assurance:

(1) The construction of the pipeline segment must be done under a quality assurance plan addressing pipe inspection, hauling and stringing, field bending, welding, non-destructive examination of girth welds, applying and testing field applied coating, lowering of the pipeline into the ditch, padding and backfilling, and hydrostatic testing.

(2) The quality assurance plan for applying and testing field applied coating to girth welds must be:

- (i) Equivalent to that required under § 192.112(f)(3) for pipe; and
- (ii) Performed by an individual with the knowledge, skills, and ability to assure effective coating application.

49 CFR 192.328(e) – Interference Currents:

(1) For a new pipeline segment, the construction must address the impacts of induced alternating current from parallel electric transmission lines and other known sources of potential interference with corrosion control.

ECP requested a special permit because it does not meet the regulatory requirements to utilize the alternative MAOP. The Empire North Project mentioned below in paragraph F would require an ECP MAOP of 1,440 psig to provide the requested incremental firm transportation service. The flow capacity associated with the Empire North Project and the

compressor station suction and discharge pressures are being designed for a pipeline MAOP of 1,440 psig. Operating under the existing regulations and with an ECP MAOP of 1,290 psig will reduce the flow capabilities for this project and thus would greatly limit the ability of Empire to provide the requested service to the project shippers.

As mentioned above, Empire sought, via the special permit process, to increase the flow capacity and MAOP of its pipeline system without installing replacement pipeline or pipeline looping. Without acceptance of the special permit, Empire would need to construct approximately 70 miles of replacement pipeline or 8.9 miles of pipeline looping, both of which would result in temporary construction impacts to streams, wetlands, agricultural fields, and potentially threatened and endangered species.

Additionally, the alternative MAOP allows Empire to provide additional cost effective incremental service for current and potential additional shippers utilizing this pipeline (based on the limited work necessary to complete the expected requirements under the special permit). Operating the ECP at the alternative MAOP will also prevent the need for pipeline outages that would otherwise occur during pipeline construction related to pipeline tie-ins, which would greatly impact the shippers who rely on a dependable supply of natural gas from the existing pipeline. The schedule for completing all the required tasks to utilize the alternative MAOP also allows for this incremental service to be provided in a timely manner.

In March of 2018, Empire applied to Federal Energy Regulatory Commission (FERC) for a Certificate of Public Convenience and Necessity under Section 7(c) of the Natural Gas Act, as amended, for the proposed Empire North Project, FERC Docket No. CP18-89-000 at eLibrary on [www.ferc.gov](http://www.ferc.gov). The project includes construction and operation of two (2) new compressor stations and, depending on the outcome of this special permit application, modifications at two (2) existing interconnect facilities which, in combination with this alternative MAOP special permit request, would allow Empire to provide additional firm transportation service.

The Empire North Project includes the proposed construction and operation of a compressor station in the Town of Farmington, Ontario County, NY (“Farmington CS”) with two (2) 16,000 HP electric-motor driven centrifugal compressors, each in an acoustically treated building. The Farmington Compressor Station (CS) would also include new or modified electric power supply facilities from an existing electric substation located adjacent to the proposed site. The Empire North Project also includes the proposed construction and operation of a compressor station in Jackson Township, Tioga County, Pennsylvania (“Jackson CS”) with two (2) 11,107 HP ISO-rated natural-gas turbine driven centrifugal compressors, each in an acoustically treated building. The Jackson CS is located adjacent to Empire’s existing pipeline facilities and its existing Jackson Meter and Regulator Station.

In addition, minor modifications at Empire’s existing New Victor Regulator Station in the Town of Victor, Ontario County, New York and Empire’s Jackson Meter and Regulator Station are required, including installation, modification, or replacement of existing regulator and control valves, station piping, metering equipment, and additional noise mitigation insulation, as needed.

### III. Site Description

The ECP is an interstate pipeline and it is located in mostly rural areas through agricultural fields, open pastures, wooded areas, and mostly flat to rolling terrain. The northern sections of this pipeline are more populated as it gets closer to the suburbs of Rochester, New York.

A summary of environmental resources along the ECP is provided on Attachment 16 – ECP Environmental Assessment Affected Resources Table, dated 11/14/2017. Attachment 17 – ECP Representative Photographs, dated 11/14/2017 are provided as a reference of current conditions.

The ECP is a 76.6 mile, 24-inch outside diameter (“OD”) natural gas steel pipeline that was placed in-service on December 10, 2008. This special permit request is for the Class 1, Class 2, and Class 3 location pipeline segments, which totals 76.6 miles.

The details of this pipe are as follows:

- Class 1 location: 24-inch OD, 0.309-inch Wall Thickness, Grade X-70, Steel, Fusion Bonded Epoxy Coating, 50.2 miles;
- Class 2 location: 24-inch OD, 0.369-inch Wall Thickness, Grade X-70, Steel, Fusion Bonded Epoxy Coating, 19.9 miles; and
- Class 3 location: 24-inch OD, 0.494-inch and 0.500-inch Wall Thickness, Grade X-70, Steel, Fusion Bonded Epoxy Coating, 6.5 miles.

The sections of the ECP that are part of this special permit request are located entirely in the state of New York and are in the following counties (listed from North to South): Ontario, Yates, Schuyler, Chemung, and Steuben.

This special permit is for the 0.309-inch wall thickness (Class 1 location), 0.369-inch wall thickness (Class 2 location), and 0.494-inch and 0.500-inch wall thickness (Class 3 location) pipeline segments, which total 76.6 miles. The beginning and ending points of each Class 1, Class 2, and Class 3 location segments are listed on Attachment 4 – ECP Segmentation Sheet, dated 11/07/2017.

A pipeline overview map is included as Attachment 1 – ECP Alternative MAOP Overview Map, dated 10/03/2017 and a class location overview map is included as Attachment 2 – ECP Class Location Overview Map, dated 10/03/2017.

This special permit is for the Class 1, Class 2, and Class 3 location pipeline segments. For the Class 1 and Class 2 locations, the nearby population consists of sparsely located residences with mostly agricultural fields, open pastures, wooded areas, and flat to rolling terrain. The Class 3 locations are the more populated pipeline segments. The ECP does not have any Class 4 pipeline segments. Photographs are attached for reference as Attachment 17 – ECP Representative Photographs, dated 11/14/2017.

There are a few pipeline segments that are a part of this special permit request that include a high consequence area (“HCA”). These HCA’s are depicted on Attachment 4 – ECP Segmentation Sheet, dated 11/07/2017. Using the increased MAOP of 1,440 psig, the calculated potential impact radius (PIR) footage is 629 feet.<sup>3</sup> This is an increase of 5.7% from the current PIR footage of 595 feet for the MAOP of 1,290 psig.

#### **IV. ECP CONSTRUCTION HISTORY**

The ECP was constructed between 2007 and 2008 and placed in-service twelve (12) days prior to the alternative MAOP code requirements taking effect. This pipeline was constructed with modern technology steel pipe from Stupp Corporation (an American pipe mill), from steel produced at U.S. Steel Gary Works (an American steel mill). The material handling, welding, non-destructive testing, coating, installation, and pressure testing of this pipeline were completed with modern specifications and procedures, which results in a superior pipeline for the transportation of natural gas. Inspectors were present at the pipe mill, coating mill, material receiving, and pipeline construction to ensure the pipe was produced to the material specifications and that the pipeline was constructed and installed in compliance with the construction procedures.

Specifically regarding the code from which Empire is seeking relief, 49 CFR 192.112(c)(2) – Plate / Coil Quality Control, Stupp Corporation and U.S. Steel Gary Works had a Quality Control Assurance Program in place at the time of this pipe production for the ECP.

#### **V. Alternatives**

##### **A. Alternative 1: “Do Nothing/No Action” Alternative**

If the special permit was denied, Empire would continue operating the ECP at the current MAOP of 1,290 psig. ECP may choose to construct approximately 70 miles of replacement pipeline or 8.9 miles of pipeline looping.

##### **B. Alternative 2: “Special Permit” Alternative**

Receiving and operating ECP under a special permit at the alternative MAOP allows Empire to provide additional firm transportation capacity on the Empire pipeline system without installing replacement pipeline or pipeline looping, thereby avoiding the associated environmental impacts that such construction would bring. This incremental increased capability allows Empire to provide new transportation service to various shippers on its pipeline system, which currently includes local gas distribution companies, natural gas producers, and energy marketers. With the increase from 1,290 psig to 1,440 psig, Empire would be able to increase the ECP’s design capacity by about 53,000 Dth per day. An alternative MAOP of 1,440 psig on the ECP would result in a minimum MAOP of 1,440 psig on a different portion of Empire’s pipeline system that runs from the western end at the Canadian border to the southern end at the Pennsylvania

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<sup>3</sup> PIR means the radius of a circle within which the failure of a pipeline could have significant impact on people or property as defined and calculated based 49 CFR 192.3 – *Potential impact radius (PIR)*.

border. The western and southern pipeline segments currently have a pipeline MAOP of 1,440 and 1,480 psig, respectively. The special permit contains additional safety conditions, as prescribed by PHMSA that are above and beyond normal compliance with 49 CFR Part 192. In addition, numerous requirements in 49 CFR 192.112, 192.328 and 192.620 that apply only to alternative MAOP pipelines were developed as a set of additional safety measures for these pipelines.

### **SPECIAL PERMIT CONDITIONS:**

PHMSA has developed below a summary of the special permit conditions.

**Special Permit Conditions:** For a full description of the special permit conditions, please go to the Docket – PHMSA-2017-0158 in [www.regulations.gov](http://www.regulations.gov). The special permit conditions apply to the *special permit segment*, which is comprised of 76.6-miles of pipeline. PHMSA requires all 76.6 miles of ECP, which includes all the Class 1, 2, and 3 location pipeline, to be in the defined *special permit segment*. The inclusion of the Class 3 location pipeline in the *special permit segment* is to ensure all high consequence areas (HCAs), whatever the class location, are fully covered by the integrity requirements of the special permit conditions. PHMSA required this in-lieu-of requiring all pipeline in HCAs not to be allowed to operate above 72% of specified minimum yield strength. This will allow the pipe in Class 1, 2, and 3 locations, whether in or not in HCAs, to be inspected and remediated to the more conservative measures in the proposed special permit conditions.

The *special permit segment* is located in Class 1, 2, and 3 locations, as defined in 49 CFR 192.5, in the following counties of New York: Ontario, Yates, Schuyler, Chemung, and Steuben.

**Special Permit – Summary of Conditions** – The special permit conditions are focused on integrity areas that could impact safety. The integrity areas are:

1. Design Factor – Existing Pipelines
  - Existing pipe installed in the ECP *special permit segment* may use a maximum design factor of 0.80 in Class 1 locations, a maximum design factor of 0.67 in Class 2 locations, and a maximum design factor of 0.56 in any Class 3 locations.
2. Cased Crossings
  - Empire must identify and clear any casings which are "metallically shorted" (the carrier pipe and the casing are in metallic contact) in the *special permit segment*.
3. Pipeline Segments – Class Location and HCA Changes
  - Empire must conduct class location and HCA surveys at least once each calendar year, not to exceed 15 months in the *special permit segment*.
4. Interference Currents Control
  - An induced Alternating Current (AC) and/or Direct Current (DC) program to protect the *special permit segment* from corrosion caused by stray

currents must be in place within three (3) years of the grant of this special permit and prior to operating at the alternative MAOP.

5. Close Interval Survey
  - Empire must have performed a close interval survey (CIS) on ECP in the *special permit segment* within the three (3) years immediately prior to the increase in operating pressure above the existing MAOP to the alternative MAOP.
6. Pipeline Coating Assessments
  - Empire must verify and remediate pipeline coating conditions by performing either a direct current voltage gradient (DCVG) or alternating current voltage gradient (ACVG) survey of the *special permit segment* in accordance with 49 CFR 192.620(d)(7).
7. Initial and Future In-Line Inspection
  - Empire must have performed an initial in-line inspection (ILI) of the ECP *special permit segment* within three (3) years immediately prior to operating at the alternative MAOP using a high-resolution (HR) magnetic flux leakage (MFL) tool and a HR-deformation tool.
8. Anomaly Response and Repair
  - Anomaly response and repair for the ECP *special permit segment* must be conducted as required by 49 CFR 192.620(d)(10)(i) and Subpart O as well as the additional evaluation and remediation criteria in the special permit conditions, regardless of HCA status.
9. Controlling Internal Corrosion
  - To control internal corrosion for low volume, less than 1 million cubic feet per day (MMCFD), natural gas receipt tie-ins to the *special permit segment*, Empire may use a dual channel gas analyzer for moisture and carbon dioxide measurement instead of a chromatograph specified in 49 CFR 192.620 (d)(5)(iii) for a maximum of five (5) receipt tie-ins.
10. Mainline Valve – Monitoring and Remote Control for Leaks or Ruptures
  - Prior to operating at an alternative MAOP, all ECP mainline valves within the *special permit segment* must be controlled by a supervisory control and data acquisition (SCADA) system and must be equipped for remote monitoring and control, or remote monitoring and automatic control, in accordance 49 CFR 192.620(d)(3)(iii).
11. Data Integration
  - Empire must maintain data integration of special permit condition findings and remediation in the ECP *special permit segment*.
12. Environmental Assessments and Permits
  - Empire must evaluate the potential environmental consequences and affected resources of any land disturbances and water body crossings needed to implement the special permit conditions for the *special permit segment* prior to the disturbance.



13. Communications
  - Empire must provide pipeline safety awareness material to emergency responders and residents within the potential impact radius (PIR) of the *special permit segment* 30 days prior to conducting operations to raise the ECP MAOP from 1,290 psig to 1,440 psig.
14. Uprating MAOP to Alternative MAOP
  - Empire must develop and implement an uprating procedure for raising the MAOP from 1,290 psig to 1,440 psig (alternative MAOP) in the *special permit segment*.
15. Pipe Properties Records
  - Empire must mechanically and/or hydrostatically test pipe in the *special permit segment* that does not meet Condition 19(c) in the special permit conditions. Hydrostatic tests must meet 49 CFR 192.620 and Subpart J.
16. Annual Report
  - Annually, after issuance of this special permit, Empire must report the following information about the *special permit segment* to the Director, PHMSA, OPS Eastern Region; the Director, PHMSA, OPS Engineering, Research; and the Director, PHMSA, OPS Standards and Rulemaking Division:
    - i. Any new integrity threats,
    - ii. Summaries of close interval surveys for cathodic protection,
    - iii. Reportable incidents and repairs within the last year,
    - iv. Pressure test leaks or failures,
    - v. Class location or HCA changes,
    - vi. On-going damage prevention initiatives,
    - vii. Emergency events resulting in closure of mainline valves,
    - viii. Corporate assets transfers affecting regulatory responsibility; and
    - ix. Summary report of all annual findings from Data Integration.
17. Notifications
  - Empire must provide notifications where required in the ECP special permit conditions.
18. Certification
  - An Empire senior executive officer, vice president or higher must certify various elements of compliance, as specified in the special permit.

The complete special permit conditions are included on docket (PHMSA-2017-0158) in [www.regulations.gov](http://www.regulations.gov).

## **VI. AFFECTED RESOURCES AND ENVIRONMENTAL CONSEQUENCES**

- A. A baseline of environmental resource conditions for the applicable Class 1, Class 2, and Class 3 location segments of the ECP is provided in Attachment 16 – ECP Environmental Assessment Affected Resources Table, dated 11/13/2017.

**1. Aesthetics:**

This special permit will not change the visual character of the Class 1, Class 2 and Class 3 location *special permit segments*, since there will be no earth disturbance associated with the request.

**2. Agricultural Resources:**

This special permit will not impact any agricultural resources, as there will be no earth disturbance associated with the request.

**3. Air Quality:**

Air quality within the Class 1, Class 2, and Class 3 location *special permit segments* are described in Attachment 16 – ECP Environmental Assessment Affected Resources Table. The issuance of the special permit will result in the transmission of a greater quantity of natural gas. The transmission will not lead to any appreciable difference in emissions. Pipeline operators in full compliance with all requirements of 49 CFR 192.112, 192.328 and 192.620 increase operating pressures or operate at alternative MAOP without any permit from PHMSA. Nonetheless, the increased natural gas throughput or pressure would indirectly lead to eventual increased emission of sulfur, mercury, particulates, and nitrogen oxides (NO<sub>x</sub>).

**4. Biological Resources:**

Wildlife, fisheries, and vegetation are described in Attachment 16 – ECP Environmental Assessment Affected Resources Table, including and State listed threatened, proposed threatened, or endangered species. This special permit will not impact these biological resources, since there will be no ground disturbance associated with this request.

**5. Climate Change:**

As discussed above, there is no anticipated ground disturbance associated with this special permit, therefore there are no anticipated additional construction related emissions or new facility emission sources.

The issuance of the special permit would likely result in the transmission of a greater quantity of natural gas. The transmission would not lead to any appreciable difference in the emissions of greenhouse gases. Pipeline operators in full compliance with all requirements of 49 CFR 192.112, 192.328 and 192.620 increase operating pressures or operate at Alternative MAOP without any permit from PHMSA. Nonetheless, the increased natural gas throughput or pressure would indirectly lead to eventual increased emission of greenhouse gases.

**6. Cultural Resources:**

Cultural and archaeological resources will not be impacted by this special permit because no ground disturbing activities are associated with this request. No paleontological resources are located within this area.

**7. Environmental Justice:**

The ECP does not traverse through any Environmental Justice Areas. The 76-mile pipeline is located largely in rural settings. There will be no disparate impact to low income, minority, or non-English language populations.

**8. Geology, Soils, and Mineral Resources:**

Soils, geology, mineral resources, and an assessment of seismic activity are discussed in Attachment 16 - ECP Environmental Assessment Affected Resources Table for all Class 1, Class 2, and Class 3 locations incorporated in this request.

**9. Indian Trust Assets:**

There are no Indian Trust Assets in the area, nor any-recognized Tribal Reservations. Tribal coordination previously occurred during development and installation of the ECP under FERC Docket No. CP06-5-000.

**10. Land Use:**

Refer to Attachment 16 – ECP Environmental Assessment Affected Resources Table for summary of existing land uses along the Class 1, Class 2, and Class 3 location segments in this request. Except for the Town of Catlin in Chemung County, all the remaining 13 municipalities crossed by the ECP Class 1, Class 2, and Class 3 location segments have active Comprehensive or Master Plans, last revised between 2001 and 2017. As this special permit will not require ground disturbance activities, it will not impact land use or planning and does not require permits from local governments. The ECP was constructed and is being operated in accordance with the original, state, and local permits received.

**11. Noise:**

Current noise levels within the *special permit segment* is consistent with rural agricultural and residential areas, including local road traffic, rural residential activities and agricultural equipment. Noise levels will not change because of this request, as there are no ground disturbing activities or changes to aboveground facilities. As there are no ground disturbing activities, there are no state or county noise ordinances applicable to the *special permit segment*.

**12. Recreation:**

Recreational resources in the special permit inspection areas include three trails crossed or directly adjacent to the ECP. These are the Ontario Pathways trail system (Mile Post (MP) 19.4 to MP 27.5), Keuka Outlet trail (MP 40.4), and the Finger Lakes trail (MP 63.0). These four (4) trails are maintained by separate non-profit groups. Special use lands in the special permit inspection areas or immediately adjacent include two shooting ranges (MPs 11.3, 61.7). These recreational resources and special use lands will not be impacted, as no ground disturbance is associated with this request.

**13. Safety:**

The pipeline risk factors were determined for the current operating conditions (MAOP of 1,290 psig) and for the proposed operating conditions with the alternative MAOP (1,440 psig). An increase in MAOP by itself could increase

safety risk because the higher pressure imposes greater stress on the line pipe and pipeline components. However, PHMSA is proposing special permit conditions, as listed above, including an uprating procedure for raising the MAOP 150 psig, increased maintenance, monitoring, and repair requirements. These criteria are designed to ensure that the pipeline is fully cathodically protected to avoid or greatly reduce corrosion. More frequent and more full applicability of integrity inspections are intended to identify anomalies and defects before they pose an integrity risk to the pipeline. More stringent repair criteria ensure that anomalies and defects are remediated before they pose an integrity risk to the pipeline, as relevant to the proposed alternative MAOP of 1,440 psig. PHMSA believes that issuance of the proposed special permit, including the above described special permit conditions would not impose increased risks to pipeline safety and arguably would ensure greater protection over the operating life span of ECP.

In the unlikely event of failure, immediately after failure a greater quantity of natural gas could be released into the environment due to the greater pressure and quantity of product traveling through the pipeline. If ignition occurred, immediately after failure, greater heat and duration of burning could occur causing a larger impact radius to the safety of the public and the environment. However, the proposed special permit and 49 CFR 192.620(d)(3) would require the installation of remote controlled valves that could be closed to stop the flow of flammable gas more quickly than with Code-required valves when operating at non-Alternative MAOP requirements. Remote controlled valves will be located at Mile Posts: 0.00, 8.34, 19.98, 32.04, 45.19, 61.41, and 76.6. These valves can be closed in emergency situations.

The current calculated PIR based on an ECP MAOP of 1,290 psig is 595 feet. The new calculated PIR based on the proposed ECP MAOP of 1,440 psig is 629 feet. This proposed PIR is 5.7% larger than the current operation of the ECP, but both PIR distances fall within the 660 feet (220 yards) boundary that Empire uses for affected landowners and determining class location and HCA's. This shows a slight increase in potential impact to the public in the unlikely event of failure. Pipeline operators are able to increase their MAOP, which results in a larger PIR, pursuant to §§ 192.112 and 192.328 without a permit from PHMSA. As described above, ECP is not able to meet each of those provisions.

Operating under the special permit conditions will not have any detrimental effect on the ECP longevity or reliability. The operations of this pipeline will not be changed with the proposed MAOP of 1,440 psig. Furthermore, the proposed special permit would impose operations, monitoring, and maintenance requirements that would likely increase the longevity of the pipeline.

#### **14. Socioeconomics:**

The population in areas crossed by the ECP Class 1, Class 2, and Class 3 location segments is generally below the state average of per capita personal income. However, poverty rates in these communities range between 2.3% and 21.8% (average of 10.4%), which is below the poverty rate in New York State (15.7%) and

therefore these are not considered predominantly low income populations. The Class 1, Class 2, and Class 3 location pipeline segments that are a part of this request are not situated in a predominantly low income population, and would not disproportionately impact predominantly low income populations.

**15. Topography:**

At the northern end of the ECP, topography is generally flat and dominated by glacial features and deposits, including drumlins, eskers, moraines and glacial lake sediments. Elevations range from approximately 550 to 850 feet above sea level (ft asl). In the central portions of the ECP, topography gradually changes to a gently rolling landscape with elevations ranging from 700 to 1,650 ft asl. The southern end of the ECP is gently rolling with limited areas of steep slopes, typically at waterbody crossings. Elevations range from approximately 1,150 to 1,800 ft asl.

Topography will not be impacted because no construction or other ground disturbing activities are associated with this request.

**16. Transportation:**

The *special permit segment* will be accessed by existing roads and right-of-way (ROW) crossings. This request will not increase traffic or require additional roads to be constructed or more frequently maintained.

**17. Water Resources:**

Surface waters, wetlands, and drinking water aquifers are summarized in Attachment 16 – ECP Environmental Assessment Affected Resources Table. These water resources would not be impacted, as no ground disturbing activities are associated with this request.

## **VII. Comparative Environmental Impacts of Alternatives**

Alternative 1, the “Do Nothing/No Action” Alternative, would result in a denial of the proposed special permit and would have no direct impacts to the above listed environmental resources. However, if this alternative MAOP request were denied, the applicant would likely pursue alternative designs to meet Empire North Project contractual agreements with the shippers.

To meet its private contractual agreements, Empire, in one alternative, proposed the replacement of all 70 miles of Class 1 and Class 2 location pipelines. Based on a typical, average 100-foot ROW required for construction, this would impact approximately 860 acres of land and at least one (1) full construction season. Much of this acreage would be returned to pre-existing land use and aesthetics after completion of construction activities, but some forested land clearing may remain as a permanent impact. As indicated on Attachment 16 – ECP Environmental Assessment Affected Resources Table, there are many waterbodies and wetlands that would be temporarily affected by construction, including several protected streams. Ground disturbance activities associated with this activity would also affect several mineral resource areas; at least three cultural resource sites that would require additional investigations or avoidance; active agricultural areas; and special use lands (i.e. two (2)

shooting ranges). Threatened and endangered species, and wildlife within these areas may also be temporarily or permanently impacted by construction and operation activities. Large scale excavation could lead to increased run off and temporary water quality impacts. Topography would be temporarily disturbed, as restoration activities would return the pre-existing contours following construction. During construction activities, noise, air emissions from construction equipment, and traffic would temporarily increase in the *special permit segment* areas being replaced due to equipment necessary to conduct construction. Access roads to the segments may need improvements to support the large pipeline construction equipment.

As described above, in the event of denial of the special permit request, Empire would also consider a second alternative, constructing 8.9-miles of looping pipeline installed at the southern end of the ECP. Based on a typical, average 100-foot ROW required for construction, this would impact approximately 108 acres of land and would take several months to construct. As a looping pipeline it would be parallel to the existing ECP, additional clearing outside of extents used for the ECP would be required, including additional forested area clearing. Although much of this acreage would be returned to re-existing land use (i.e. utility corridor, agricultural lands) and the current aesthetic conditions, forested areas which may need to be cleared would be permanently converted to new utility corridor. As indicated on Attachment 16 - ECP Environmental Assessment Affected Resources Table, there are several waterbodies and wetlands temporarily affected by new construction. Ground disturbance activities associated with his activity would also impact at least one cultural resource site that would require additional investigations or avoidance. Active agricultural areas would be temporarily affected during construction and restoration. Threatened and endangered species, and wildlife within these areas may also be temporarily or permanently impacted by construction and operation activities. Topography would be temporarily disturbed, as restoration activities would return pre-existing contours following construction. During construction activities, noise, air emissions from construction equipment, and traffic would temporarily increase in the looping area due to equipment necessary to conduct construction. Access roads to the segments may need improvements to support the large pipeline construction equipment.

In comparison with full pipeline replacement, as described above, construction of the looping pipeline would be less impactful. However, if PHMSA denied this alternative MAOP special permit request, PHMSA would have no decision-making authority over the construction method Empire selects.

PHMSA does not believe replacement of 70-miles of 24-inch diameter pipe versus either looping the existing 24-inch pipeline or adding additional compression is an economic option.

## **VIII. Consultation and Coordination**

**Name, title and company of persons involved in the preparation of this document.**

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Empire mailed a notification letter to the landowners along the ECP route. An example copy of this letter is included as Attachment 19 – Sample Landowner Letter, dated 10/31/2017.

## **IX. Response to Public Comments Placed on Docket PHMSA-2017-0158**

### **A. Public Notice:**

On July 25, 2018, PHMSA published the special permit request in the Federal Register (83 FR 35313) and the public comment period ended on August 24, 2018, with all comments received through September 4, 2018, being reviewed and considered. The special permit application from Empire, pipeline route maps, public comments, environmental assessment, and special permit conditions are available in Docket No. PHMSA-2017-0158 at: [www.regulations.gov](http://www.regulations.gov).

PHMSA received two (2) stakeholder comments on the proposed ECP special permit. The comments received were for denying the special permit request. A summary of the stakeholders posting comments are:

- Stakeholder Comments Requesting PHMSA to Deny the ECP Special Permit: 2
  - Private Citizens – 2
  - Public Officials - 0
- Stakeholder Comments in support of the ECP Special Permit: 0

**B. PHMSA Overall Response and Considerations of Public Safety Concerns:**

PHMSA has reviewed public stakeholder comments on the docket through September 4, 2018, concerning the ECP special permit request. The public comments are summarized as noted below and can be reviewed on the docket (PHMSA-2017-0158) at: [www.regulations.gov](http://www.regulations.gov).

PHMSA received two (2) stakeholder comments on the proposed ECP special permit. All comments received were for denial of the special permit request. PHMSA's summarization of the public stakeholder comments and how the concerns are being handled within the special permit are below:

- 1) **Stakeholder Comment:** Safety regulations should increase not decrease.
  - **PHMSA Response:**
    - The special permit conditions were structured to maintain safety throughout the operational life of the ECP *special permit segment* at the alternative MAOP (up to 80% of the pipelines specified minimum yield strength (SMYS)).
    - The special permit conditions require increased operational monitoring and anomaly remediation standards that are more conservative than 49 CFR 192 for alternative MAOP pipelines. The special permit conditions are summarized below and can be reviewed in complete detail in the Docket (PHMSA-2017-0158) at: [www.regulations.gov](http://www.regulations.gov).
  
- 2) **Stakeholder Comment:** Running higher pressure leaves a smaller safety margin which is unacceptable.
  - **PHMSA Response:**
    - Sections 192.112, 192.328, and 192.620 allow gas transmission pipelines built in accordance with these sections of 49 CFR Part 192 to operate at an alternative MAOP.
    - The special permit conditions were developed to maintain safety in areas where the ECP does not meet the Code requirements (49 CFR 192.112(c)(1), 192.112(c)(2), 192.112(f)(3), 192.328(a), and 192.328(e)) through the operational life of the ECP *special permit segment*.
  
- 3) **Stakeholder Comment:** Regulations are in place to protect public safety. It would be irresponsible governance to grant a special request to lift those regulations without a public vote or congressional oversight.
  - **PHMSA Response:**
    - 49 CFR 190.341 allows issuance of special permits in accordance with the standards in U.S.C. 60118(c) and subject to the conditions set forth in the order (special permit).
    - 49 CFR 190.341 requires a description of any measures or activities the special permit applicant proposes to undertake as an alternative to



compliance with the relevant regulations(s). These alternative safety measures are noticed in the Federal Register for public comment. After review by the public and a review of relevant safety concerns by PHMSA, PHMSA can either approve or deny the special permit application.

- The special permit conditions require Empire to submit to the Docket at [www.regulations.gov](http://www.regulations.gov) for public review and to PHMSA an annual report on the integrity of the ECP *special permit segment*.

## **X. Finding of No Significant Impact**

In consideration of the safety conditions summarized above, PHMSA finds that issuance of a special permit with conditions, allowing Empire to operate the ECP *special permit segment* at alternative MAOP, will not result in a significant impact to the human environment. PHMSA also believes that issuance of the special permit and full compliance with the special permit conditions will benefit the human environment by avoiding extensive excavations and improving maintenance, monitoring, and repair requirements for the ECP.

## **XI. BIBLIOGRAPHY**

### **Books, websites, or other documents consulted in preparing this Final Environmental Assessment.**

Atlas of Eleven Selected Aquifers in New York, United States Geological Survey, Water Resources Investigations, Open File Report 82-553, 1982.

EPA Sole Source Aquifer interactive mapper.

<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>. Accessed October 2017.

FERC eLibrary, Docket No. CP06-5-000. <https://elibrary.ferc.gov>.

New York State Department of Environmental Conservation, Environmental Resource Mapper. <http://www.dec.ny.gov/gis/erm/>. Accessed October 2017.

U.S. Fish and Wildlife Information for Planning and Consultation (IPaC) website. <https://ecos.fws.gov/ipac/>. Accessed October 2017.

New York State Department of Environmental Conservation, Natural Heritage Program. <http://www.dec.ny.gov/animals/29338.html>. Accessed October 2017.

Indian Reservations in the Continental United States.

<https://www.nps.gov/nagpra/DOCUMENTS/RESERV.PDF>.

United States Census Bureau – Ontario, Yates, Schuyler, Chemung, and Steuben County demographic information. <https://factfinder.census.gov/>. Accessed October 2017.

U.S. Department of Agriculture Natural Resources Conservation Service, Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed October 2017.

Soil Survey of Ontario and Yates Counties, New York, United States Department of Agriculture Soil Conservation Service, June 1958.

Soil Survey of Steuben County, New York, United States Department of Agriculture Soil Conservation Service, July 1978.

Soil Survey of Schuyler County, New York, United States Department of Agriculture Soil Conservation Service, June 1979.

Soil Survey of Genesee County, New York, United States Department of Agriculture Soil Conservation Service, March 1969.

Code of Federal Regulations 40 CFR 81.333. Attainment Status Designations – New York. <https://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol18/pdf/CFR-2012-title40-vol18-sec81-333.pdf>

## **XII. Acronym List**

**API 5L** – American Petroleum Institute Specification for Line Pipe

**ASTM A578/A578M Level B** –

Standard Specification for Straight-Beam Ultrasonic Examination of Rolled Steel Plates for Special Applications

**CFR** – Code of Federal Regulations

**CIS** – Close Interval Survey

**CS** – Compressor Station

**DOT** – U.S. Department of Transportation

**DTH** – dekatherms

**EA** – Environmental Assessment

**EAQ** – Environmental Assessment Questionnaire

**Empire** – Empire Pipeline, Inc. (Operator of ECP)

**ECP** – Empire Connector Pipeline

**FERC** – Energy Regulatory Commission

**FT ASL** – feet above sea level

**HCA** – High Consequence Area

**ICC** – Internal Corrosion Control

**MAOP** – Maximum Allowable Operating Pressure

**MP** – Mile Post

**MPS** – Manufacturing Procedure Specification

**OD** – Outside Diameter

**PHMSA** – Pipeline and Hazardous Materials Safety Administration

**PIR** – Potential Impact Radius  
**PSIG** – Pounds per Square Inch Gauge  
**ROW** – Right-of-Way  
**SMYS** – Specified Minimum Yield Strength

### **XIII. ATTACHMENTS**

**Attachment 1** – ECP Alternative MAOP Overview Map, 10/03/2017, on page 20 of 20 of this document

**Attachment 2** – ECP Class Location Overview Map, 10/03/2017, on page 20 of 20 of this document

**Attachment 4** – ECP Segmentation Sheet, 11/07/2017

**Attachment 8** – ECP Hydrotest Report, 04/27/2009

**Attachment 16** – ECP Environmental Assessment Affected Resources Table, 11/14/2017.

**Attachment 17** – ECP Representative Photographs, 11/14/2017

**Attachment 19** – Sample Landowner Letter, 10/31/2017.

The above attachments are included on docket (PHMSA-2017-0158) in [www.regulations.gov](http://www.regulations.gov).

Completed by PHMSA in Washington DC on: October 23, 2018

**Attachment 1 – ECP Alternative MAOP Overview Map, 10/03/2017**



**Attachment 2 – ECP Class Location Overview Map, 10/03/2017**

