



BP Pipelines (North America), Inc.  
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## **BP PIPELINES (NORTH AMERICA) INC. / OLYMPIC PIPE LINE COMPANY GENERAL DESIGN & CONSTRUCTION STANDARDS**

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BP Pipelines (North America) Inc. (hereinafter referred to as “BP”) is committed to environmental stewardship and maintaining the safety of its employees, contractors, and the general public. BP operates pipelines that safely transport various liquids and gasses at high pressure (including, for example, those of the Olympic Pipe Line Company). Construction or excavation work that is performed near pipelines has the potential to be hazardous. As a result, the United States Department of Transportation and the Office of Pipeline Safety regulate such activities. BP has prepared the following list of general standards for working on pipeline rights-of-way.

### **General Safety Requirements**

- Any person who intends to conduct work within a pipeline right-of-way (“Requestor”) is required to first call 811, the national “One-Call” number, at least 48 hours (2 working days)\* before any construction and/or excavation activities are initiated within the pipeline right-of-way. Alternatively, depending on the state, a Requestor may make a notification online at <http://call811.com/811-your-state>. BP may have a representative present to ensure that there are no conflicts with the pipeline as a result of the work. There is no cost to use the One-Call Notification service. However, failure to utilize the One-Call service is a violation of regulatory requirements and may subject the offender to potential civil penalties\*\* and damages for personal injury and/or destruction of property.

\*Some states require additional advance notice. For example, Michigan and Tennessee each require 72 hours (3 working days) prior notice.

\*\*For example, refer to Washington State RCW 19.122.030 and Oregon State OAR 952-001-0050

- To have the pipeline physically located and its depth verified, please contact a BP Right of Way Agent at [BPPipelinesROW@bp.com](mailto:BPPipelinesROW@bp.com).
- BP requires its representative to be on site when any work is being performed within 25 feet of the pipeline(s) or when the reach of mechanized equipment is capable of extending within twenty five feet of the pipeline(s). BP requires forty-eight (48) hours’ (2 working days) prior notice of any work. Notice to BP does not relieve any Requestor of its obligation to contact the appropriate state One-Call system.
- The Requestor is responsible for taking all necessary safety precautions and will be held responsible for any damages to property or for personal injury caused by the work.

### **Submitting Plans and Requests to BP**

Any proposed project or development that is located in close proximity to BP's pipelines is of concern due to the potential adverse impact to the pipeline's operation and integrity.

BP strongly discourages any request to encroach upon the right of way, easement areas, leased premises or owned properties, whether such areas belong solely to BP, or are BP joint venture locations.

If a Requestor has plans or proposals for development, modification or change in use of land, or of land adjacent to where BP has existing real property interests, BP will review those plans and proposals; however, BP's engagement on these issues should not be construed as BP's approval of a request to encroach upon BP's real property interests. Any time or costs the Requestor incurs or expends in connection with BP's review of such plans and proposals are the Requestor's sole responsibility.

Requestors must have the pipeline location and depth added to their plans and drawings. To avoid project delays, Requestors should submit their plans to BP during the initial planning stages of the project. Plans and drawings should be sent to **BP Pipelines ((North America) Inc., Attention: Right of Way Department, 30 South Wacker Drive, Suite 10S, Chicago, Illinois 60606.**

Compliance with BP's General Design & Construction Standards does not guarantee BP's final approval of any project. These are considered minimum standards. Each request will be assessed on a case-by-case basis and additional project-specific requirements may apply.

In order to obtain final approval of your submitted project design (or any component thereof), all Requestors must obtain a fully-executed Permitted Facilities Agreement and Engineering Approval Letter (or other form of fully-executed written agreement appropriate for the proposed encroachment or work activity). Only a BP management employee with the appropriate level of authority is authorized to grant such approval and execute such documents on BP's behalf. Any verbal approval that a Requestor may receive from a contractor, subcontractor or other party does not constitute the required final approval from a BP management employee. If, after fully-executed written BP approval is appropriately granted, any drawings or designs are updated or changed, the final approval is invalidated and the Requestor must send the new plans to BP for further review and written approval.

### **Subdivision Planning**

- Neither residential nor commercial lot lines should be placed on the right-of-way. In cases where it is impossible to locate such lot lines outside of the right-of-way, lot lines shall under no circumstances be placed on the pipeline. Any portion of the lot line within a BP right-of-way should be used only as a green space.

### **General Construction Activities**

- To gain access to the job site, the contractor shall submit a plan indicating where construction equipment will cross the pipeline, the depth of the pipe at the crossings, any proposed ramping over the pipeline, and the following specifications for the equipment: type and fully loaded weight of equipment; for tracked equipment – track shoe width and length of track on ground; for wheeled equipment – number of axles (single or tandem axles). BP will perform a stress factor calculation to determine if the equipment can safely cross the pipeline. If crossing of the pipeline is allowed, special measures may need to be taken to ensure the integrity of the pipeline.
- The contractor shall not transport construction materials or equipment longitudinally over the pipeline. Where it is necessary for construction equipment (*i.e.*, tractors, backhoes, dump trucks, etc.) or equipment transporting construction materials to cross the pipeline, the crossing of the pipeline right-of-way shall be at, or as near to, a 90° angle as is feasible.

- No track type construction equipment shall be permitted to pivot or turn directly over the top of the pipeline.
- A scraper or pan type tractor shall not be used for removal of soil within ten feet (10') of the centerline of the pipeline. Rubber tire or small track type equipment is an acceptable alternative.
- A sheepsfoot roller shall not be used for compaction purposes within five feet (5') of, or directly above, the centerline of the pipeline.
- No vibratory rollers shall be used within three feet (3') of the centerline of the pipeline until the compacted cover over the pipeline has reached a depth of three and one-half feet (3 ½').

### **Excavation Requirements**

- No excavation or construction activity will be permitted in the vicinity of a pipeline until all appropriate communications have been made with BP's field operations and the Right-of-Way Department. A formal engineering assessment may be required.
- No excavation or backfilling should occur within the pipeline right-of-way for any reason unless prior permission is obtained from BP personnel who are on-site and can review the work.
- Any excavation within two feet (2') of the pipeline shall be done by hand, or by other non-mechanical means as approved by BP personnel who are on-site and can review the work.

### **Structures, Parking Lots, Roads, Driveways, and Fences**

- No permanent structures may be constructed on/within/overhanging the pipeline right-of-way (permanent structures shall include, but not be limited to, swimming pools, sheds, fences, earthen berms, bike paths, etc.) Any aboveground structure should be located as far as possible from the pipeline, and it is strongly recommended that none be located within 30' of the pipeline; this provides BP needed access for ongoing maintenance and potential emergency response. *(Requestors must inform the BP Right-of-Way Department as to how close the structure will be to the pipeline right of way, even if the structure itself is off the pipeline right-of-way).*
- For any proposed occupied buildings within 50' of the pipeline, for your consideration, please be advised that US Code of Federal Regulations 195 governing the construction of hazardous liquid pipelines states, "no pipeline may be [installed] within 50 feet of any [existing] private dwelling[,] industrial building or place of public assembly in which persons work, congregate, or assemble, unless" the pipeline has 48" of cover. Thus, it is strongly recommended that the 3rd party ensures any hazardous liquid pipeline within 50' of an occupied building has a minimum 48" of cover. This minimum depth of cover is intended to provide increased protection of the pipeline and public in areas of public activity.
- No portion of canopy, building overhang, etc. shall be allowed over the pipeline right-of-way.
- For proposed utility structures within public ROW adjacent to BP pipeline:
  - o No utility structures (including, but not limited to, manholes or catch basins) shall be located over the pipeline. A minimum horizontal clearance of twenty-five feet (25') is required between the structure and the pipeline.
  - o There shall be a minimum vertical separation of two feet (2') between the pipeline and any underground utility structure constructed on the pipeline right-of-way, regardless of horizontal clearance.

- Development grading should not remove any of the existing ground cover from, nor add fill over the pipeline(s). Any request to increase the cover above BP's pipeline, with the exception of meeting the required clearance for a road crossing, must be brought immediately to BP engineering's attention for discussion. Please note: clearing a paved lot (e.g., a parking lot), is not considered a road crossing.
- All permanent driving surfaces shall cross the pipeline right-of-way at, or as near to, a 90° angle as is feasible. In no instance shall the angle of the crossing be less than 45°.
- For proposed road crossings and driveways BP will perform a stress factor calculation to determine the amount of cover required over the pipeline. Under no circumstances shall cover be less than the following: a) five and one half feet (5.5') for all road crossings and commercial driveways, and b) three feet (3') for residential driveways.
- A minimum of four feet (4') of cover is required for all drainage ditches.
- Proposals for parking lot construction on the pipe line right-of-way are discouraged and should be limited to the same encroachment impact as would a 4 lane road. Any proposals must include green spaces above the BP pipeline to allow for required visual inspections of the rights-of-way and routine measurements.
- Concrete pavement is discouraged, especially reinforced concrete; and in most instances will not be allowed. This is to prevent exposing the pipeline to stresses related to impact forces associated with breaking concrete.
- Requests for fence installation within the easement shall be reviewed on a case-by-case basis and any permitted fence install must allow for 24/7 access by BP operations to the pipeline ROW

#### **Foreign Line or Utility Crossings**

- All foreign lines shall cross the pipeline right-of-way at, or as near to, a 90° angle as is feasible. In no instance shall the angle of the crossing be less than 45°.
- In no instance shall the foreign line be placed parallel to the pipelines right-of-way.
- The foreign line shall cross under the pipeline with at least two feet (2') of vertical separation (three feet (3') for fiber optics).
- If the foreign line is a telecommunications cable, power cable, or similar in nature, the foreign line shall be placed in a Schedule 40 PVC conduit, or greater, for a linear distance extending ten feet (10') on either side of the centerline of the pipeline. The entire length of carrier pipe shall either be encased in concrete, or shall have a concrete cap placed on top of it. However, if the method of installation is bore, and concrete is impractical, then the utility shall be placed in HDPE.
- If the foreign line is a metallic pipeline, or similar in nature, the foreign line shall be coated with a suitable coating for a distance of at least fifty feet (50') on either side of the centerline of the pipeline. The foreign line owner, operator, or their contractor, shall install cathodic protection bonds and potential test leads to the foreign line at the crossing location and terminate the leads at an above-ground location as identified by BP's on-site representative. BP will install the test leads on BP's pipeline.
- Below-ground precautionary flagging (warning tape) shall be placed in the ditch line above the foreign line. The warning tape shall be placed approximately one foot (1') below the final surface grade/elevation. The warning tape shall extend for a linear distance of ten feet (10') on either side of the centerline of the pipeline.

### **Landscape and Vegetation**

- Trees and deep-rooted shrubbery are not allowed on the pipeline right-of-way. BP may permit the installation of limited landscaping and minor shrubbery plantings with written communication and/or documentation. For a major development, landscaping plans must first be submitted in writing to BP for review and approval. Any plantings that restrict efficient aerial inspection or limit access to the easement area will be considered an interference and will not be allowed.
- Development grading should not remove any of the existing ground cover from, nor add fill over the pipeline(s). Any request to increase the cover above BP's pipeline, with the exception of meeting the required clearance for a road crossing, must be brought immediately to BP engineering's attention for discussion (to be clear a paved lot, e.g. a parking lot, is not considered a road crossing).

**Requestors anticipating problems complying with these requirements should contact BP's *Right of Way Agent at BPPipelinesROW@bp.com.***

**If, in the exercise of the pipeline easement rights, any "Permitted Facility" is damaged, disturbed or otherwise interfered with, BP and/or the pipeline easement owner shall be held harmless from and against any and all claims of whatsoever kind and nature which might be associated with or derived from such damage, disturbance or interference.**